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Anna Scherbina  
Associate Professor  
UC Davis  
Graduate School of Management  
Email: ascherbina@ucdavis.edu

Dear Members of the Q Group Jack Treynor Prize Committee:

Please consider the attached paper, “Performance Isn’t Everything: Personal Characteristics and Career Outcomes of Mutual Fund Managers,” joint with Bernd Schlusche and Brad Barber.

The paper analyzes the data on mutual fund managers, the managers’ performance, and their advancement through the career ladder. The paper confirms a well-known fact that there are very few female money managers. The paper then proceeds to analyze this fact in more detail and documents the following set of results. Firstly, women who grew up in cultures with high gender inequality appear to self-select not to go into the money management industry. Secondly, even women who make it to money management positions face some obstacles. Specifically, women who are co-managers rather than sole-managers appear to do worse in their careers than men in similar positions. Zeroing in on this empirical regularity, we show that female co-managers have worse career outcomes than their male co-managers with identical performance histories. This result confirms recent papers that show that women who work in teams get less credit than their male teammates. We also show that foreign-born managers tend to have fewer career advancements, possibly because they have smaller professional networks. Finally, we present some suggestive evidence that managers who “look good on paper” have better career outcomes, even after controlling for performance.

**Relevance to the Q-Group sponsors and its mission:**

I believe that the Q-Group members would find the result that money does not always follow talent to be interesting. Managers may do better or worse in their careers purely because of their personal characteristics rather than performance.

The lack of diversity in the money management field should be worrisome to investors because similar managers likely think alike, resulting in highly correlated returns. Identifying talented money managers, even when they do not fit a typical money manager profile, should be in the interests of management and investors alike.

Sincerely,  
Anna Scherbina

# Performance Isn't Everything: Personal Characteristics and Career Outcomes of Mutual Fund Managers

Brad Barber\*

Anna Scherbina<sup>†</sup>

Bernd Schlusche<sup>‡</sup>

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## ABSTRACT

We find that mutual fund managers' career outcomes are largely determined by past performance, measured by returns and fund flows. However, managers' personal attributes also factor in. All else equal, female managers are less likely to be promoted and have shorter tenures than male fund managers. This finding largely applies to women who co-manage funds with other managers, which suggests that working in teams negatively affects women's careers compared to men's. Restricting the sample of managers to those that co-manage the same fund and have identical track records, we provide further evidence that female managers are significantly more likely to leave the job than male managers. After controlling for workload and performance, we show that young managers are more likely to be promoted and less likely to be demoted or fired than their older peers.

**JEL classification:** G11, G14, G23.

**Keywords:** Women in Finance, Diversity, Career Advancement, Mutual Fund Industry

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\*Graduate School of Management, University of California, Davis, One Shields Avenue, Davis, CA 95616, USA. E-mail: bbarber@ucdavis.edu. Phone: (530) 752-0512

<sup>†</sup>Graduate School of Management, University of California, Davis, One Shields Avenue, Davis, CA 95616, USA. E-mail: ascherbina@ucdavis.edu. Phone: (530) 752-7658

<sup>‡</sup>Board of Governors of the Federal Reserve System, 20th Street and Constitution Avenue NW, Washington, DC 20551. E-mail: bernd.schlussche@frb.gov. Phone: (202) 452-2591

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## ABSTRACT

We find that mutual fund managers' career outcomes are largely determined by past performance, measured by returns and fund flows. However, managers' personal attributes also factor in. All else equal, female managers are less likely to be promoted and have shorter tenures than male fund managers. Restricting the sample of managers to those that co-manage the same fund and thereby have identical track records, we provide further evidence that female managers are significantly more likely to leave the job than male managers. Furthermore, managers from elite schools and those holding advanced degrees have better career outcomes, while older managers face significantly worse career prospects, possibly by choice.

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# I. Introduction

Hiring and promoting employees solely based on merit should be the goal of any performance-oriented organization. However, often, there is some degree of judgement by the management, and various personal biases may enter personnel decisions.<sup>1</sup> For example, good (poor) performance can be attributed to good (bad) luck rather than skill. If decision makers hold personal biases against certain employee groups, the good performance of some groups—perhaps those groups that are underrepresented in the particular industry and that are viewed as inherently less skilled—may be disproportionately attributed to good luck and bad performance to low skill. Indeed, research in economics and organizational behavior documents lower salaries, worse marketplace outcomes, and more negative workplace attitudes towards women, minorities, and older people.

In this paper, we conduct a large-scale study of promotion and demotion decisions made within competitive organizations that uses actual rather than self-reported data. Conducting such a study and drawing causal inference is only feasible with an appropriate setting at the researcher’s disposal. Being able to observe and measure individual employee performance is a necessary condition, but, due to a lack of available micro data, suitable settings are scarce. In our study, we focus on the mutual fund industry, which offers an ideal setting to analyze the influence of personal attributes on career progression for, at least, two reasons: (1) the performance of individual mutual fund managers is easily measurable, and (2) mutual fund families care about fund flows and returns to the extent that returns generate further fund flows and increase the value of total net assets (TNA) under management.

In its analysis of the influence of personal attributes on career progression, this paper contributes to the study of workplace discrimination, which is summarized in more detail in the next section. In this area, the so-called gender pay gap, or the fact that women make about 20% less than men, has garnered a lot of attention. The pay gap is largely explained by women’s tendency to work in lower-paying fields. Finance is one of the highest paying fields, and women in finance are severely

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<sup>1</sup>While some biases are introduced into the decision making process consciously, psychology research suggests that people may be unaware of the biased views they hold, leading to subconsciously biased decisions.

underrepresented. According to the statistics shown in this paper, while the fraction of women in the industry was rising in the 1990s, the trend changed around the burst of the dot-com bubble, with the fraction of women working as mutual fund managers declining from a peak of 13.83% in August 1999 to 9.78% in December 2016.

Our study of fund managers' characteristics and their effects on career progression offers a variety of new insights into the relation between gender and career outcomes. To begin, we address the question of why there are so few female managers in the industry? Analyzing the fraction of female managers by their country of origin, we find that the decision to work in finance is weakly related to a countries' gender inequality rank compiled by the United Nations. Unfortunately, the cross-section of countries with a meaningful number of managers is very small and the relation is not statistically significant. Within the United States, the attitude towards gender equality most likely also varies by culture, and, hence, women of some cultural backgrounds may be less likely to consider to work in the finance industry.

Next, we investigate whether or not female managers are treated fairly once they have entered the mutual fund industry. We present evidence that once a women becomes a mutual fund manager, she typically has a significantly shorter tenure in the industry than a male manager, that is, she is significantly more likely to permanently leave the industry in any given month. Are female managers' departures from the industry related to their performance? When analyzing in detail the performance of female managers of active equity funds, we find no significant difference between their performance and that of male managers in terms of both returns and fund flows. Moreover, female managers' returns are less volatile than the returns of other funds in the same investment category. One reason for why female managers leave the industry is that they typically have fewer fund management responsibilities than their male counterparts. When a male manager loses one fund, he may be managing another fund in parallel, and so he remains in the industry. When a female manager loses a fund, she is less likely to be managing another fund at the same time, and she ends up leaving the industry. But even controlling for the number of funds and the total net value of the assets that a manager manages does not explain the tendency of female managers

to leave the industry prematurely. There is also the question of why female managers do not get promoted to large fund management responsibilities.

We conduct a detailed analysis of fund managers' promotion and demotion decisions. To that end, we consider a manager to be fired from the industry when s/he permanently disappears from the industry, having ended all fund management responsibilities, and is less than 60 years old, or, if the age is missing, has worked as a fund manager for less than 30 years. We define as a demotion all job reassignments that result in fewer funds being (co-)managed by the manager or a lower total TNA being attributed to the manager. Analogously, we define as a promotion all job reassignments that result in more funds being (co-)managed by the manager or a higher total TNA being attributed to the manager. Given that a fund family receives a management fee that is based on the total assets under management, these definitions make sense because it is likely that part of the fund's management fee, which is based on the amount of assets under management, is shared with the manager. Our results indicate that female managers are not disproportionately penalized following instances of poor performance. In fact, sole female managers are less likely than male managers to permanently leave the industry following instances of bad returns. Likewise, female managers are equally rewarded with promotions following good returns.

We do, however, find that female managers are less likely to be promoted to managing more funds or a higher combined TNA than male managers in any given month. Is that perhaps a deliberate choice that female managers make because they may be experiencing more family conflicts? The lower propensity of female managers to be promoted does not appear to be related to their age. However, sole managers probably have more demanding job responsibilities than co-managers, and we find that female sole managers tend to disproportionately permanently leave the industry when they are of a childbearing age.

One plausible hypothesis for why female managers tend to have fewer fund management responsibilities is that they have gaps in their careers to accommodate family responsibilities. However, we do not find that the incidences of career gaps and their length are statistically different between men and women. A related conjecture is that female managers perhaps do not intend to

leave their jobs permanently but then face more obstacles than men rejoining the field following an employment gap. Unfortunately, it is impossible to test this conjecture given the data limitations.

We also present a number of noteworthy findings on the relation between managers' characteristics other than gender and their career outcomes. In particular, we analyze the influence of the attributes that have been historically associated with workplace discrimination, such as age, foreign origin, terminal degree, and a dummy variable indicating whether a manager attended an elite school. These variables can be identified from the Morningstar dataset of managers' characteristics that provides a managers' names, degrees, schools attended, dates of birth, dates of graduation, and the dates on which each manager started (and finished, if applicable) managing each fund.

One strong and consistent result emerges. Older managers have significantly worse chances of being promoted and significantly higher chances to be demoted than younger managers with similar job responsibilities and similar past performance. While it is possible that older managers voluntarily diminish their job responsibilities, it is clearly not in the interest of mutual fund families to underemploy skilled managers. Our results also show that managers who hold advanced degrees are promoted faster than their similarly performing peers with only a Bachelor's degree. Following instances of poor past performance, managers with an advanced degree have a lower risk of being fired or demoted, and they tend to get promoted at a faster rate than their peers. All else equal, managers who attended a top school for at least one of their degrees have a higher chance of being promoted. Being foreign born does not increase the chances of being fired or demoted, but it does decrease the odds of being promoted, compared to otherwise similar U.S.-born managers.

