

Reallocation of Mutual Fund Managers and Capital Raising Ability

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Abstract

This paper establishes the fund manager's capital raising ability as an important managerial skill that fund firms exploit to generate higher firm revenues. Fund firms reallocate fund managers with high capital raising ability to other funds with large outflows. Investors demand the capital raising ability of managers and reward it by investing more capital despite lower future alphas. A team with a larger experience difference between reallocated managers and existing managers attracts more capital inflows, suggesting that there is a synergy effect on the fund manager's capital raising ability.

Keywords: Mutual Fund; Manager; Fund Firm; Reallocation; Revenue

JEL Classification: G11; G14; G23

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I. Introduction

Mutual fund firms reallocate fund managers to different funds within the firms (Agarwal et al. (2018); Berk et al. (2017)). This paper studies the benefits and reasons for manager reallocation. My research question is 1. Does manager reallocation improve fund firm revenue? Since the main incentive of fund firms is to generate higher revenue (Berk and van Binsbergen (2015); Ibert et al. (2017)), reallocation decisions should increase firm revenue. 2. Which fund manager skills are determinants to be reallocated and help fund firms generate higher revenues?

A central theme in the mutual fund literature is the fund manager's active investment skill to generate superior performance and add value (Carhart (1997); Bollen and Busse (2001); Kacperczyk et al. (2008); Berk and van Binsbergen (2015)). Thus, existing studies focus on investment skill as a crucial reason for manager reallocation. For example, Nanda et al. (2004) show that a star manager who performs extremely well can bring capital inflows to other funds in its firm. Agarwal et al. (2018) find that fund managers who deliver superior past performance manage multiple funds to generate more revenue for the fund firm. Berk et al. (2017) suggest that fund firms reallocate capital among their managers to make capital to be aligned with managerial skills, leading to increased value added and revenues. However, active investment skill is not the exclusive source to attract capital flows. In addition to active investment skill, Xu (2021) shows that senior fund managers' capital raising ability also attracts sizeable flows and has spillover effects on junior managers. Consequently, this paper studies the capital raising ability of fund managers to explain the manager reallocation decision in addition to the studies of managers' investment skills.

Capital raising ability is first proposed by Xu (2021) and is defined as the ability to increase a fund's assets under management (AUM) *without increasing its performance*.¹ It is motivated by the evidence that mutual funds' net alphas and fees have a large cross-sectional

¹Active investment skill is defined as increasing a fund's AUM *by increasing its performance*.

dispersion, and some investors keep investing in negative alpha funds ([Carhart \(1997\)](#); [Cooper et al. \(2021\)](#)). There should be another managerial skill in addition to the investment skill that investors demand. The capital raising ability could be marketing skill, customization skill, and more investor connections. One example is ESG investing. If a fund manager can attract investors with high ESG preferences, these investors are willing to accept lower net alphas. There are two possible channels that fund firms exploit managers' capital raising ability. First, fund firms reallocate high capital raising ability managers to funds that suffer from outflows and that need capital. Second, fund firms optimize the capital raising ability of a management team by assigning particular managers to collaborate since firms have information about their fund managers' capital raising ability.

I find that when fund firms reallocate fund managers to other funds within the firm, the firm's revenue increases. The more frequently a fund firm reallocates managers, the more revenue this fund firm generates in the next year. The increase in revenue comes from the increased AUM instead of increased expense ratios. Furthermore, the increased AUM is due to the increased capital flows this fund firm attracts. The result holds after controlling for the fund firm's performance over the past 3 years. This evidence suggests that fund firms generate more revenues by reallocating managers.

To understand what causes the increase in firm revenue, I test the fund manager capital raising ability hypothesis. Past flows and size are signals of a fund manager's ability to raise capital. I first investigate whether past flows a manager attracts and the size a manager manages can explain fund firms' decisions to reallocate this manager to other funds. I show that fund firms are more likely to allocate managers who manage larger size funds and who attracted higher past 1 to 3 years flows in other funds. The economic magnitude of past flows to explain the probability of manager reallocation is higher than the economic magnitude of past alphas. These findings indicate that fund managers' capital raising ability is more important than their active investment skills for fund firms to make reallocation decisions.

I also find that funds with capital outflows are more likely to have new managers join.

One reason is that some funds with capital outflows have a crisis of investors' confidence in the existing managers in the fund. Fund firms allocate fund managers who have higher capital raising ability (e.g., are more trusted) to join these funds. Furthermore, funds with capital outflows are more likely to employ managers who have attracted higher flows in the past. The evidence suggests that fund firms' reallocation decision is related to both the allocated managers' past inflows and the allocated funds' past outflows.

Above tests show that managers' *past flows* are important to explain reallocation decisions. Another method to test the reallocated manager's capital raising ability is whether this reallocated manager can attract more *future flows* than other non-reallocated managers. I find that reallocated managers' future flows are higher than that of non-reallocated managers, suggesting that reallocated managers have higher capital raising ability. Besides, the fund with reallocated managers also has higher future flows than other funds, indicating that the reallocated manager brings more capital to the fund.

However, the capital flow is also a signal of the fund manager's investment skill because investors chase past performance (Sirri and Tufano (1998); Lynch and Musto (2003)). The identification strategy is not clear enough to conclude that managers' capital raising ability is important for a fund firm's reallocation decision. To address this issue, I examine the change in future gross alpha the fund delivers after a manager is reallocated to a fund. I use the model in Xu (2021) which relaxes the assumption in Berk and Green (2004) that the net alpha is zero and allows variations in net alphas across fund investors. The model shows that net alpha, gross alpha, and value added can be used to differentiate between capital raising ability and active investment skill. It predicts that a higher capital raising ability is associated with lower net alpha and gross alpha because capital inflows dilute revenues from active investment. Value added has no effect when capital is not constrained. In contrast, a higher active investment skill is associated with a higher gross alpha and value added. Net alpha is higher when capital is not constrained.

Empirical evidence shows that reallocated fund managers deliver lower net alpha and

gross alpha in the next year than other managers. The change in value added between reallocated managers and non-reallocated managers is insignificantly different from zero. These findings confirm that reallocated managers have higher capital raising ability than non-reallocated managers. In addition, funds with allocated managers deliver insignificantly lower net alpha, lower gross alpha, and positive value added in the future than funds without allocated managers. The evidence implies that the allocated manager contributes to the fund firm through her capital raising ability by increasing AUM without increasing the fund's performance, consistent with the model prediction in [Xu \(2021\)](#).

Another possibility that fund firms take advantage of managers' capital raising ability is through a synergy channel. Fund firms could optimize the capital raising ability of a team by allowing particular managers to collaborate. Fund firms' flows and revenues can be increased due to the synergy effect of the team's capital raising ability. According to the synergy hypothesis, I test whether the joint work between reallocated managers and existing managers could optimize the team's capital raising ability and thus lead to higher flows. One possible channel is that junior managers benefit from senior managers' capital raising ability ([Xu \(2021\)](#)). I find that the larger the experience difference between the reallocated manager and existing manager is, the more investor flows this fund can attract in the next year. This evidence suggests that there is a synergy effect between the reallocated managers and existing managers.