A possible omission of important fund controls from our analysis of mutual fund managers' career trajectories would pose a threat to our conclusions. For example, female managers could be forced out of the industry because the types of funds that they manage have become obsolete. To mitigate such concerns, we turn to a setting in which we are able to perfectly control for the nature of the funds in the analysis and managers' past performance. Specifically, we focus on co-managers of the same fund, who have no prior fund management history and who started co-managing the fund in the same month. We then track what happens to these managers next. We

find that, consistent with our full-sample results, female managers are significantly more likely to be removed from the job of co-managing the fund without any substitute fund management responsibilities than male managers.

Given its focus on mutual funds managers, our study is also related to the relatively small number of papers on the determinants of career outcomes of mutual fund managers (e.g., Khorana (1996), Chevalier and Ellison (1999), Hu, Hall, and Harvey (2000), and Evans (2009)). Our contribution to that literature is the use of a larger dataset, in both the time series and the cross-section. Our main dataset covers the period from January 1992 (this is the month when fund returns become available from the monthly CRSP Mutual Fund dataset) to December 2016 and includes 968,388 manager-month observations and 13,831 unique managers. As mentioned above, in addition to fund returns and fund flows, as well as other controls, we also include a set of managers' personal attributes that may factor into their career outcomes. We only consider managers of actively managed mutual funds, and we also consider separately sole managers, co-managers, as well as managers of mainstream active domestic equity funds. Fund flows and CAPM alphas are computed over a rolling 12-month window as ranks within the fund's IOC category. When a manager manages several funds at the same time, the returns are weighted by the number of other managers in the fund so as to assign higher weights on sole-managed funds.

We confirm the earlier findings that managers' career outcomes are strongly related to their past returns. Unlike that literature, we also document a strong relation between career outcomes and fund flows. This result is not surprising given the finding of Lamont and Frazzini (2008) that fund families create more funds in the investment categories that enjoy high levels of investor sentiment and likely assign the managers who already manage similar funds to manage additional funds in the high-sentiment category.

The rest of the paper is organized as follows: Section II reviews the related literature. Section III describes the data and variable construction. Section IV presents the empirical results. Section V concludes.



## **II. Related literature**

### **A. Literature on workplace discrimination**

Prior literature in economics documents that women and minorities have worse marketplace outcomes than males and whites and analyzes whether the effect can be explained by performance differences or by discrimination. The literature on discrimination distinguishes between statistical and taste-based discrimination. Statistical discrimination arises when an individual is being judged on her group characteristics rather than on her individual characteristics. This is a shortcut used in decision making when information about an individual or mental resources are scarce. Taste-based discrimination arises when employers, superiors, other employees, or customers have “tastes” for discrimination; that is, they prefer one group over another based on tastes rather than any economic rationale, perhaps even to a monetary detriment to themselves.

In a prominent study in the literature on workplace discrimination against racial minorities, Bertrand and Mullainathan (2004) set up a field experiment to document a bias held by hiring managers against African Americans in hiring decisions. They sent out fictitious resumes in response to job postings in Boston and Chicago area newspapers, randomly using African American-sounding names in a subset of resumes and found that these resumes received 50% fewer call-backs. Beginning with an influential analysis by Scully (1974), a number of papers in economics document racial discrimination in major league baseball against African American and Latino players, manifested in pay differences and in hiring biases (e.g., Christiano (1986) and Palmer and King (2006)). (Baseball is largely an individual sport, and thus offers an opportunity to measure the performance of each individual player and thereby to observe whether discrimination exists.) Racial discrimination also appears to exist at higher educational levels. Ginther, Schaffer, Schnell, Masimore, Liu, Haak, and Kington (2011) analyze the relation between the U.S. National Institutes of Health (NIH) R01 applicants’ self-identified race or ethnicity and the probability of receiving an award and find that African Americans and Asians are less likely to receive NIH investigator-initiated research funding than whites.

Several papers document adverse workplace outcomes for female workers. Goldin and Rouse (2000) describe that many prominent symphony orchestra conductors used to be biased against hiring female musicians and that female musicians used to be severely under-represented in symphony orchestras. The paper shows that the adoption of “blind” auditions, in which the musician auditioning for a spot in the orchestra was obscured from the jury by a screen, increased the odds that female musicians would get to advanced rounds of auditions and eventually be hired by orchestras. Ginther and Kahn (2005) investigate whether gender plays a role in academic careers in sciences; the science field is subdivided into Science, Life Science, Physical Science, and Engineering. The paper finds that females are less likely than males to get tenure track appointments. After controlling for productivity, measured as the combination of the amount of government support received, the total number of papers, and the total number of publications, female scientists are less likely to get tenure in Life Sciences and less likely to be promoted to full professor in Science and Life Science than their male peers. Ginther and Hayes (2003) focus on academic careers in social sciences and humanities and find that female faculty are less likely to be promoted and have lower salaries than their male peers. The salary gap increases over time, and at the full professor level, there is a 12% unexplained salary difference between male and female faculty.

Bertrand, Goldin, and Katz (2010) also observe a salary gap between male and female University of Chicago MBA graduates that increases with the number of years since graduation. They find this salary gap by analyzing salaries, work history and work hours self-reported in a web-based survey by the Chicago MBA 1990-2006 graduating classes. Some of the salary gap is explained by females working shorter hours and having had gaps in employment, as well as having taken fewer finance classes and having earned somewhat lower GPAs in the MBA program. However, some of the salary gap remains unexplained.

In a paper closely related to our study, Azmat and Ferrer (forthcoming) uses self-reported survey data on young lawyers to study the pay and promotion gap between male and female lawyers.<sup>2</sup> They find substantial differences in performance, both in terms of hours billed to clients and the amount

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<sup>2</sup>The dataset used in the paper is called *After the JD*, which is a survey-based dataset produced by the American Bar Association and other legal associations. Lawyers in the sample are representative of all lawyers first admitted to the bar in 2000.

of new client revenue generated, and show that these differences explain almost 50% of the pay and promotion gaps. Moreover, the paper finds that female lawyers have more modest aspirations for becoming an equity partner. The paper also documents a larger performance gap for female lawyers who have young children, while male lawyers with young children do not exhibit worse performance. The paper provides additional evidence that childbearing is the cause of lower performance rather than self-selection into motherhood.

Sarsons (2017) documents that, when it comes to tenure decisions, female economics professors get less credit for published papers that are co-authored with male colleagues than male professors. This finding suggests that in a team environment, female employees get less credit for good performance.

Some studies in the literature aim to identify which form of discrimination is at play. For example, List (2004) conducts an experiment in which groups of young white males, young white females, young nonwhite males and white males over age 60 are sent out to buy a particular sportscard at a sportscard show. In this experiment, minority groups (which are all but the first group of negotiators) receive worse initial and final offers. Subsequent analysis reveals that this effect is likely explained by statistical rather than taste-based discrimination of sportscard dealers.

More evidence is accumulating on age discrimination in the workplace. Lahey (2008) conducts a field experiment to show that otherwise similarly qualified older workers have a more difficult time obtaining job interviews. The author sent out fictitious resumes in the greater Boston, Massachusetts and greater St. Petersburg, Florida areas in response to “help-wanted ads” in the Sunday Boston Globe and the Sunday St. Petersburg Times, as well as to randomly chosen firms in each city. High school graduation dates were randomized to create different ages of the job applicants. The older group of fictitious job applicants (those aged 50, 55, and 62) received more than 40 percent fewer callbacks with positive responses from the prospective employers than fictitious applicants aged 35 and 45. The paper finds no support for taste-based discrimination as a reason for this differential, and some suggestive evidence in support of statistical discrimination.

The literature in organizational behavior documents more negative workplace attitudes towards certain employee groups (such as women and older workers) predominately based on survey evidence. In particular, a recent study uses survey evidence to document biases held by heterosexual men married to homemakers against their female colleagues (Desai, Chugh, and Brief (2014)). The paper presents some evidence that causality may go from the marriage type to the man's attitude towards working women. High-paying fields such as finance have low percentages of women. Since finance salaries are high, perhaps men in finance are more likely to have traditional marriages, and the men's attitudes may be detrimental to women's career prospects.

## **B. Literature on mutual fund managers career outcomes**

The literature on the determinants of career outcomes of mutual funds managers is relatively small. Khorana (1996), one of the earliest papers in this literature, studies 339 replacements of mutual fund managers over the 1979-1992 time period. He finds that the probability of a managerial replacement is negatively related to the current and previous years' returns.

Chevalier and Ellison (1999) examine promotion and termination decisions of mutual fund managers over the 1992-1994 period. They only consider sole managers of growth or growth and income funds. The dataset consists of 1,320 manager-fund-year observations and contains only 242 terminations and 38 promotions. The authors find that manager terminations are sensitive to fund alphas and that this sensitivity is higher for younger managers. The authors find no significant relation between past fund returns and manager promotion decisions.

Hu, Hall, and Harvey (2000) study 307 managerial changes over the 1976-1996 time period. They find that promotions are positively and demotions are negatively associated with performance and that fund flows are not a significant predictor of either.

Finally, for a sample of U.S. equity funds over the period 1995-2002, Evans (2009) finds that fund return alphas are significant predictors of manager promotions and demotions, but fund flows are not.

### III. Data and variable construction

#### A. Datasets

The data on managers' background and the career trajectory are obtained from Morningstar. The data for mutual fund monthly returns and TNAs are obtained from the CRSP Mutual Fund dataset. Since the monthly data in the CRSP dataset start in January 1992 and end in December 2016, this dictates the start and the end of our sample for the main tests. For the tests that do not involve the CRSP dataset, we use the entire Morningstar dataset, covering the July 1924 to March 2017 period, though the earlier years have only few managers and funds.