This paper adds to the literature on mutual fund manager skill. The debate of whether active fund managers possess skills is a central topic in mutual funds. Some suggest that fund managers have no skill and skill is unpredictable (e.g., [Jensen \(1968\)](#); [Carhart \(1997\)](#); [Bollen and Busse \(2001\)](#); [Fama and French \(2010\)](#)), while others find evidence in skill ([Kosowski et al. \(2006\)](#); [Kacperczyk et al. \(2008\)](#); [Cremers and Petajisto \(2009\)](#); [Berk and van Binsbergen \(2015\)](#)). These studies focus on the active investment skill measure that fund managers outperform the benchmark. [Xu \(2021\)](#) proposes a new fund manager skill as the capital raising ability. This paper provides further empirical evidence on fund managers' capital

raising ability by showing that fund firms reallocate managers based on managers' capital raising ability to generate more revenue.

This paper contributes to the literature on the role of firms in fund manager reallocation. It is most related to [Berk et al. \(2017\)](#) who find that capital reallocation within fund firms increases the value added. They provide evidence that fund firms have private information about the skill of their managers. [Berk et al. \(2017\)](#) focus on the fund firms' private information in their managers' investment skills and study the outcome of fund firms' value added, while this paper focuses on the fund firms' public information in their managers' capital raising ability and study the outcome of fund firms' flows and revenue. My result suggests that managers' capital raising ability is another important reason for fund firms' rational reallocation and increases revenue for fund firms.

This paper is also related to the literature on mutual fund flows. Some studies suggest that higher net alpha leads to higher inflows ([Sirri and Tufano \(1998\)](#); [Lynch and Musto \(2003\)](#); [Ben-David et al. \(2021\)](#); [Evans and Sun \(2021\)](#)), and fund firms obtain substantial flows through spillover effects of star funds ([Warner and Wu \(2011\)](#); [Sialm and Tham \(2016\)](#)), some papers find that brokers and marketing teams attract investors ([Bergstresser et al. \(2009\)](#); [Christoffersen et al. \(2013\)](#); [Roussanov et al. \(2020\)](#)), and [Cohen and Schmidt \(2009\)](#) show that fund firms attract flows themselves by being named trustee to secure sizable inflows. In addition to the above channels, this paper highlights that fund firms use fund managers' capital raising ability to attract flows.

Finally, this paper relates to the literature on team management and multitasking. [Zambrana and Zapatero \(2020\)](#) show that managers with different skill specifications who work together can maximize fund performance. [Harvey et al. \(2020\)](#) find that team management can lower the decreasing returns to scale. [Fedyk et al. \(2020\)](#) show that it reduces uninformed overconfident trading. This paper suggests that fund managers who have high capital raising ability are frequently allocated to different funds to maximize fund and firm revenue. The team management and multitasking structure of mutual funds allow fund managers to be

reallocated frequently to generate more revenue to fund firms.

The rest of the paper proceeds as follows. Section II develops the hypotheses. Section III defines the variables at the fund-level, manager-level, and firm-level. Section IV describes the data set and shows the summary statistics. Section V presents evidence of fund firms' benefits in manager reallocation. Section VI analyzes the determinants and outcomes of the fund manager reallocation decision by focusing on managers' capital raising ability. Section VII provides concluding remarks.

II. Hypotheses

This section develops the hypotheses and outlines the key empirical prediction.

U.S. fund firms regularly reallocate fund managers to different funds within the firm. The standing point is the fund firm's incentives. Past studies imply that the main incentive of mutual fund firms is to generate higher revenues (Berk and van Binsbergen (2015); Ibert et al. (2017)). Fund managers as employees are not independent to fund firms, so fund managers' incentives should align with fund firms' incentives. For example, Ibert et al. (2017) show that fund managers' compensation contracts are largely explained by fund firms' revenue, while they are less explained by manager-level AUM and weakly explained by performance. Therefore, manager reallocation decisions should allow firms to generate higher revenues. Otherwise, there is no incentive for fund firms to reallocate fund managers within the firm. It leads to the first hypothesis.

H1: Manager reallocation increases a fund firm's revenue.

What are the reasons for manager reallocation that increase the fund firm's revenue? Berk et al. (2017) suggest that fund firms have private information of their fund managers' *active investment skill*, so firms reallocate managers by changing their assets under management that best match their skills to increase revenues and value added. Investors reward the firm's decision by increasing flows and thus increasing revenues.

In addition to the *active investment skill*, this paper hypothesizes that fund managers' *capital raising ability* is also an important determinant of the fund firm's reallocation decision, leading to higher firm revenues. Capital raising ability, first proposed by Xu (2021), is defined as the manager's ability to increase a fund's size without increasing its performance. In contrast, active investment skill is defined as the skill to increase a fund's size and performance. The existing literature suggests that funds with higher net alphas can attract more fund flows (Sirri and Tufano (1998); Lynch and Musto (2003)). However, some funds exist even though they consistently deliver negative net alphas (Carhart (1997); Fama and French (2010)). Considering that many funds have low net alphas but still exist, fund managers should be rewarded for raising capital from investors who accept low net alphas. It leads to the second hypothesis.

H2: Fund managers' capital raising ability is one reason why fund firms reallocate managers to increase revenues.

III. Variable Construction

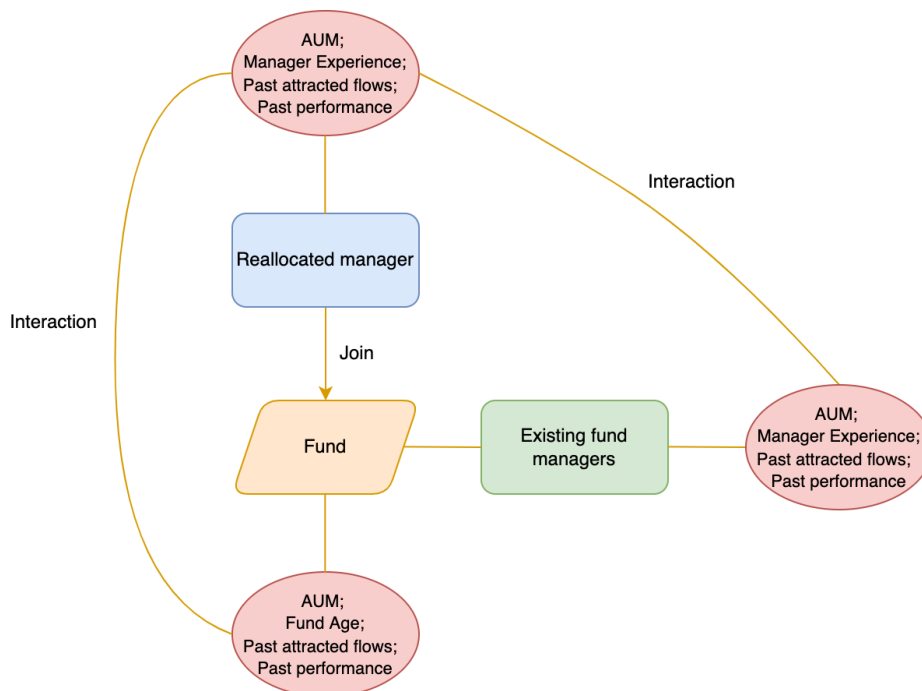
This section outlines the variable construction at the fund level, manager level, and fund firm level. To better understand mutual fund variables in manager reallocation within a firm, Figure I shows an example of when a fund manager is reallocated to another fund. The reallocated manager belongs to a fund firm, and she is reallocated to join another fund within the fund firm. There are three determinants of this fund manager reallocation decision.