The Morningstar dataset that we obtained consists of three files. The first file provides the managers' background information: first and last names, gender, date of birth, names of each school attended for each of the degrees earned (Bachelor, MBA, MA, PhD, and a category called "Other degree" that likely includes J.D. and M.D.), dates of graduation with each degree that is applicable, as well as an indicator of whether or not the manager holds a CFA certificate. We create a dummy for top schools that equals one if a manager earned at least one of his/her degrees from any university or college ranked in top 10 based on their selectiveness in 2013, as well as all top-ten MBA programs and all Ivy League schools.<sup>3</sup> This file contains 20,840 unique manager observations, though we are not using all of them in the main tests because of the sample period constraints.

The gender information is available for the vast majority of managers. When the gender field is missing, we identify the manager's gender from the first name, and if it is ambiguous, from the managers' LinkedIn or professional profiles or from fund reports and other material available on the Internet. In the end, we are unable to identify the gender of only one manager.

To calculate a manager's age, we use the birth date. When it is not available, we assume that managers are 22 when they are awarded their undergraduate degrees (as in Chevalier and Ellison

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<sup>3</sup>Top ten lists typically include more than 10 schools.

(1999)). If the year of the undergraduate degree is missing, we use the years when other degrees were awarded, assuming that managers are 26 when awarded an MBA, MA or Other degree, and 29 when they were awarded a Ph.D. Because the graduation year information is often missing, just as the birth year information, we are able to identify age for only 33.29% of managers. For this reason, we present results based on the time a manager was employed in industry, which is available for all managers and should be highly correlated with age.

We identify the managers' country of origin by the location of the school where they received their undergraduate degree. We then create a dummy variable indicating that the manager attended a foreign school, which we interpret to indicate that the manager is of a foreign origin. (Managers who attended a Canadian school are not considered to be of foreign origin.) However, *foreign* dummy is only defined for managers with non-missing the school information. In the original sample of 20,840 managers, only 67.76% of managers have school information available. For this reason, to increase the sample size of some of our tests, we also create a dummy variable *foreign+guess* that is set to one when the school information is missing but both first and last name are of a non-Anglo-Saxon origin or when a manager is of foreign origin based on school data, and to zero otherwise. In some tests, in order to have a larger sample size, we use the *foreign+guess* dummy, in other tests we use the *foreign* dummy, which identifies the foreign origin precisely.

The second Morningstar file provides for each manager, identified with a unique manager code, all his or her present or historical manager-fund assignments and the exact dates when the manager started and finished (if applicable) managing each fund. Each fund is identified with a unique identifier, FUNDID. If the end date of a fund assignment is missing, this means that the manager is still employed in the fund as of March 2017, the end of our sample period. We use this file to match a managers to funds s/he manages on each date and to identify the number of co-managers that a fund has on any particular date—such observations would have more than one manager employed at a particular fund in a given month.<sup>4</sup>

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<sup>4</sup>The information on the number and identities of managers for each co-managed fund is more precise than the information available in the CRSP mutual fund dataset, which does not identify manager changes precisely and frequently codes co-managed funds as “team-managed” without providing details on the identities of the managers.

The third Morningstar file provides the mutual-fund-specific information, including FUNDID, fund name, fund family, investment objective category, fund ticker, fund CUSIP, inception date, the end date of fund operation, if applicable, fund status (active, closed, merged), and the reason for obsolescence, when applicable.

We further categorize the funds using the third Morningstar file. For example, in the tests presented in the Appendix, we are interested only in the mainstream active domestic equity funds. We use specific keyword searches of fund names and investment categories to identify index funds, socially responsible and tax-managed funds, real estate funds, metals and commodities funds, utilities funds, international funds, corporate bond funds, and government and municipal bond funds.<sup>5</sup>

According to the business press, managers of index funds are paid substantially less than managers of actively-managed funds. Moreover, index funds represent an entirely different employment category than actively managed funds, as managers typically do not move from actively managed funds to index funds and vice versa. We, therefore, exclude index fund managers from our analysis.

The CRSP Mutual Funds dataset contains data on funds' monthly returns and total net assets, organized by a unique fund identifier, FUNDNO. The CRSP Mutual Funds dataset and Morningstar are merged together by fund ticker or fund CUSIP if ticker is missing.

## **B. Variable construction**

### **B.1. Manager-level performance measures**

For each mutual fund manager, we construct monthly performance measures based on the fund return and fund flow calculated over the rolling 12-month window. In our main tests on the relation between career outcomes and past performance, we use performance measures lagged by up to three years, and, hence, we only consider managers who have an uninterrupted track record

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<sup>5</sup>For example, we identify index funds by searching fund names for keywords “index,” “ishares,” “S&P,” “100,” “500,” “1500,” “3000,” with variations in the spelling, and we identify socially responsible funds with variations of key words ‘social,’ “soc aware”, “responsible,” “clean env,” “catholic,” and “tax”.

over the trailing 36-month window. In the tests investigating the relation between manager characteristics and performance, we only consider managers who have been managing the fund for at least 13 months.

We calculate monthly fund flows as the change in the fund's total net asset value (TNA) relative to the prior month that is unexplained by the fund's return ( $ret_t$ ):

$$Fund\ flow_t = \frac{TNA_t - TNA_{t-1}(1 + ret_t)}{TNA_{t-1}} \quad (1)$$

For each fund-month observation, we further compute CAPM alphas, fund flows, and return standard deviations realized over the rolling 12-month and the 36-month period.

Since fund returns and fund flows are expected to differ across fund categories, we then rank each fund's CAPM alpha and fund flow, estimated as described above, from 1 to 10 within each investment objective code. We only consider populous investment objective codes that have at least 10 funds in a given month. If the number of funds within the investment objective code in a particular month is less than 10, we set the return rank and the fund flow rank equal to missing values.

If a manager manages more than one fund in parallel, we aggregate the manager's performance measures across the funds that s/he manages. If all the funds that a manager manages are sole-managed funds, we simply average the return and fund flow ranks across the funds. For co-managed funds, the funds' return and fund flow ranks are weighted by  $\frac{1}{number\ of\ co-managers}$ . For example, if a manager is a sole manager of fund A and one of two co-managers of fund B, then fund A will be weighted by  $\frac{1}{1+1/2}$  and fund B by  $\frac{1/2}{1+1/2}$ . We have also tried equal-weighting the performance ranks across all managed funds, but thus-weighted measures, through very statistically and economically similar, work slightly worse for explaining managers' career outcomes.



## **B.2. Identifying promotions, demotions and firings**

Fund families are paid a percentage of total assets under management. It is, therefore, reasonable to assume that managers are also paid some percentage of the assets that they manage. We assume a promotion to be an event when a manager is assigned to manage more money. Analogously, a demotion is assumed to be event where a manager is either re-assigned to manage less money or permanently or temporarily relieved of fund management responsibilities.

Hence, we consider that a manager was promoted when either of these changes occur: a manager (1) gets additional fund(s) to sole-manage (a manager may lose one or more co-managed funds at the same time); (2) gets a additional fund(s) to co-manage and at the same time does not lose any sole-managing responsibilities; (3) swaps a sole-managed fund for another sole-managed fund with a TNA that is higher by at least 20%; or (4) swaps a co-managed fund for another co-managed fund such that the ratio of the fund's TNA to the number of co-managers is at least 20% higher than before.

We consider a manager to be demoted when either of these changes take place: a manager (1) loses one or more sole managed funds; (2) loses one or more co-managed funds and gets no additional sole-managed funds; (3) swaps a sole-managed fund for another sole-managed fund with at least a 20% lower TNA; or (4) swaps a co-managed fund for another co-managed fund such that the ratio of the fund's TNA to the number of co-managers is at least 20% lower than before. Instances (1) and (2) may include observations when a manager goes from having fund management responsibilities to having none either because s/he has a gap in the career or has permanently left the mutual fund industry and was below retirement age (which we consider being under 60 years old or having less than 30 years of fund management experience in cases when age information is missing).

In observations that we classify as a promotion or a demotion, we check to see whether the change in the fund management responsibilities has persisted for at least 6 months, and if not, we re-classify such observations as non-events.

We also investigate separately cases when a manager has permanently left the mutual fund industry under the retirement age, which, we described above, are instances when a manager is either under 60 years old or, if the age information is missing, has less than 30 years of fund management experience.

## C. Sample Description

Table I reports the fraction of female managers for each country of origin as well as the total number of managers from that country in the dataset for all managers that have school information available in the dataset. The table further ranks countries, from 1 to 10, based on the female representation in the money management industry. The table also reports country gender equality ranks obtained from the 2016 Global Gender Gap Index compiled by the World Economic Forum. The table reprints the comprehensive country index and four subindices based on (1) economic participation and opportunity; (2) educational attainment; (3) health and survival; and (4) political empowerment for all countries present in the Morningstar dataset.<sup>6</sup>

A large number of countries have had zero female managers in the Morningstar dataset. We show suggestive evidence that countries with worse gender gap rankings have a lower fraction of women in the mutual fund industry. The last row of Table I presents the results of the regression of the countries' female representation rank on the various gender gap indices:

$$\text{Country Female Representation Rank}_i = \alpha + \beta \times \text{Gender Gap Rank}_i + \varepsilon_i \quad (2)$$

The results show a negative relation between a countries' treatment of women and the fraction of women managers from that country. Female representation among mutual fund managers is significantly negatively related to the overall gender gap rank, and the subranks based on the gender gap in (1) economic participation and opportunity, (2) educational attainment, and (3) health and survival outcomes. The ranks based on the gap in economic opportunity and education appear

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<sup>6</sup><http://reports.weforum.org/global-gender-gap-report-2016/rankings/>.

to be particularly important, with the regression coefficients exceeding 0.03 and the associated  $p$ -values below 1%. These results suggest that the internalized cultural attitudes toward women's worth affect the self-selection of women into the money management industry and appear to at least partially explain the underrepresentation of women in the industry.

The descriptive statistics for the managers in the entire Morningstar dataset and the managers of the mainstream active domestic equity funds are also plotted by year in Figures 1, 2, 3, and 4. In particular, Figure 1 shows that the fraction of female managers increased in the 1990s, reached its peak in 2001, and has been declining ever since.<sup>7</sup>

Further descriptive statistics for the dataset are presented in Table II in the main text and in the Appendix Table AII that presents the same statistics exclusively for the managers of the mainstream actively managed equity funds.