First, the allocated fund managers' characteristics (e.g., experience; past flows; past performance) can explain this reallocation. For example, these fund managers might have higher capital raising ability, so they attracted considerable investor flows in the past. Second, the fund characteristics can affect the fund manager's reallocation decision. For example, the fund might consistently have outflows so the fund needs a new manager to attract capital inflows. Finally, the fund's existing fund managers' characteristics can explain the reallocation. For example, existing managers in this fund have low capital raising ability, so the fund needs

a high capital raising ability manager to join the fund. In that case, there should be an interaction between the reallocated manager's and existing manager's capital raising ability such that there is a synergy effect on maximizing their abilities to attract higher flows. The reallocated manager's characteristics and the fund's characteristics should also interact. For example, a well-performing fund manager interacts with a poor-performing fund to explain the reallocation decision (Agarwal et al. (2018)).

Figure I: Reallocation Example

This diagram shows an example when there is a reallocation decision within a fund firm.



III.A. Fund-Level Variables

I first construct the following fund-level variables and then convert them into the manager and firm-level variables.

Let R_{it}^n be the mutual fund i 's net excess return at time t which is the return over the riskless asset earned by investors. Let R_{it}^g be the gross excess return which is the excess

return the fund makes before charging the percentage fee $f_{i,t-1}$ (charged from $t - 1$ to t)

$$R_{it}^g = R_{it}^n + f_{i,t-1}. \quad (1)$$

Let R_{it}^B denote the benchmark return at time t which is the best alternative investment opportunity for investors of fund i . The net alpha of the mutual fund is

$$\hat{\alpha}_{it}^n = R_{i,t}^n - R_{i,t}^B, \quad (2)$$

and the gross alpha of the mutual fund is

$$\hat{\alpha}_{it}^g = R_{i,t}^g - R_{i,t}^B. \quad (3)$$

Let V_{it} denote the total revenue a mutual fund makes between times $t - 1$ and t . V_{it} is the product of assets under management and the percentage fee

$$V_{it} = q_{i,t-1} f_{i,t-1}, \quad (4)$$

where $q_{i,t-1}$ is the assets under management (AUM) at the end of the past period.

Let V_{it}^A denote the revenue a fund earns from the active investment skill at time t . V_{it}^A is the value added proposed by [Berk and van Binsbergen \(2015\)](#) which is the dollar value a fund manager adds over the benchmark

$$V_{it}^A = q_{i,t-1} \hat{\alpha}_{it}^g. \quad (5)$$

I follow [Berk and van Binsbergen \(2015\)](#) to estimate the best alternative investment opportunity of mutual funds which are the low-cost index funds offered by Vanguard. The

benchmark return on fund i at time t is

$$R_{it}^B = \sum_{l=1}^{n(t)} \hat{\beta}_i^l R_t^l, \quad (6)$$

where $n(t)$ is the number of index funds by Vanguard in year t , and R_t^l is the excess return of the index fund l at time t , and $\hat{\beta}_i^l$ is estimated by the linear projection of the excess return of fund i onto the excess return of benchmark l . I include 11 Vanguard index funds in the main analysis, following [Berk and van Binsbergen \(2015\)](#).² These index funds include transaction costs and were traded by investors at the time.

The assets under management of a mutual fund mainly come from the fund flows of investors. The fund flows to the fund i in year t is the increase in AUM from $t - 1$ to t after excluding capital appreciation or depreciation:

$$Flow_{it} = q_{it} - q_{i,t-1}(1 + R_{it}^n). \quad (7)$$

I winsorize flows at the 2.5th and 97.5th percentiles to take mutual fund mergers and splits into consideration ([Huang et al. \(2007\)](#)). When the flow is positive, it is the fund inflow and vice versa.

III.B. Manager-Level Variables

When there is a manager reallocation, this manager’s characteristics could affect the reallocation decision by fund firms. I first construct the manager tenure, $Tenure_{j,t}$, which is the number of months a fund manager j appeared in the full mutual fund data set up to the point of that reallocation time t . Manager tenure is an important manager characteristic. [Xu \(2021\)](#) finds that more experienced fund managers can benefit junior managers to attract more fund flows.

²Index funds data comes from CRSP Database. The tickers for the Vanguard index funds include VFINX, VEXMX, NAESX, VEURX, VPACX, VVIAX, VBINX, VEIEX, VIMSX, VISGX, and VISVX.

Next, I construct manager-level variables based on fund characteristics. Given that many funds are managed by several managers, I divide the mutual funds' AUM equally across each manager and aggregate all the funds that manager j manages

$$q_{jt} = \sum_{i \in \Omega_{jt}} \frac{q_{it}}{Mgrn_{it}}, \quad (8)$$

where $Mgrn_{it}$ is the number of managers in the fund i at time t , and Ω_{jt} is the set of all funds managed by manager j at time t . Other fund variables that are related to quantity (e.g., fund flow, revenue, and value added) are constructed in the same way.

Fund variables in percentage cannot be equally contributed to each manager, so I calculate the value-weighted average of these variables across all funds under management by the manager j (net alpha as an example):

$$\alpha_{jt}^n = \frac{\sum_{i \in \Omega_{jt}} w_{it} \alpha_{it}^n}{\sum_{i \in \Omega_{jt}} w_{it}}, \quad (9)$$

where w_{it} is the weight of fund i at time t among all funds the fund manager j manage.

III.C. Firm-Level Variables

The reallocation decision is not an individual decision made by fund managers but is mostly decided by fund firms. [Berk et al. \(2017\)](#) find that fund firms have private information about their fund managers' skills and they add value by reallocating capital among their fund managers. The main objective of a fund firm is to maximize the total revenue of the funds ([Berk and Green \(2004\)](#); [Pástor and Stambaugh \(2012\)](#)). The revenue of firm f at time t is the sum of all revenue generated by its funds

$$V_{ft} = \sum_{i \in \Omega_{ft}} V_{it}, \quad (10)$$

where Ω_{ft} is the set of all funds in firm f at time t . Other firm variables such as AUM, fund flow, and value added are constructed in the same way.

Fund firms' alphas and fees cannot be added up, so I calculate the fund firm f 's value-weighted average of alphas and fees (net alpha as an example)

$$\alpha_{ft}^n = \frac{\sum_{i \in \Omega_{ft}} w_{it} \alpha_{it}^n}{\sum_{i \in \Omega_{ft}} w_{it}}, \quad (11)$$

where w_{it} is the weight of fund i in year t among all funds the fund firm f has.

Finally, I convert fund-level, manager-level, and firm-level variables from a monthly basis to a yearly basis. The reason is that manager reallocation is related to funds' strategic deployment, so evaluating manager reallocation in the monthly horizon is too short.

IV. Data Set

The data set includes all U.S. actively managed equity funds and fund managers from January 1962 to December 2020. The U.S. mutual fund data comes from CRSP Survivorship Bias Free Mutual Fund Database, including fund-level variables such as fund returns, expense ratios, assets under management, turnover ratios, and investment objectives. I only include actively managed equity funds by excluding index funds, ETFs/ENFs, bonds, and money market. I also exclude any fund observations before the fund's TNA reached \$5 million following [Berk and van Binsbergen \(2015\)](#). Mutual fund firms usually offer different share classes of the same fund which have different expense ratios. Thus, I aggregate multiple share classes into a single fund. Fund manager information comes from Morningstar Direct which includes fund managers' names for each fund at a different time. Finally, I merge fund-level data from CRSP with manager data from Morningstar Direct. The final dataset includes 5,464 mutual funds and 13,244 fund managers.