Panel A of Table II shows the statistics on managers by aggregated fund categories, and the Appendix Table AI shows the same statistics by Morningstar investment categories (we only present the results on the categories that have at least unique 10 funds). It can be seen that the fraction of women managers differs across fund categories. There are relatively more women managers in various municipal bond funds and relatively fewer women managers in real estate and commodity funds.

Panel B of Table II and Panel A of the Appendix Table AII shows the statistics on various career events that constitute promotions and demotions. All in, managers have about a 2.5% chance of being promoted or demoted in any given month. Changes in the number of funds managed is more common than swaps for funds with a 20% different TNA.

Panel B of Table II and Panel B of the Appendix Table AII presents the statistics on the differences between male and female managers. Male managers on average have significantly more years of industry experience and are older than female managers. There are more male managers under 35 years old and substantially more male managers under 55 years old than female managers

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<sup>7</sup>In unreported tests we confirm that 2001 corresponds to the structural break in the time series of the growth rate of the fraction of women managers.

in these age groups. These results dovetail with our findings that a female manager is more likely to permanently leave the industry in any given month before retirement age.

There are more foreign-born managers among women. When it comes to education, women are less likely to hold an MBA and Other degree and slightly less likely to have a CFA certificate.

Comparing the management responsibilities, the table shows that women managers sole-manage and co-manage significantly fewer funds (though the Appendix table for the managers of the main-stream active domestic equity funds shows that women co-manage significantly more funds). The total TNA attributable to a manager is significantly higher for male managers. This is consistent with our finding that, all else equal, women are less likely to be promoted than men.

Female managers tend to work for larger mutual fund families, employing more managers, on average.

When it comes to performance metrics, Table II shows that without controlling for the fund size, expense ratio, etc., women appear to underperform men, and Table AII shows no significant performance differences.

Turning to various career events, the tables show that women are just as likely as men to have a gap in the fund-management assignments of 6 months or longer, and the average length of the employment gap is just over two years for both genders. Women are significantly more likely to permanently leave the industry in any given month, before the retirement age. Without controlling for the current fund management responsibilities, Table II shows that female managers are less likely to get promoted, and just as likely as men to get demoted, while Table AII shows the women managers are more likely to get both promoted and demoted.

## IV. Empirical Results

### A. Manager gender and performance

We investigate further into whether female managers differ in performance than male managers. The performance statistics presented in Table II check the differences in return and fund flow ranks but do not explain the actual levels and do not include important fund-level controls such as the expense ratio, turnover, 12B-1 fees, fund TNA, fund age, and the institutional fund dummy. We include these controls to explain fund flows and returns at the individual fund level, and we now consider exclusively sole-managed funds to more easily determine the possible effects of gender and other manager characteristics.<sup>8</sup> For the set of funds included in the regressions we require that the fund's manager has been managing the fund for at least 12 months prior because fund flows may be sensitive to the lagged manager characteristics and lagged fund flows and returns.

To control for the differences in fund flows and returns across different investment objective codes, in the main tables we analyze style-adjusted fund flows and style-adjusted CAPM alphas by subtracting out the mean fund flow (CAPM alpha) earned by the funds in the same investment objective category in a given month. We consider only funds in the investment objective categories containing at least 3 other funds. Because fund flows have exhibit well known seasonal patterns linked, e.g., to the tax and bonus seasons, we also include month dummies in all but one regression specifications. In order to have a more uniform set of funds, we only consider actively managed "mainstream" equity funds and thereby exclude from the sample international funds, tax managed and socially responsible funds, and funds that specialize in real estate, utilities or commodities, as well as funds with the target allocation to bonds exceeding 50%.

Table III explains monthly style-adjusted fund flows. Table AIII explains monthly fund flows unadjusted for style and includes IOC (investment objective category) dummies in most regression

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<sup>8</sup>As is customary in papers analyzing fund flows, we exclude monthly observations with the absolute value of fund flows in excess of 1; such observations are considered to be the result of data errors. We also only consider funds with TNA over \$5 mil.

specifications. The tables shows no significant effect of gender on fund flows.<sup>9</sup> Regression results in Table AIII show that foreign managers and managers with PhDs have slightly higher fund flows than otherwise similar managers in similar funds, but Table III does not show this effect.

Turning to fund returns, we try three different return specifications. Table IV presents the results for monthly style-adjusted CAPM alphas. Appendix Table AIV explains CAPM alphas (Panel A) and raw fund returns (Panel B) unadjusted for style, and all but one of the model specifications in Table IV include IOC dummies. Gender is an insignificant predictor of fund returns in Table IV, and a marginally significant negative predictor of returns in some specifications of Table AIV.

In unreported results, we also find that female managers tend to have lower return volatilities than other managers in the same investment objective categories.

To sum up, these results show no significantly reliable performance differences between male and female managers of the sole-managed mainstream equity funds.

## **B. Explaining promotions, demotions, and firings**

In this section, we explain managers' career outcomes with linear probability regressions. Because of the likely time series and cross-sectional correlations in the error terms, the standard errors are double clustered by year and manager. Regressions are run at a monthly frequency and all regression specifications include year dummies. Either fund family dummies or fund family characteristics are included in the regressions. Fund family characteristics include the total TNA of all funds that the fund family has, as well as the total number of funds, and total number of managers working at the fund family at the end of the prior month. Because manager hirings and firings are affected by the state of the stock market (for example we observe large manager exodus after the dot-com and real estate bubbles collapsed), we include year dummies on all regressions. Most regression specifications also include the standard deviation of the monthly returns of the man-

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<sup>9</sup>This is in contrast with Niessen-Ruenzi and Ruenzi (2017), who use a somewhat different sample and different regression specifications. Their sample covers the 1992-2009 period, regressions are run at an annual frequency, and standard errors are clustered only at the fund level.

ager's portfolio of funds computed over the trailing 36-month window, log of the managers' total managed TNA, the total number of funds managed, as well as the total number of funds managed squared to pick up any non-linear relations.

We include the following performance measures: the within-IOC rank based on the CAPM alpha (1 to 10) and the within-IOC rank based on the fund flow (1 to 10), each computed over the rolling windows of  $[-12, -1]$ ,  $[-24, -13]$  and  $[-36, -14]$  months, corresponding to subscripts  $t - 1$ ,  $t - 2$ , and  $t - 3$  in the tables. We include the 2 and 3 year lags because career decisions may be based on the performance information from the prior years. For this reason, our sample consists only of managers who have had a continuous track record record in the industry for at least three prior years.

The main sample period is January 1992 – January 2017, but in the model specifications that include the performance measures computed over the trailing 36-month window, the sample period is reduced by the initial 36 months. The sample is further reduced in the models that use the school information to identify whether a manager is of a foreign origin and whether s/he has an advanced degree and went to a top school. In the regressions explaining firings and demotions, we end the sample in March 2016 in order to allow for the possibility that managers may have a one year gap in their careers to take maternity leave, and that these managers may come back to fund management a year later (our Morningstar sample, from which we identify promotions, demotions, and firings, ends in March 2017).

The regression results for firings, demotions, and promotions are presented in Tables V, VI, and VII, respectively. All tables have the same structure: Panel A presents the results for the entire sample of managers, Panel B only for the managers who are sole managers in month  $t$ , and Panel C only for the managers who are co-managers in month  $t$ .

The regressions explaining manager firings, which, as described above, are defined as instances when managers permanently leave the fund management industry while being under the retirement age, are presented in Table V. The results show that the regression coefficient on *Female* dummy is significantly positive in all regression specifications. The regression coefficients on *Female* dummy

in Panel A range between 0.0014 and 0.0022, which implies that female managers have a 24% to 35% increase in the probability of being fired in a given month over male managers.

An interesting result is that female sole managers do not exhibit significant differences from comparable male sole managers, while the effect for female co-managers is stronger. This is finding consistent with the findings of Sarsons (2017) that females get less credit for good performance in academic teams. Another interesting result is that female sole managers are more likely to disproportionately leave the industry early in their career, perhaps because of conflicting family responsibilities, while female co-managers are disproportionately more likely to leave the industry later in their career. Overall, while managers tend to leave the industry following stretches of low returns and low fund flows, females are not incrementally more likely to leave as a result of bad performance. Hence, when it comes to penalizing managers for bad performance, female managers do not appear to be singled out by fund families.

Table VI shows that female managers are unconditionally less likely to be demoted. However, when controlling for past performance and managers' total portfolio management responsibilities, the effect disappears. The results suggest that managers are demoted following low return realizations for up to three years back and low fund flow realizations for up to two years back. Panel B shows that female sole managers are relatively less likely to be demoted due to low returns. Foreign managers are also less likely to be demoted. Managers in the early stages of their career are also significantly less likely to be demoted than the more experienced managers with similar past performance and similar fund management duties.

Table VII shows that female managers are significantly less likely to be promoted than male managers with similar past performance and similar fund management responsibilities. A female manager is 0.24% to 0.34% less likely to be promoted relative to an otherwise similar male manager, which corresponds to a 9.6% to 13.6% lower monthly promotion probability. As in the case of manager firings, the effect is not reliably significant for female sole managers, but very economically and statistically significant for female co-managers. Again, this evidence suggests that less credit for good performance goes to women when they work in a team. The relation between



promotions and past returns and fund flows is statistically strong but not as strong as for manager firings and demotions. And again we observe that, all else equal, younger managers have a higher chance of being promoted than the similar more experienced managers.

In unreported tests, we run logit regressions with the identical regression specifications and find very similar results in terms of both statistical and economic magnitudes.

To alleviate any concerns about the possible survivorship bias in the Morningstar data and the effect it may have on the results, we have rerun all regressions with January 2006 as the starting date. There should be negligible survivorship bias in the data from 2006 to 2017 because we combined the Morningstar files from 2005, 2009, 2011, 2013, and 2017. The results are presented in Table AV. These results also show that female managers are more likely to be fired from the industry and less likely to be promoted than otherwise similar male managers.

Table AVI presents the results only for the managers who manage active mainstream domestic equity funds in month  $t$ . This table also shows the higher likelihood of female equity managers to permanently leave the industry before the retirement age, but shows no significant differences between males and females in terms of demotions or promotions.