Since the research question is about reallocation benefits to fund firms and reasons for manager reallocation, I only study the reallocation within fund firms. This paper does not

study the benefits and reasons for fund managers' job hopping (not within fund firms).

Table I reports the summary statistics annually. The first rows of Panel A and Panel B show that 8.6% of funds of the sample have an internal change of fund managers in the fund, and 8.2% managers of the sample are reallocated by fund firms annually. The average frequency with which a fund firm reallocates managers is 0.568 per year as the first row of Panel C shows.

Table I: Summary Statistics

This table reports the summary statistics of fund characteristics, manager characteristics, and firm characteristics annually. The sample period is from January 1962 to December 2020.

	Observations	Mean	SD	Min	Max
<i>Panel A: Fund Characteristics (Annual)</i>					
Manager Relocation Dummy (Within Fund Firm)	91,584	0.086	0.281	0	1
AUM (\$ mil)	91,145	1,288	5,515	0.211	210,424
Flow (%)	89,754	0.065	0.384	-1.012	1.978
Expense Ratio (%)	85,126	1.241	0.513	0.000	9.667
Total Revenue (\$ mil)	85,145	11.55	41.18	0.000	1,330
Net Alpha (%)	85,453	-0.985	8.051	-73.17	73.57
Gross Alpha (%)	85,453	0.240	8.037	-71.43	75.20
Value Added (\$ mil)	85,453	8.169	250.9	-11,618	35,510
<i>Panel B: Manager Characteristics (Annual)</i>					
Manager Relocation Dummy (Within Fund Firm)	110,913	0.082	0.274	0	1
AUM (\$ mil)	105,718	1,202	3,938	0.0917	141,223
Flow (%)	106,099	-0.005	0.264	-1.012	1.978
Expense Ratio (%)	105,890	1.209	0.450	0.001	9.667
Total Revenue (\$ mil)	105,449	10.39	28.44	0.001	1,128
Net Alpha (%)	105,899	-1.002	6.561	-73.17	73.57
Gross Alpha (%)	105,899	0.200	6.543	-71.43	75.20
Value Added (\$ mil)	105,469	6.576	165.9	-5,999	11,981
<i>Panel C: Firm Characteristics (Annual)</i>					
Reallocate Frequency (Within Fund Firm)	16,250	0.568	2.141	0	99
AUM (\$ mil)	16,245	7,345	48,292	4.141	1,525,000
Flow (%)	14,841	14.14	48.98	-49.96	199.6
Expense Ratio (%)	15,013	1.209	0.535	0.008	8.890
Total Revenue (\$ mil)	15,013	66.98	357.0	0.0009	8,998
Net Alpha (%)	16,245	-0.827	6.023	-41.36	48.82
Gross Alpha (%)	16,245	0.277	6.003	-39.90	50.21
Value Added (\$ mil)	14,987	46.580	1,087	-19,692	54,831

V. Fund Firm Benefits of Manager Reallocation

In this section, I examine whether the fund manager’s reallocation decision is beneficial to the fund firm in Hypothesis *H1*. My model specification is as follows:

$$\Delta V_{f,t} = a_t + a_f + \beta \text{ReallocateFrequency}_{f,t} + \Psi X_{f,t} + \epsilon_{f,t}, \quad (12)$$

where $\Delta V_{f,t}$ denotes the change in fund firm f ’s characteristics from year $t - 1$ to t . The reason why I do not use the change from t to $t + 1$ is that there are manager reallocations on different months in year t ; I study the effect of manager reallocation during the year t following Berk et al. (2017). $V_{f,t}$ (fund firm’s characteristics) include revenues, expense ratios, and fund flows. a_t is a calendar time-fixed effect, and a_f is a fund firm-fixed effect. Fund firm-fixed effect is used to address an endogeneity issue - some fund firms with many funds under management are more likely to reallocate fund managers to different funds. I use this fund firm-fixed effect by comparing the increased fund firm’s revenue after any fund manager reallocation decision.

Some fund firms reallocate one manager one time within one year, while others reallocate multiple managers multiple times within one year. I construct a reallocation frequency variable $\text{ReallocateFrequency}_{f,t}$ for the firm f in year t to study whether more frequent reallocation is more beneficial to fund firms. When there is no reallocation, $\text{ReallocateFrequency}_{f,t}$ is set as zero. The reason why I do not use the manager reallocation dummy variable is that some large fund firms such as Vanguard reallocate managers every year. If I use the manager reallocation dummy and the firm-fixed effect, these large firms’ samples are ignored, leading to a selection bias. $X_{f,t}$ is a vector of control variables including the fund firm’s tenure (the number of years firm f appears in the full mutual fund dataset) and fund firms’ value-weighted net alphas over the past 1 to 3 years.

The first column in Table II shows that there is an increase in revenue for fund firms that have reallocated fund managers. The more frequently a fund firm reallocates managers,

Table II: Fund Firm Benefits of Manager Reallocation

This table implements Eq. (12), a firm and time-fixed effect regression of change in firm-level characteristics on the reallocation frequency. Reallocation Frequency is the total amount of times a fund firm reallocates its fund managers over a year. Tenure is the number of months the fund firm appeared in the full mutual fund sample in year t . Past 1 Year Net Alpha, Past 2 Year Net Alpha, and Past 3 Year Net Alpha are historical net alphas of the fund manager over the past 1, 2, and 3 years. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

	$\Delta Revenue$	$\Delta ExpenseRatio$	$Flow$	$\%Flow$
<i>Fund Firm's</i>				
Reallocation Frequency	0.503** (2.19)	0.002 (1.54)	23.100*** (4.03)	0.616*** (3.50)
Tenure	-1.252* (-1.91)	-0.026*** (-6.11)	-79.058*** (-5.27)	-4.860*** (-10.55)
Past 1 Year Net Alpha	0.494*** (4.84)	-0.002*** (-3.33)	18.074*** (7.12)	2.220*** (28.49)
Past 2 Year Net Alpha	0.172 (1.59)	0.001 (1.09)	16.137*** (5.99)	1.629*** (19.71)
Past 3 Year Net Alpha	0.105 (0.95)	-0.001 (-1.51)	8.672*** (3.17)	0.580*** (6.92)
Observations	13,674	13,674	14,781	14,781
R-squared	0.147	0.105	0.204	0.403
Fund Firm FE	YES	YES	YES	YES
Time FE	YES	YES	YES	YES

the more revenue this fund firm generates. Revenue is the product of the expense ratio and AUM, and the source of the increase in AUM is investor flows or capital appreciation. Given that AUM mainly comes from investor flows, I further study the source of increased revenue by decomposing it into the increase in expense ratio and investor flow. The second and third columns show that the increased revenue comes from the investor inflows, not from the increase in expense ratios. The result also holds for percentage flow as shown in Column 4. The empirical evidence is consistent with hypothesis $H1$ that manager reallocation increases a fund firm's revenue.

The third to fifth rows show that net alphas over the past three years also positively explain the increase in revenue. The evidence that investors chase past performance is a central finding in the mutual fund literature (Sirri and Tufano (1998); Lynch and Musto (2003)). This paper shows that after controlling for the fund firm's past performance, the

reallocation frequency still explains investor inflows. It indicates that fund firms' reallocation is another channel in addition to superior performance to attract investors and thus generates higher revenue.

VI. Fund Managers' Capital Raising Ability as A Reason of Reallocation

Existing studies find that fund performance is an important reason for reallocation (Nanda et al. (2004); Agarwal et al. (2018)). For example, fund managers who perform well are more likely to be reallocated to poorly performed funds. Xu (2021) proposes a model featuring fund managers' capital raising ability and shows that a spillover of senior fund managers' capital raising ability on junior managers exists. In this section, I focus on fund managers' capital raising ability as a reason why fund firms reallocate managers to other funds. I also compare managers' active investment skills with their capital raising ability in explaining manager reallocation.

I first estimate a logistic regression to examine which manager characteristics are more likely to explain fund firms' decisions to reallocate this manager to other funds within the fund firm.

$$Pr[\mathbb{1}_{j,t+1}^{join} = 1] = a_t + \Phi \mathbf{Manager}_{j,t} + \epsilon_{j,t}, \quad (13)$$

where $\mathbb{1}_{j,t+1}^{join}$ equals one if the fund manager j joins any other fund within the fund firm and zero otherwise; $\mathbf{Manager}_{j,t}$ is a vector of manager-level characteristics including the past 1 to 3 year flows, past 1 to 3 years alphas, past 1 to 3 years value added, log AUM, manager tenure, turnover, and expense ratio. a_t is the time-fixed effect. This analysis does not include a manager-fixed effect. Some managers are reallocated several times while others are never reallocated. If I use a manager fixed-effect model, the managers who were never reallocated are excluded from the analysis, leading to a sample bias problem.

This model specification allows us to test Hypothesis $H2$ that fund managers' capital

raising ability is one reason why fund firms reallocate managers. The past flows a manager has attracted is an important signal of the manager's capital raising ability. If a fund manager has attracted significant inflows, the manager is more likely to have a higher capital raising ability. A manager's AUM is another signal of capital raising ability because the ability to raise capital is incorporated into the size.

Table III: Manager Reallocation - Explained by Allocated Managers' Characteristics

This table implements Eq. (13), a time-fixed effect logistic regression of a manager reallocation dummy within fund firms on the following manager characteristics: Past 1 Year % Flow, Past 2 Year % Flow, Past 3 Year % Flow (historical percent flows of the fund manager over the past 1 year, 2 years, and 3 years), LnSize (natural logarithm of total size the fund manager manages), Past 1 Year Net Alpha, Past 2 Year Net Alpha, Past 3 Year Net Alpha (historical net alphas of the fund manager over the past 1, 2, and 3 years), and Past 1 Year Value Added, Past 2 Year Value Added, Past 3 Year Value Added (historical value added of the fund manager over the past 1 year, 2 years, and 3 years), Manager Tenure (number of months the fund manager appeared in the full mutual fund sample in year t), Expense Ratio (expense ratio of the fund manager in year t), and Turnover Ratio (turnover ratio of the fund manager in year t). All explanatory variables are standardized. The sample period is from January 1962 to December 2020. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

	Reallocated Manager Dummy		
<i>Reallocated Manager's</i>			
Past 1 Year % Flow	0.085*** (3.92)		0.073*** (3.19)
Past 2 Year % Flow	0.091*** (4.08)		0.099*** (4.25)
Past 3 Year % Flow	-0.008 (-0.48)		-0.010 (-0.60)
LnSize	0.339*** (19.11)	0.337*** (19.03)	0.338*** (19.05)
Past 1 Year Net Alpha		0.045*** (2.79)	0.031* (1.87)
Past 2 Year Net Alpha		0.028* (1.77)	-0.010 (-0.61)
Past 3 Year Net Alpha		0.031** (2.18)	0.008 (0.58)
Past 1 Year Value Added	0.005 (0.52)	-0.001 (-0.05)	-0.000 (-0.05)
Past 2 Year Value Added	-0.035*** (-2.72)	-0.034** (-2.55)	-0.032** (-2.38)
Past 3 Year Value Added	-0.015 (-1.29)	-0.017 (-1.39)	-0.016 (-1.36)
Tenure	-0.232*** (-12.83)	-0.240*** (-13.25)	-0.232*** (-12.82)
Expense Ratio	-0.014 (-0.83)	-0.013 (-0.74)	-0.014 (-0.78)
Turnover Ratio	0.107*** (7.12)	0.103*** (6.87)	0.107*** (7.16)
Observations	84,821	84,821	84,821
Number of Managers	11,773	11,773	11,773
R-squared	0.256	0.255	0.256
Time FE	YES	YES	YES

Table III reports the result for manager reallocation within fund firms explained by allocated managers' characteristics. The first column shows that a fund manager who attracted higher fund inflows over the past 1 and 2 years is more likely to join a new fund within the fund firm. The second column suggests that a fund manager who performed well over the past 1, 2, and 3 years is more likely to join a new fund within the fund firm. R-squared of the past net alphas is slightly lower than the R-squared of the past % flows, indicating that a fund manager's ability to attract fund inflows is somewhat more important than a manager's skill to deliver net alphas for fund firms to make reallocation decisions.

The third column includes both past 1-3 years % flows and past 1-3 years net alphas to jointly explain the probability of the manager reallocation. Alphas over the past 2 and 3 years are no longer positive, suggesting that net alphas are positively related to flows. R-squared in column 3 is the same as the R-squared in column 1, implying that a fund manager's ability to attract flows alone can explain the fund firm's reallocation decision. The economic magnitudes of past 1-3 year % flows are all higher than the economic magnitudes of net alphas (past 1 year % flow 0.073 compared to the net alpha 0.031), indicating that a manager's past fund inflows explain the probability of manager reallocation better than the alphas.

Moreover, the consistent significant positive fund size in the fourth row suggests that when a manager has already managed a large amount of capital, this manager is more likely to be reallocated to manage other funds.

I use the past flows and fund size after controlling for past alphas and value added as a measure of managers' capital raising ability. Both the significantly positive past fund flows and size suggest that the fund manager who has higher capital raising ability is more likely to join in new funds, consistent with Hypothesis *H2*. The empirical evidence also shows that the economic magnitude of flows is higher than that of alphas, indicating that fund managers' capital raising ability plays a more important role than their active investment skill.

I then estimate the following logistic regression to study which fund characteristics are

more likely to have new managers join

$$Pr[\mathbb{1}_{i,t+1}^{join} = 1] = a_t + \Gamma \mathbf{Fund}_{i,t} + \epsilon_{i,t}, \quad (14)$$

where $\mathbb{1}_{i,t+1}^{join}$ equals to one if a new reallocated manager joined the fund i at time $t + 1$ and zero otherwise. $\mathbf{Fund}_{i,t}$ is a vector of fund-level characteristics including the fund i 's past 1 to 3 year flows, past 1 to 3 years alphas, past 1 to 3 years value added, log AUM, firm fund number, manager per fund, turnover, and expense ratio. a_t is the time-fixed effect. This analysis does not include a fund-fixed effect. Some funds reallocate managers very frequently while others never reallocate. If I use a fund fixed-effect model, the funds that never reallocate managers are excluded from the analysis, leading to a sample bias problem.