### **C. Career outcomes of co-managers with identical track records and employment history**

One may be concerned that we do not perfectly control for the types of funds that managers manage. Perhaps the types funds managed by women are more likely to become obsolete, and female managers may disproportionately leave the industry for that reason. In order to eliminate this concern we also perform the tests described in this section.

We investigate career outcomes of co-managers who are indistinguishable from each other in terms of their employment history and past performance. We form fund-co-manager cohorts that consist of co-managers who started co-managing the same mutual fund in the same month and had no

prior recorded mutual fund management history and no other concurrent mutual fund management responsibilities. Figure 5 provides a graphical illustration of how fund-co-manager cohorts are formed. The observable performance of co-managers in the same cohort is identical. Hence, there should not be any systematic differences in future promotions or demotions related to fund manager characteristics. We test whether this is the case. The sample for this test includes all managers in the Morningstar dataset since we do not need to link the Morningstar data to the return and TNA data in the CRSP Mutual Fund dataset.

We begin by investigating whether female co-managers have the same career outcomes as their otherwise identical male cohort members. For this test, we require that at least one member of the fund-co-manager cohort is female. The sample descriptions are provided in Table VIII, Panel A. The sample contains 139 cohort observations and 375 unique managers. Male manager outnumber female managers by 7%. The average number of co-managers in a cohort is 3.33.

We then check what happens to these co-managers next in their careers. If a manager's tenure with the fund ends and the manager gets no other mutual fund management responsibilities, we consider the manager to be fired, and we code this observation as a demotion and set the career outcome variable equal to  $-1$ . If a manager stays in the same position until the end of our sample period, we code this observation as neither a promotion nor a demotion and set the value of the career outcome variable to 0. If a manager leaves the fund and gets a new co-management responsibility at another fund, we also code this observation as neither a promotion nor a demotion and set the career outcome variable equal to 0. Finally, if a manager subsequently gets a sole-management responsibility or becomes a co-manager of more than one fund, we code this observation as a promotion, and set the career outcome variable to  $+1$ .

We investigate separately whether the probability of promotion and probability of demotion depends on the co-manager characteristics and whether career outcomes, as we coded them, systematically differ across co-managers. Specifically, we demean each variable of interest by the

mean of the corresponding fund-co-manager cohort and present the results for the deviations in the observed variable of interest from the cohort mean:

$$Prob(CareerOutcome_{ij}) = \sum_{i=1}^N \alpha_i Cohort_i + \beta_j X_{ij} + \varepsilon_{ij} \quad (3)$$

where  $X$  is a vector of manager characteristics.

The results, reported in Panel B of Table VIII, show that female co-managers have a 9.2% to 10.5% higher probability of losing the co-management job than the male co-managers in the same cohort. The likelihood of a promotion is somewhat lower than for male cohort members, but the difference is insignificant. All in all, female co-managers tend to have a significantly worse career outcomes than the otherwise identical male co-managers.

Next, we check the hazard rate for promotion. The motivation for this analysis is that, even if all co-managers in a cohort eventually get promoted, some may get promoted faster than others. Specifically, we investigate the probability of a promotion in each subsequent month, conditional on the manager remaining in the fund until then, using the Cox proportional hazard rate model. When estimating the model, we take into account that our sample is censored at the end of our sample period, and, thus, we may not have a chance to observe a promotion that happens in the future beyond the end of the sample. We use dummies for each fund-co-manager cohorts, thereby setting the baseline probability of promotion the same for the co-managers in each cohort:

$$\ln[h_i(t)/h_o(t)] = \sum_{i=1}^N \alpha_i Cohort_i + \beta_j X_{ij} \quad (4)$$

where  $X$  is a vector of manager characteristics. We use all fund-co-manager cohorts in this analysis, requiring only that each cohort has some variation in at least one manager characteristic of interest. In this analysis, we code the co-managers that were fired as not being promoted.

The results are reported in Table IX. Panel A presents the summary statistics of the sample. This sample is somewhat larger than the one in Table VIII and has 439 cohorts. The sample contains

1,083 unique managers, and the fraction of female managers is lower than in the previous table because of the generally low percentage of female managers in the industry.

Panel B presents the results of the hazard regressions, as well as hazard ratios for the explanatory variables. Conditional of having stayed in the fund until month  $t$ , managers who have MBAs have a significantly higher probability of being promoted in month  $t + 1$  than other managers in their cohort. Other manager characteristics do not come out consistently statistically significant.

#### **D. Professional networks: suggestive evidence**

One of the crucial inputs into a successful career is a strong professional network. An important time to call on one's professional networks is when looking for a new job. For this reason, we specifically check career outcomes of mutual fund managers who must find new jobs elsewhere subsequent to their fund families merging or closing.

To be consistent with the earlier sample, we still consider the sample of fund families with at least 5 funds and 5 managers employed and using the January 1992 to December 2016 sample period.<sup>10,11</sup> There are 11 observations of fund family closings in this sample, involving 114 mutual fund managers. Of these, 13 are female and 10 are of a foreign origin (here we use the dummy *foreign+guess* to increase the sample size).<sup>12</sup>

We find that the unconditional probability of permanently disappearing from the mutual fund industry in the month in which the fund family closes, while being under 60 years old or having under 30 years of fund management experience if age information is missing, is 51%. When regressing the probability of a permanent disappearance from the industry on female and foreign dummies, while using fund family fixed effects to account for the possibility that each fund family closure may have a different effect on the reputations of the managers involved, we estimate the coefficient on the *Female* dummy to be 0.02 ( $t$ -statistic=0.13), and the coefficient on the *for-*

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<sup>10</sup>We obtain the end months of fund families from the CRSP Mutual Fund dataset.

<sup>11</sup>The results are similar when broaden our sample to fund families that consist of at least 2 funds and 2 managers.

<sup>12</sup>As before, Canadian managers are not considered to be foreign.

*foreign+guess* dummy to be 0.30 ( $t$ -statistic=1.71). Therefore, foreign managers are 30% less likely to find another job in the mutual fund industry after their fund family disappears, which is a statistically and economically significant result. While it is difficult to draw strong conclusions from the results on based on such small sample size, it makes intuitive sense that the effect is stronger for foreign managers, who are likely have smaller professional networks in the United States.

## V. Conclusion

In this paper, we investigate whether being in the minority relative to a typical employee profile adversely affects the employee's career prospects. We conduct this investigation in the mutual fund industry. This industry is very transparent because of the required disclosures of mutual fund returns, total net asset values, and managers' identities. Hence, a manager's performance can be precisely measured and attributed. We are able to measure managers' career outcomes by observing the changes in the fund management assignments.

We find that past performance is a very important determinant of managers' career outcomes. This finding suggests that the mutual fund industry is largely meritocratic and that it strongly rewards performance. However, managers' personal attributes also appear to play a role in their career outcomes. A female manager with the same fund management duties and past performance as a male manager is significantly less likely to be promoted and significantly more likely to leave the industry before the retirement age. This observation is stronger still for female co-managers, who likely get less credit for good fund performance than their male co-managers. As a further confirmation of these results, we investigate male and female co-managers with an identical track record, we observe significantly worse career outcomes for women. We also find a strong positive effect of young age on the career prospects, and a somewhat positive effect of having a better academic background, even after controlling for performance.

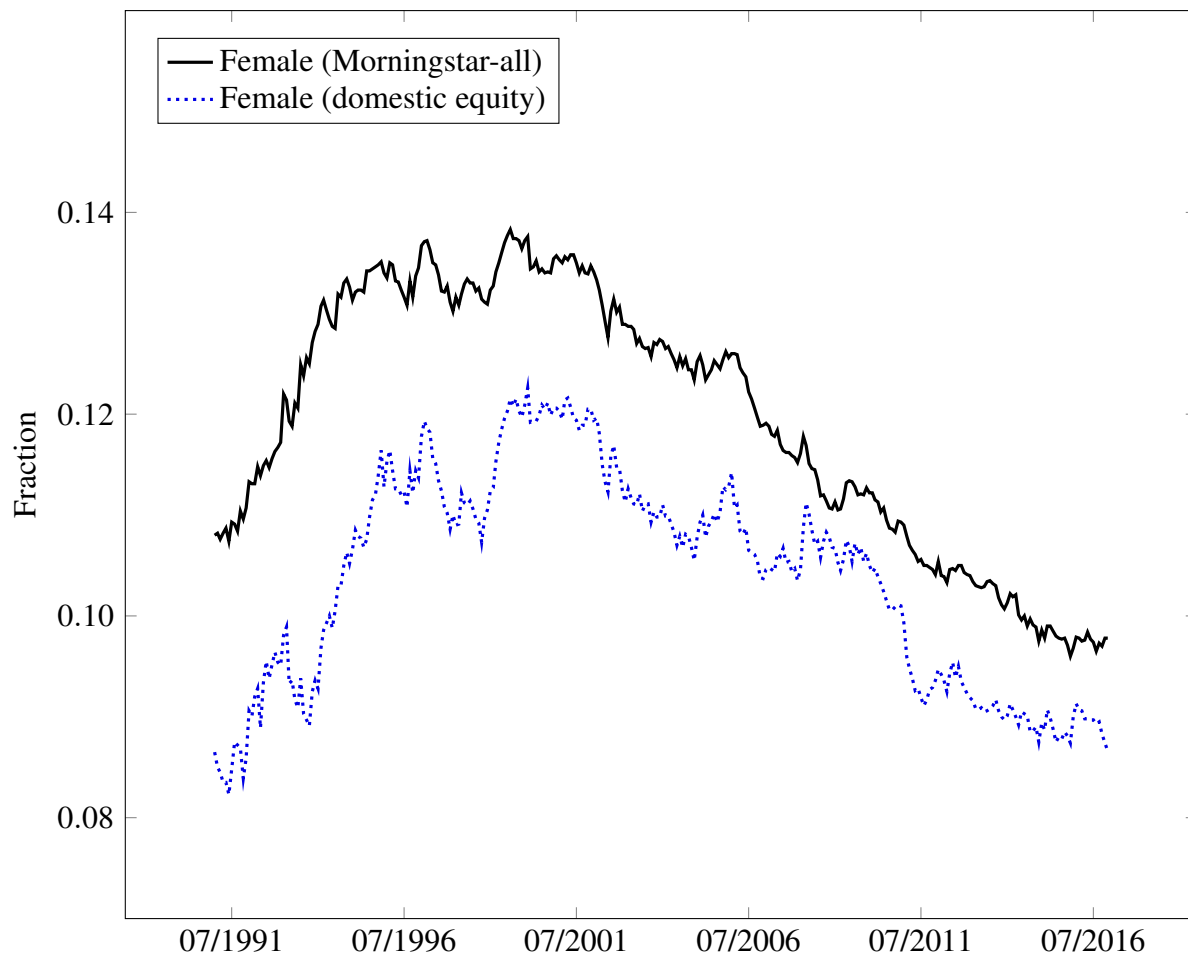
Overall, the results in this paper suggest that, even though the mutual fund industry is relatively fair because it is very transparent and highly performance oriented, traces of bias against some

employee groups can still be observed, and this effect likely to be worse in the less transparent organizations.

## References

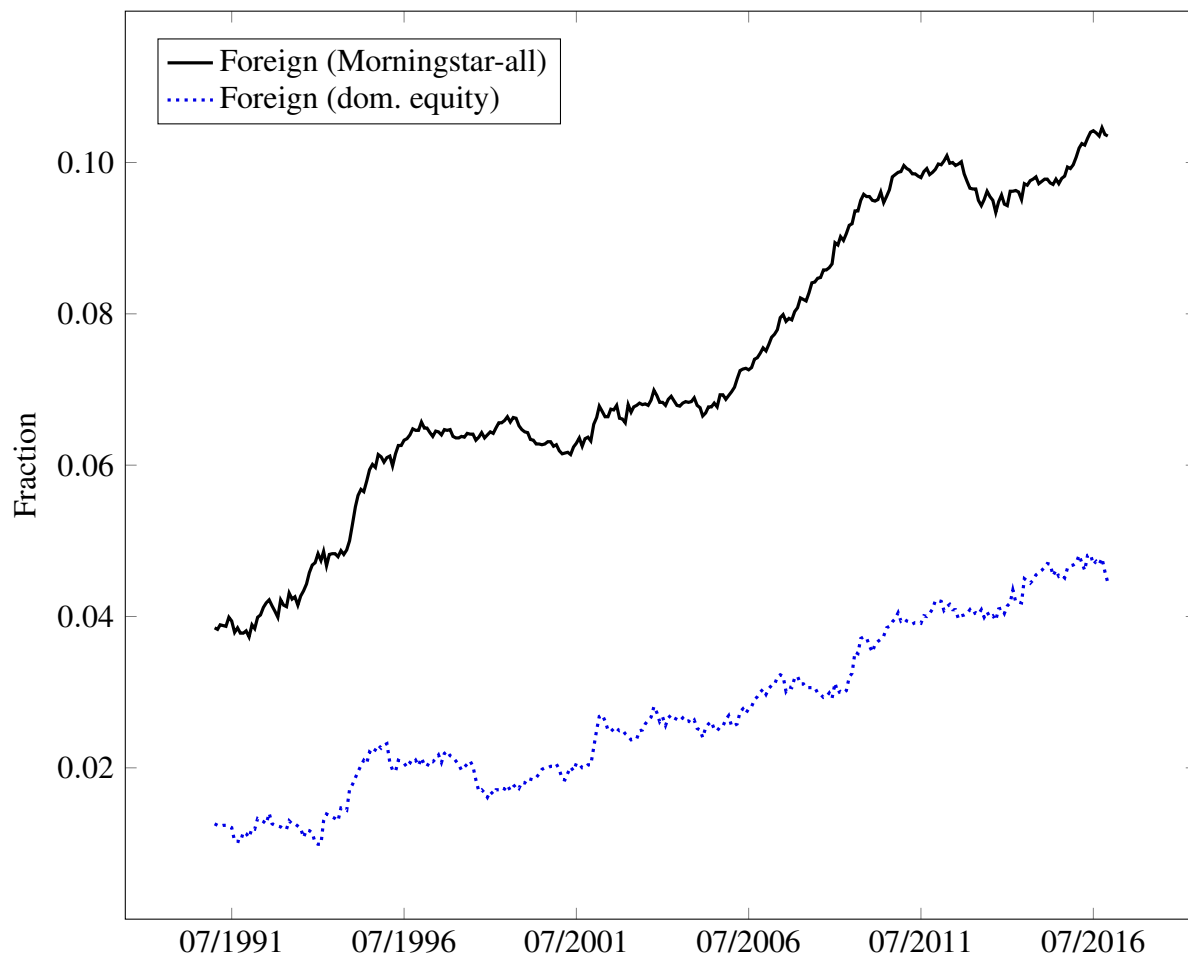
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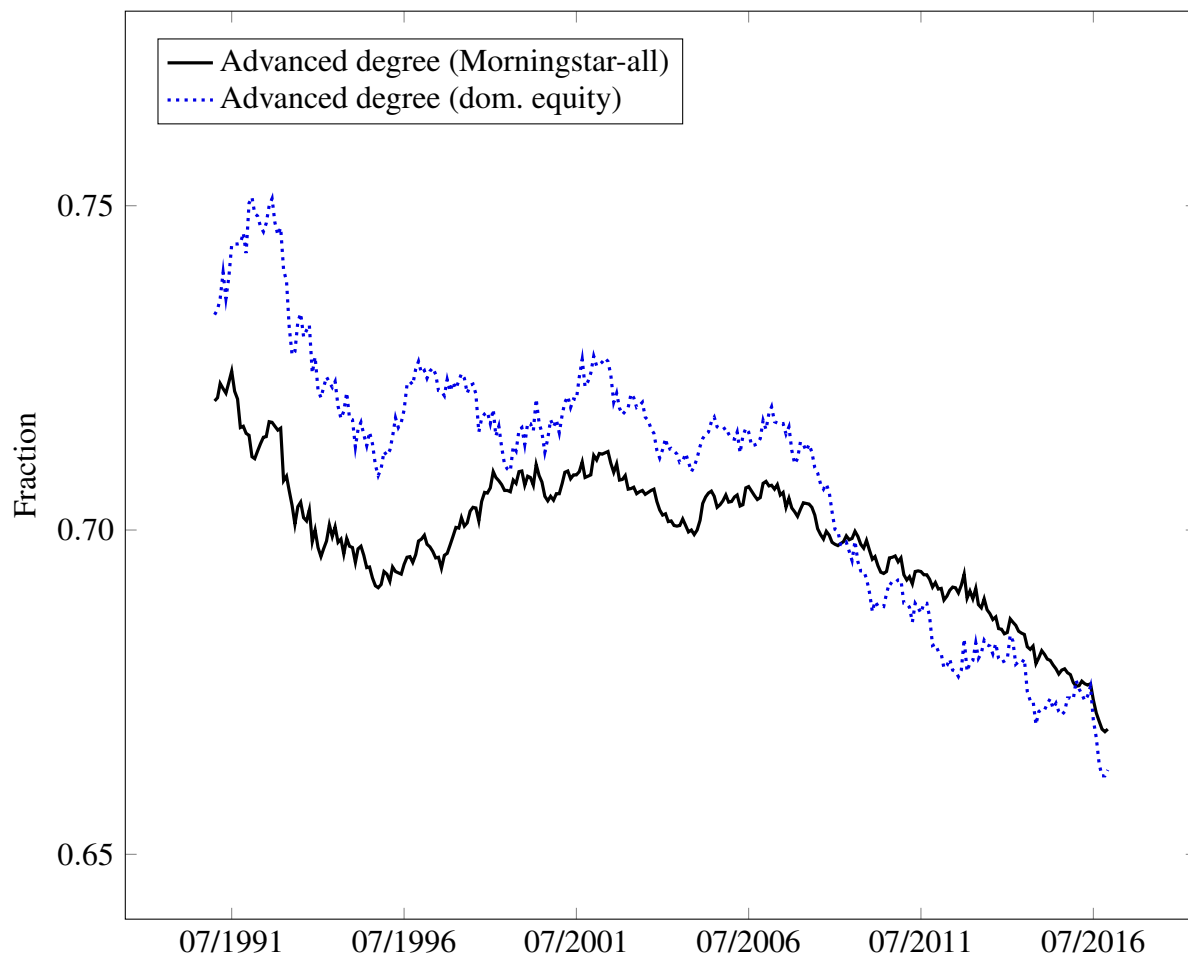


**Figure 1. Fraction of female managers.** The figure plots the fraction of female fund managers by month. The solid line plots the fraction for all managers in the original Morningstar dataset and the dotted line plots the fraction in active mainstream domestic equity funds.