Table IV: Manager Reallocation - Explained by Allocated Fund Characteristics

This table implements Eq. (14), a time-fixed effect logistic regression of a fund reallocation dummy on the following fund characteristics: Past 1 Year % Flow, Past 2 Year % Flow, Past 3 Year % Flow (historical percent flows of the fund over the past 1, 2, and 3 years), LnSize (natural logarithm of total size the fund manages), Past 1 Year Net Alpha, Past 2 Year Net Alpha, Past 3 Year Net Alpha (historical net alphas of the fund over the past 1, 2, and 3 years), and Past 1 Year Value Added, Past 2 Year Value Added, Past 3 Year Value Added (historical value added of the fund over the past 1, 2, and 3 years), Firm Fund Number (number of funds the fund's firm has in year t), Manager Per Fund (number of managers the fund has in year t), Expense Ratio (expense ratio of the fund in year t), and Turnover Ratio (turnover ratio of the fund in year t). All explanatory variables are standardized. The sample period is from January 1962 to December 2020. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

	Reallocated Fund Dummy		
<i>Reallocated Fund's</i>			
Past 1 Year % Flow	-0.168*** (-5.84)		-0.123*** (-4.09)
Past 2 Year % Flow	-0.016 (-0.53)		-0.024 (-0.79)
Past 3 Year % Flow	-0.001 (-0.05)		0.004 (0.19)
LnSize	0.160*** (7.27)	0.174*** (7.93)	0.168*** (7.61)
Past 1 Year Net Alpha		-0.123*** (-6.47)	-0.101*** (-5.10)
Past 2 Year Net Alpha		-0.031 (-1.62)	-0.007 (-0.33)
Past 3 Year Net Alpha		-0.070*** (-4.10)	-0.060*** (-3.44)
Past 1 Year Value Added	0.003 (0.26)	0.014 (1.39)	0.014 (1.36)
Past 2 Year Value Added	0.002 (0.15)	0.003 (0.19)	0.002 (0.18)
Past 3 Year Value Added	-0.029** (-1.98)	-0.018 (-1.21)	-0.017 (-1.13)
Firm Fund Number	0.201*** (12.70)	0.198*** (12.60)	0.200*** (12.69)
Manager Per Fund	0.106*** (7.34)	0.105*** (7.33)	0.106*** (7.36)
Expense Ratio	-0.057*** (-2.68)	-0.055*** (-2.58)	-0.063*** (-2.92)
Turnover Ratio	0.119*** (6.81)	0.114*** (6.56)	0.112*** (6.40)
Observations	62,730	62,730	62,730
Number of Funds	5,119	5,119	5,119
R-squared	0.388	0.388	0.389
Time FE	YES	YES	YES

The hypothesis is that funds with capital outflows are more likely to have new managers join. This is because those funds with significant outflows may have a crisis of investors' confidence in the existing managers in the fund. Fund firms allocate managers with higher capital raising ability (i.e., are more trusted) to join in those funds. Table IV shows the result for manager reallocation to be explained by allocated funds' characteristics. The first column shows that a fund that has significant outflows over the past 1 year is more likely to have new managers join.

Column 2 implies that a fund that performed poorly over the past 1 and 3 years is more likely to have new managers join. Column 3 adds both past 1-3 years % flows and past 1-3 years net alphas to jointly explain the probability of the manager reallocation. The economic magnitude of past 1-year percent flow (-0.123) is higher than the economic magnitudes of past 1-year net alpha (-0.101), indicating that past 1-year % flow is a more important determinant of fund firm's reallocation decisions. The empirical evidence suggests that when a fund has significant capital outflows and performed poorly, this fund firm is more likely to reallocate a manager to join this fund.

I further examine the interaction between a fund's characteristics and the allocated manager's characteristics

$$Pr[\mathbb{1}_{i,t+1}^{join} = 1] = a_i + \gamma Fund_{i,t} \times Manager_{i,t} + \epsilon_{i,t}, \quad (15)$$

where $Manager_{i,t}$ is a vector of the allocated fund manager's characteristics when this allocated manager joins to fund i in year t . If there is more than one allocated manager associated with fund i in year t , $Manager_{i,t}$ is the average of all newly allocated managers' characteristics. a_t is the time-fixed effect.

I examine whether funds with capital outflows are more likely to allocate managers with high capital raising ability. If the fund's past flows and the allocated manager's past flows negatively interact, it suggests that funds with capital outflows are more likely to allocate

new managers with high capital raising ability.

Table V: Manager Reallocation - Flow Interactions

This table implements Eq. (15), a time-fixed effect logistic regression of a fund reallocation dummy on the following fund characteristics: interaction between the reallocated fund's past 1, 2, 3 year flows and the reallocated manager's past 1, 2, 3 years past flows, Past 1 Year % Flow, Past 2 Year % Flow, Past 3 Year % Flow (historical percent flows of the reallocated funds and reallocated managers over the past 1 year, 2 years, and 3 years), Fund's LnSize (natural logarithm of the total size of the reallocated fund), Manager's Tenure (number of months the fund manager appeared in the full mutual fund sample in year t), Firm Fund Number (number of funds the fund's firm has in year t), Fund's Manager Per Fund (number of managers the fund has in year t), Fund's Expense Ratio (expense ratio of the fund in year t), and Fund's Turnover Ratio (turnover ratio of the fund in year t). The sample period is from January 1962 to December 2020. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

	Reallocated Fund Dummy		
Fund's Past 1 Year % Flow \times Reallocated Manager's Past 1 Year % Flow	-0.312** (-2.32)		
Fund's Past 2 Year % Flow \times Reallocated Manager's Past 2 Year % Flow		-0.521*** (-4.38)	
Fund's Past 3 Year % Flow \times Reallocated Manager's Past 3 Year % Flow			-0.439*** (-3.91)
Fund's LnSize	0.076*** (6.27)	0.088*** (6.86)	0.092*** (6.79)
Manager's Tenure	0.006*** (11.21)	0.006*** (10.51)	0.005*** (10.07)
Firm Fund Number	0.066*** (10.56)	0.065*** (10.33)	0.062*** (9.72)
Fund's Manager Per Fund	-0.044 (-0.95)	-0.018 (-0.36)	-0.002 (-0.05)
Fund's Expense Ratio	0.146*** (5.44)	0.157*** (5.67)	0.172*** (5.95)
Fund's Turnover Ratio	-4.555*** (-26.31)	-4.602*** (-26.02)	-4.616*** (-25.57)
Observations	72,665	67,640	62,664
Number of Funds	5,316	5,290	5,130
R-squared	0.367	0.400	0.441
Time FE	YES	YES	YES

Table V shows that there is an interaction between the fund's past flows and reallocated manager's past flows. It holds over the past 1, 2, and 3 years. The result implies that fund firms' reallocation decision is related to the fund manager's capital raising ability and the fund's difficulty in maintaining capital.

Previous tests suggest that managers' *past flows* are important to explain fund firms' reallocation decisions. An additional approach to examine the reallocated manager's capital

raising ability is to test whether this reallocated manager can attract more *future flows* than other non-reallocated managers

$$\Delta Flow_{j,t+1} = a_t + \gamma \mathbb{1}_{j,t}^{join} + X_{j,t} + \epsilon_{j,t}, \quad (16)$$

where $X_{j,t}$ is a vector of manager-level characteristics including the manager j 's log AUM, expense ratio, turnover ratio, and tenure. Moreover, I also examine whether the fund that has new allocated managers could attract more *future flows* than other funds that have no new allocated manager

$$\Delta Flow_{i,t+1} = a_t + \gamma \mathbb{1}_{i,t}^{join} + X_{i,t} + \epsilon_{i,t}, \quad (17)$$

where $X_{i,t}$ is a vector of fund-level characteristics including the fund i 's log AUM, expense ratio, turnover ratio, numbers of fund in the firm, and numbers of managers.