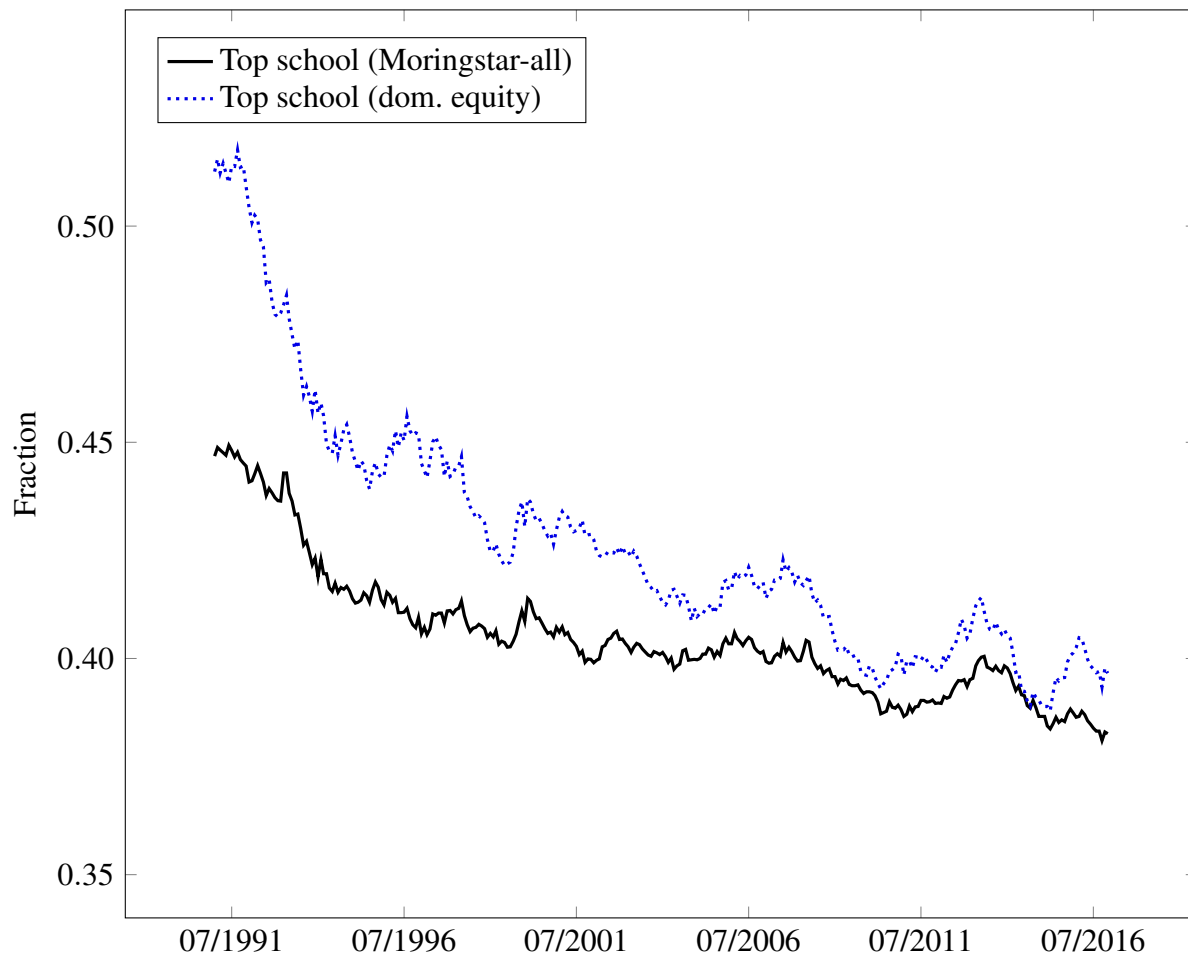




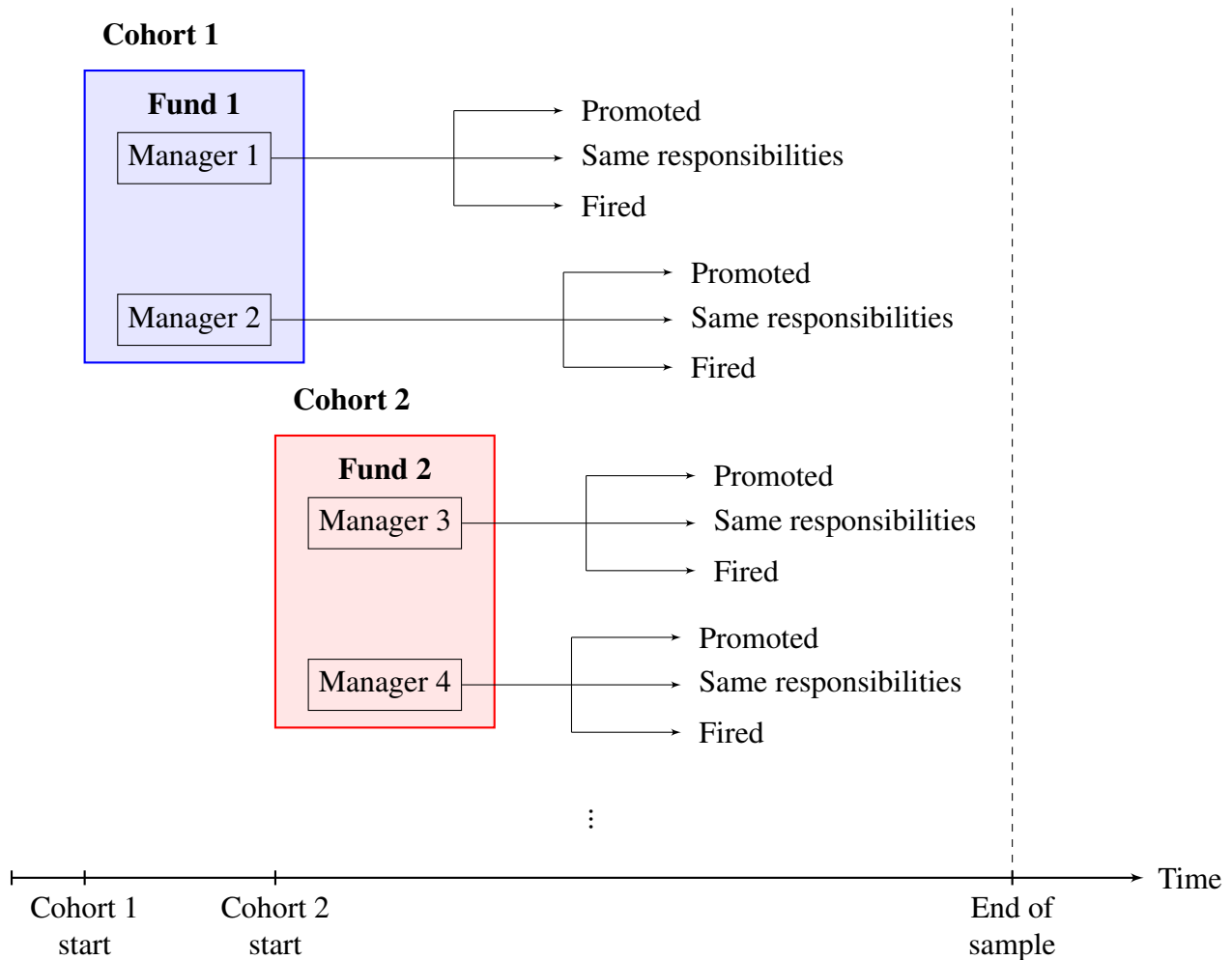
**Figure 2. Fraction of foreign managers.** The figure plots the fraction of foreign fund managers by month. The solid line plots the fraction for all managers in the original Morningstar dataset and the dotted line plots the fraction in active mainstream domestic equity funds. Canadian managers are not considered to be foreign.



**Figure 3. Fraction of managers holding an advanced degree.** The figure plots the fraction of fund managers who hold an advanced degree. An advanced degree is any degree earned after the Bachelor's degree. The solid line plots the fraction for all managers in the original Morningstar dataset and the dotted line plots the fraction in active mainstream domestic equity funds.



**Figure 4. Fraction of managers who attended top schools.** The figure plots the fraction of fund managers who obtained at least one of their degrees from a top-ten college, a top-ten university, a top-ten MBA program, ranked based on their selectivity, or any Ivy League school. The solid line plots the fraction for all managers in the original Morningstar dataset and the dotted line plots the fraction in active mainstream domestic equity funds.



**Figure 5. Graphical illustration of fund-co-manager cohorts** The figure provides a graphical illustration of how fund-co-manager cohorts are constructed. These cohorts consist of all co-managers who started co-managing the fund in the same month and have no other fund management responsibilities and no prior fund management history. We subsequently investigate whether co-managers in the same cohort have different career outcomes, such as being fired or being promoted, depending on their personal characteristics.

**Table I**  
**Manager statistics by country of origin**

This table present information on the countries represented in the Morningstar dataset. The country of origin is inferred by the location of the schools that the manager attended. If at least one of the schools is located in a foreign country, the manager is considered to be foreign. Observations with missing school information are excluded. If the school information is missing, the manager is excluded from the analysis. The table also presents the country ranks of the counties represented in the Morningstar dataset from 1 to 10 based on the female representation of mutual fund managers. The table furthermore reports country ranks from the 2016 The Global Gender Gap Index produced by World Economic Forum (these include the comprehensive index and the subindices based on (1) economic participation and opportunity; (2) educational attainment; (3) health and survival; and (4) political empowerment). The last raw of the table presents the beta from the regression of the Female representation rank in the mutual fund industry on the Gender Gap Indices.  $a$ ,  $b$ , and  $c$  indicate the 1%, 5% and 10% statistical significance levels, respectively.

Country	Fraction female	Female repr. rank	Total number of managers	Global Gender Gap Index				
				Overall	Economic	Educational	Health	Political
mexico	0.000	10	11	66	122	51	1	34
denmark	0.000	10	7	19	34	1	106	29
chile	0.000	10	4	70	119	38	39	39
pakistan	0.000	10	3	143	143	135	124	90
poland	0.000	10	3	38	58	31	40	44
bolivia	0.000	10	2	23	98	98	1	11
georgia	0.000	10	2	90	61	78	119	114
hungary	0.000	10	2	101	67	67	40	138
lebanon	0.000	10	2	135	133	108	102	143
portugal	0.000	10	2	31	46	63	76	36
dominican republic	0.000	10	1	97	78	77	97	118
egypt	0.000	10	1	132	132	112	95	115
finland	0.000	10	1	2	16	1	1	2
guatemala	0.000	10	1	105	102	107	1	96
kenya	0.000	10	1	63	48	116	83	64
morocco	0.000	10	1	137	139	122	93	98
nigeria	0.000	10	1	118	52	134	135	109
norway	0.000	10	1	3	7	28	68	3
peru	0.000	10	1	80	111	80	100	60
italy	0.045	8	22	50	117	56	72	25
netherlands	0.048	7	42	16	76	60	103	14
new zealand	0.056	7	18	9	24	40	104	16
australia	0.068	7	88	46	42	1	72	61
south africa	0.071	7	28	15	63	55	1	13
argentina	0.077	7	13	33	101	54	1	22
germany	0.098	7	61	13	57	100	54	10
israel	0.100	6	10	49	62	1	67	48
sweden	0.100	6	10	4	11	36	69	6
united states	0.117	6	12452	45	26	1	62	73
india	0.123	6	171	87	136	113	142	9
japan	0.125	6	48	111	118	76	40	103
canada	0.129	5	233	35	36	1	108	49
switzerland	0.133	5	30	11	30	61	72	15
belgium	0.154	5	13	24	37	1	64	35
brazil	0.167	5	18	79	91	42	1	86
iceland	0.182	5	33	1	9	1	104	1
ireland	0.182	5	33	6	49	1	54	5
france	0.227	5	75	17	64	1	1	19
venezuela	0.250	4	4	74	71	33	1	89
greece	0.286	4	7	92	85	85	54	101
spain	0.286	4	7	29	72	43	91	26
china	0.327	4	104	99	81	99	144	74
bulgaria	0.333	3	3	41	43	65	40	51
austria	0.375	3	8	52	84	86	1	41
philippines	0.500	2	6	7	21	1	1	17
jamaica	0.500	2	4	42	35	1	1	63
ukraine	0.500	2	4	69	40	26	40	107
belarus	0.500	2	2	30	5	29	40	80
romania	0.500	2	2	76	54	68	40	112
singapore	0.545	2	22	55	17	95	121	97
colombia	0.667	2	3	39	28	37	40	66
czech republic	1.000	1	2	77	89	1	40	85
latvia	1.000	1	1	18	18	1	1	38
lithuania	1.000	1	1	25	25	1	40	43
paraguay	1.000	1	1	96	82	59	1	122
$\beta$ from regressing Country Female Representation rank on indices				0.021 <sup>c</sup>	0.033 <sup>a</sup>	0.032 <sup>a</sup>	0.022 <sup>b</sup>	0.011
( <i>t</i> -statistic)				(1.98)	(3.16)	(3.32)	(2.23)	(0.02)