Table VI reports the change in the manager's flow and fund's flow in the next year. Reallocated managers' future increased flows are higher than non-reallocated managers, indicating that reallocated managers have higher capital raising ability. In addition, the fund with reallocated managers also has higher future increased flows than other funds, implying that the reallocated manager brings more capital to this fund.

One concern in the above tests is that capital flows and AUM are also signals of a manager's active investment skill. The higher alpha a manager delivered, the more fund inflows can be obtained from investors since investors chase high performance (Sirri and Tufano (1998); Lynch and Musto (2003)). Hence, the above identification strategy is not enough to indicate that capital raising ability is an important determinant of a fund firm's reallocation decision.

To address the concern, I use the model prediction in Xu (2021) which shows that net alpha, gross alpha, and value added can be used to distinguish between capital raising ability and active investment skill. It predicts that a fund manager with higher capital raising ability

Table VI: Reallocated Manager’s and Fund’s Future Flows After Reallocation

This table implements Eq. (16) and (17), a time-fixed effect regression of the change in flows on the following manager (fund) characteristics: A manager reallocation dummy that equals to one if a fund manager j joins any other fund within the fund firm and zero otherwise (or a fund reallocation dummy that equals to one if a fund i has any manager within the fund firm join and zero otherwise), LnSize (natural logarithm of total size the fund manager (fund) manages), Expense Ratio (expense ratio of the fund manager (fund) in year t), Turnover Ratio (turnover ratio of the fund manager (fund) in year t), Tenure (number of months the fund manager appeared in the full mutual fund sample in year t), Firm Fund Number (number of funds the fund’s firm has in year t), and Manager Per Fund (number of managers the fund has in year t). All explanatory variables are standardized. The sample period is from January 1962 to December 2020. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

	$\Delta ManagerFlow$	$\Delta FundFlow$
Reallocation Dummy	19.124*** (8.95)	6.678*** (2.75)
LnSize	-17.505*** (-25.14)	-30.215*** (-37.28)
Expense Ratio	-1.736** (-2.51)	-3.779*** (-4.69)
Turnover Ratio	0.371 (0.58)	-1.162 (-1.58)
Tenure	0.544 (0.82)	
Firm Fund Number		4.782*** (6.53)
Manager Per Fund		0.555 (0.75)
Observations	89,426	72,972
R-squared	0.020	0.034
Time FE	YES	YES

has a lower net alpha and gross alpha, while a fund manager with higher active investment skill has a higher net alpha and gross alpha. Value added is irrelevant to the capital raising ability, but it increases with the active investment skill.

I estimate the following time-fixed effect model

$$\Delta\alpha_{j,t+1}^n = a_t + \gamma \mathbb{1}_{j,t}^{join} + X_{j,t} + \epsilon_{j,t}. \quad (18)$$

If the reallocated manager’s active investment skill is dominant in this manager reallocation, this manager should have a higher net alpha, gross alpha, and value added than other non-reallocated managers. Conversely, if the reallocated manager’s capital raising ability

is dominant, this manager should have a lower net alpha and gross alpha, and have no significantly higher value added. In addition, I also investigate the fund’s future change in net alpha, gross alpha, and value added

$$\Delta\alpha_{i,t+1}^n = a_t + \gamma\mathbb{1}_{i,t}^{join} + X_{i,t} + \epsilon_{i,t}. \quad (19)$$

If the reallocated fund’s increases in net alpha and gross alpha are lower than non-reallocated funds, this fund has higher capital raising ability than other funds.

Table VII reports the changes in net alpha, gross alphas, and value added at the manager and fund levels. The first column in Panel A shows that a reallocated manager’s change in net alpha is lower than other managers’ gross alpha. This result holds after controlling for the manager’s other characteristics and time-fixed effects. Gross alpha in Column 2 also shows a significantly negative result. In addition, value added is insignificantly different from zero. These findings suggest that fund managers’ capital raising ability is more predominated than their active investment skill in attracting flows. Panel B shows that funds with newly joined managers have insignificantly negative gross alpha, indicating that both managers’ capital raising ability and active skill have an impact on attracting higher flows in a fund. Capital raising ability is dominant because the increase in value added is insignificant.

Table VII: Reallocated Manager's and Fund's Future Net Alpha, Gross Alphas, and Value Added After Reallocation

This table implements Eq. (16) and (17), a time-fixed effect regression of the change in net alpha, gross alpha, and value added on the following manager (fund) characteristics: A manager reallocation dummy that equals to one if a fund manager j joins any other fund within the fund firm and zero otherwise (or a fund reallocation dummy that equals to one if a fund i has any manager within the fund firm join and zero otherwise), LnSize (natural logarithm of total size the fund manager (fund) manages), Expense Ratio (expense ratio of the fund manager (fund) in year t), Turnover Ratio (turnover ratio of the fund manager (fund) in year t), Tenure (number of months the fund manager appeared in the full mutual fund sample in year t), Firm Fund Number (number of funds the fund's firm has in year t), and Manager Per Fund (number of managers the fund has in year t). All explanatory variables are standardized. The sample period is from January 1962 to December 2020. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

	$\Delta\alpha^n$	$\Delta\alpha^g$	$\Delta ValueAdded$
<i>Panel A: Manager's</i>			
Reallocation Dummy	-0.166* (-1.71)	-0.171* (-1.76)	1.084 (0.39)
LnSize	-0.052* (-1.65)	-0.057* (-1.81)	-1.079 (-1.18)
Tenure	0.039 (1.30)	0.043 (1.43)	0.307 (0.35)
Expense Ratio	0.021 (0.67)	-0.007 (-0.21)	-0.558 (-0.62)
Turnover Ratio	0.062** (2.15)	0.066** (2.29)	0.665 (0.80)
Observations	89,416	89,416	89,400
R-squared	0.067	0.067	0.018
Time FE	YES	YES	YES
<i>Panel B: Fund's</i>			
Reallocation Dummy	-0.027 (-0.22)	-0.028 (-0.23)	4.104 (0.89)
LnSize	-0.196*** (-4.72)	-0.198*** (-4.76)	-0.138 (-0.09)
Firm Fund Number	0.056 (1.48)	0.051 (1.35)	0.050 (0.04)
Manager Per Fund	0.038 (0.99)	0.036 (0.96)	1.415 (1.01)
Expense Ratio	-0.042 (-1.02)	-0.060 (-1.45)	-0.357 (-0.23)
Turnover Ratio	0.034 (0.89)	0.038 (1.01)	0.927 (0.66)
Observations	72,952	72,952	72,952
R-squared	0.055	0.055	0.010
Time FE	YES	YES	YES

The above studies show that reallocated managers contribute to funds through their capital raising ability. An additional channel is that fund firms could optimize the capital raising ability of a manager team by allocating particular managers to work together. According to this synergy hypothesis, I study how the teamwork between the reallocated manager and existing managers could optimize the team’s capital raising ability and thus attract higher flows. Motivated by [Xu \(2021\)](#), one possibility is that there is a synergy effect between junior and senior managers. I test whether the larger the experience difference between the reallocated managers and existing managers is, the more investor flows this fund can attract. I estimate the following model

$$\Delta Flow_{i,t+1} = a_t + \Psi ExpDiff_{i,t} + \epsilon_{i,t}, \quad (20)$$

where $ExpDiff_{i,t}$ is the monthly experience (tenure) difference between the mutual fund i ’s reallocated managers and existing managers in year t . If there are multiple new (existing) managers, I took an average of all new (existing) managers’ characteristics in fund i . a_t is the time-fixed effect.

Table [VIII](#) shows that the experience difference between the reallocated managers and existing managers explains the increased fund flows in the next year. The larger the experience difference is, the higher the fund flows increase. I further investigate the changes in net alpha, gross alpha, and value added. I find that the changes in net alpha and gross alpha are insignificantly negative, and changes in value added are insignificantly positive. The findings imply that the management team’s capital raising ability is higher when the allocated manager is more senior than the existing managers.

VII. Conclusion

This paper tests a new hypothesis on the fund managers’ capital raising ability as a determinant of manager reallocation in fund firms. The capital raising ability of managers increases fund

Table VIII: Managers' Experience Difference in A Fund

This table implements

Eq. (20), a time-fixed effect regression of the change in fund characteristics on the following manager characteristics: Experience Difference (experience difference between reallocated managers and existing managers), LnSize (natural logarithm of total size the fund manages), Expense Ratio (expense ratio of the fund in year t), and Turnover Ratio (turnover ratio of the fund in year t), The sample period is from January 1962 to December 2020. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

	$\Delta FundFlow$	$\Delta\alpha^n$	$\Delta\alpha^g$	$\Delta ValueAdded$
<i>Reallocated Fund's</i>				
Experience Difference	0.060** (2.32)	-0.000 (-0.33)	-0.000 (-0.33)	0.029 (0.58)
LnSize	-10.983*** (-11.18)	0.064 (1.24)	0.066 (1.26)	0.536 (0.29)
Expense Ratio	-3.574 (-0.83)	0.170 (0.74)	0.136 (0.60)	-0.540 (-0.07)
Turnover Ratio	-0.609 (-0.21)	-0.205 (-1.33)	-0.199 (-1.29)	4.268 (0.77)
Observations	9,002	9,002	9,002	9,002
R-squared	0.038	0.070	0.070	0.021
Time FE	YES	YES	YES	YES

firms' revenues by attracting more capital flows. Compared with active investment skills, the capital raising ability of managers explains manager reallocation decisions better. There is a synergy effect between junior and senior managers to raise capital in a fund.

The empirical evidence highlights that the fund manager's capital raising ability is an important skill that could increase revenues to individual funds and fund firms as a whole. This paper suggests that understanding the ability of fund managers to raise capital may substantially improve our comprehension of value creation in mutual funds and help explain mutual fund abnormalities such as investor inflows despite negative net alphas.

References

- Agarwal, V., L. Ma, and K. Mullally (2018). *Managerial Multitasking in the Mutual Fund Industry*.
- Ben-David, I., J. Li, A. Rossi, and Y. Song (2021). What Do Mutual Fund Investors Really Care About? *The Review of Financial Studies* 00, 1–52.
- Bergstresser, D., J. M. Chalmers, and P. Tufano (2009). Assessing the costs and benefits of brokers in the mutual fund industry. *Review of Financial Studies* 22(10), 4129–4156.
- Berk, J. B. and R. C. Green (2004). Mutual fund flows and performance in rational markets. *Journal of Political Economy* 112(6), 1269–1295.
- Berk, J. B., J. van Binsbergen, and B. Liu (2017). Matching Capital and Labor. *Journal of Finance* 72(6), 2467–2504.
- Berk, J. B. and J. H. van Binsbergen (2015). Measuring skill in the mutual fund industry. *Journal of Financial Economics* 118(1), 1–20.
- Bollen, N. P. and J. A. Busse (2001). On the timing ability of mutual fund managers. *Journal of Finance* 56(3), 1075–1094.
- Carhart, M. M. (1997). On persistence in mutual fund performance. *Journal of Finance* 52(1), 57–82.
- Christoffersen, S. E., R. Evans, and D. K. Musto (2013). What Do Consumers' Fund Flows Maximize? Evidence from Their Brokers' Incentives. *Journal of Finance* 68(1), 201–235.
- Cohen, L. and B. Schmidt (2009). Attracting flows by attracting big clients. *Journal of Finance* 64(5), 2125–2151.
- Cooper, M. J., M. Halling, and W. Yang (2021). The Persistence of Fee Dispersion among Mutual Funds. *Review of Finance* 25(2), 365–402.

- Cremers, K. J. and A. Petajisto (2009). How Active Is Your Fund Manager A New Measure That Predicts Performance. *Review of Financial Studies* 22(9), 3329–3365.
- Evans, R. B. and Y. Sun (2021). Models or Stars: The Role of Asset Pricing Models and Heuristics in Investor Risk Adjustment. *Review of Financial Studies* 34(1), 67–107.
- Fama, E. F. and K. R. French (2010). Luck versus Skill in the cross-section of mutual fund returns. *Journal of Finance* 65(5), 1915–1947.
- Fedyk, A., S. Patel, and S. Sarkissian (2020). Managerial Structure and Performance-Induced Trading. *SSRN Electronic Journal*.
- Harvey, C. R., Y. Liu, E. K. M. Tan, and M. Zhu (2020). Crowding: Evidence from Fund Managerial Structure. *SSRN Electronic Journal*.
- Huang, J., K. D. Wei, and H. Yan (2007). Participation costs and the sensitivity of fund flows to past performance. *Journal of Finance* 62(3), 1273–1311.
- Ibert, M., R. Kaniel, S. Van Nieuwerburgh, and R. Vestman (2017). Are mutual fund managers paid for investment skill? *Review of Financial Studies* 31(2), 715–772.
- Jensen, M. C. (1968). The Performance of Mutual Funds in the Period 1945-1964. *The Journal of Finance* 23(2), 389.
- Kacperczyk, M., C. Sialm, and L. Zheng (2008). Unobserved actions of mutual funds. *Review of Financial Studies* 21(6), 2379–2416.
- Kosowski, R., A. Timmermann, R. Wermers, and H. White (2006). Can mutual fund "stars" really pick stocks? New evidence from a bootstrap analysis. *Journal of Finance* 61(6), 2551–2595.
- Lynch, A. W. and D. K. Musto (2003). How Investors Interpret Past Fund Returns. *Journal of Finance* 58(5), 2033–2058.

- Nanda, V., Z. J. Wang, and L. Zheng (2004). Family Values and the Star Phenomenon: Strategies of Mutual Fund Families. *Review of Financial Studies* 17(3), 667–698.
- Pástor, Ä. and R. F. Stambaugh (2012). On the size of the active management industry. *Journal of Political Economy* 120(4), 740–781.
- Roussanov, N., H. Ruan, and Y. Wei (2020). Marketing Mutual Funds. *The Review of Financial Studies*, 1–50.
- Sialm, C. and T. M. Tham (2016). Spillover effects in mutual fund companies. *Management Science* 62(5), 1472–1486.
- Sirri, E. R. and P. Tufano (1998). Costly search and mutual fund flows. *Journal of Finance* 53(5), 1589–1622.
- Warner, J. B. and J. S. Wu (2011). Why Do Mutual Fund Advisory Contracts Change? Performance, Growth, and Spillover Effects. *Journal of Finance* 66(1), 271–306.
- Xu, Y. (2021). Spillovers of Senior Mutual Fund Managers' Capital Raising Ability. *SSRN*.
- Zambrana, R. and F. Zapatero (2020). A Tale of Two Types: Generalists vs. Specialists in Mutual Funds Asset Management. *Journal of Financial Economics (JFE)*, *Forthcoming*.