**Table II**  
**Descriptive statistics on mutual fund managers**

This table presents descriptive statistics on mutual fund managers. Firings, promotions and demotions are defined in the text of the paper. The sample period is January 1992 – December 2016.

Panel A: Manager characteristics by fund category

Fund category	Top			Other				CFA	Age	No. obs.
	Female	school	Foreign	MBA	MA	PhD	degree			
Dom. equity	0.10	0.30	0.05	0.47	0.13	0.04	0.03	0.49	47.1	2052020
Real estate	0.06	0.42	0.02	0.52	0.15	0.02	0.01	0.40	46.2	33352
Corp. bonds	0.11	0.24	0.03	0.45	0.11	0.02	0.01	0.44	45.8	709944
Govt. bonds	0.14	0.25	0.03	0.38	0.14	0.03	0.02	0.41	44.9	433631
Commod. funds	0.05	0.32	0.15	0.31	0.14	0.03	0.05	0.34	46.3	16219
International	0.13	0.37	0.24	0.39	0.20	0.06	0.04	0.39	46.1	732363

Panel B: Statistics on promotions and demotions (monthly probabilities)

Promotion - additional sole-managed fund(s)	0.00431
Promotion - additional co-managed fund(s)	0.01811
Promotion - swap for a higher TNA fund (sole-managed)	0.00004
Promotion - swap for a higher TNA responsibility (co-managed)	0.00045
Combined promotion probability	0.02463
<hr/>	
Demotion - lose sole-managed fund(s)	0.00570
Demotion - lose co-managed fund(s)	0.01623
Demotion - swap for a lower-TNA fund (sole-managed)	0.00007
Demotion - swap for a lower-TNA responsibility (co-managed)	0.00165
Demotion - gap in employment over 6 months	0.00137
Fired (leave the industry <60 y.o. or <30 yrs experience)	0.00603
Combined demotion probability	0.02631

Panel C: Male vs. Female managers

	Male	Female	Difference	<i>t</i> -statistic
Fraction of manager-months	0.888	0.112	.	
Number of unique managers	9,348	1,240		
Years in industry	10.016	8.987	-1.029	(-62.60)
Age	48.157	45.914	-2.244	(-58.31)
Age first started	32.480	31.703	-0.776	(-2.41)
Under 35 y. o.	0.054	0.055	0.001	(0.78)
Over 55 y. o.	0.218	0.119	-0.099	(-62.95)
Foreign	0.123	0.144	0.021	(2.00)
MBA	0.405	0.344	-0.061	(-4.97)
MA	0.128	0.131	0.003	(0.36)
PhD	0.032	0.027	-0.005	(-1.11)
Other degree	0.031	0.016	-0.015	(-4.43)
Top school	0.386	0.395	0.009	(0.59)
CFA	0.417	0.380	-0.037	(-2.97)
No. of sole-managed funds	0.559	0.480	-0.079	(-14.43)
No. of co-managed funds	2.815	2.726	-0.089	(-7.25)
Managed TNA (mil)	1066.48	776.829	-289.65	(-33.44)
No. of managers in fund family	47.096	52.379	5.283	(31.60)
Return rank	4.541	4.425	-0.116	(-4.27)
Fund flow rank	4.472	4.412	-0.060	(-2.30)
Prob. employment gap over 6 mo.	0.001	0.001	-0.000	(-0.73)
Length of empl. gap (yrs)	2.166	2.260	0.093	(0.72)
Prob. fired	0.006	0.008	0.002	(8.25)
Prob. demoted	0.026	0.026	-0.000	(-0.23)
Prob. promoted	0.025	0.024	-0.001	(-2.20)

**Table III**  
**Explaining style-adjusted fund flows**

This table presents the results of OLS regressions explaining monthly style-adjusted fund flows, which are computed by subtracting out the mean fund flow earned by funds in the same investment objective category in a given month. The set of funds includes only sole-managed actively managed open-ended domestic equity funds and excludes international, socially responsible and tax-managed funds, real estate, commodities, and utilities funds, funds that target less than 50% of assets in equities, and funds with less than \$5mil in TNA. Moreover, we require that the fund manager has been with the fund for at least 13 months. Return controls include the CAPM alphas lagged by one, two and three months, with the CAPM beta estimated over lagged rolling 12-month return windows, as well as the average alpha earned by the fund over months  $t - 12$  to  $t - 4$ , as well as the standard deviation of the CAPM residuals over the period  $t - 12$  to  $t - 1$ . Fund flows controls include fund flows lagged by one, two and three months, and the average fund flow earned over months  $t - 12$  to  $t - 4$ . Fund controls include 12b-1 fees, expense ratio, the institutional fund indicator, total net assets under management, and turnover ratio. Fund family controls include the total number of managers employed in the fund family and the total number of funds and the total TNA of all funds in the fund family. Manager's time in industry and fund age are expressed in months. Managers are identified as foreign if they have attended a foreign college or university for at least one of their degrees, with universities and colleges located in Canada excluded from this definition. All variables are known at the end of month  $t - 1$ . The sample period is 1993-2016. Standard errors, clustered by fund and month, are reported in parentheses.



Model	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Female	0.0003 (0.099)	0.0003 (0.125)	-0.0008 (-0.329)	-0.0003 (-0.135)	-0.0004 (-0.191)	0.0003 (0.113)	0.0007 (0.257)	0.0004 (0.142)	0.0008 (0.276)	0.0009 (0.318)
Time in industry	.	.	.	.	.	.	.	.	.	0.0465 (2.253)
Time in industry <sup>2</sup>	.	.	.	.	.	.	.	.	.	-0.0029 (-2.217)
Foreign	.	.	.	.	.	.	0.0050 (1.225)	0.0044 (1.000)	0.0051 (1.247)	0.0051 (1.209)
Foreign×female	.	.	.	.	.	.	.	0.0059 (0.481)	.	.
MBA	.	.	.	.	.	.	0.0001 (0.046)	0.0001 (0.034)	0.0001 (0.030)	-0.0001 (-0.072)
MA	.	.	.	.	.	.	0.0028 (1.065)	0.0028 (1.081)	0.0028 (1.063)	0.0026 (1.005)
PhD	.	.	.	.	.	.	-0.0015 (-0.342)	-0.0015 (-0.329)	-0.0016 (-0.364)	-0.0020 (-0.446)
Other degree	.	.	.	.	.	.	.	.	.	0.0001 (0.024)
CFA	.	.	.	.	.	.	.	.	.	0.0016 (0.870)
Top school	.	.	.	.	.	.	.	.	.	0.0003 (0.167)
Time at the fund	.	.	.	.	.	.	.	.	0.0006 (0.484)	.
Fund flow controls	Y	N	Y	Y	Y	Y	Y	Y	Y	Y
Fund return controls	Y	Y	N	Y	Y	Y	Y	Y	Y	Y
Fund controls	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Year dummy	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Month dummy	Y	Y	Y	Y	Y	N	Y	Y	Y	Y
IOC dummy	Y	Y	Y	Y	N	Y	Y	Y	Y	Y
Fund family dummy	Y	Y	Y	N	N	Y	Y	Y	Y	Y
Fund family controls	N	N	N	Y	Y	N	N	N	N	N
Obs.	150260	153111	150270	150260	150270	150260	125323	125323	125323	125323
Adj. RSq.	0.0207	0.0190	0.0092	0.0165	0.0127	0.0190	0.0199	0.0199	0.0199	0.0199

**Table IV**  
**Explaining style-adjusted fund CAPM alphas**

This table presents the results of OLS regressions explaining monthly fund style-adjusted CAPM alphas which are computed by subtracting out the mean CAPM alpha earned by funds in the same investment objective category in a given month. The set of funds includes only sole-managed actively managed open-ended domestic equity funds and excludes international, socially responsible and tax-managed funds, real estate, commodities, and utilities funds, funds that target less than 50% of assets in equities, and funds with less than \$5mil in TNA. Moreover, we require that the fund manager has been with the fund for at least 13 months. Return controls include the CAPM alphas lagged by one, two and three months, with the CAPM beta estimated over lagged rolling 12-month return windows, as well as the average alpha earned by the fund over months  $t - 12$  to  $t - 4$ , as well as the standard deviation of the CAPM residuals over the period  $t - 12$  to  $t - 1$ . Fund flows controls include fund flows lagged by one, two and three months, and the average fund flow earned over months  $t - 12$  to  $t - 4$ . Fund controls include 12b-1 fees, expense ratio, the institutional fund indicator, total net assets under management, and turnover ratio. Fund family controls include the total number of managers employed in the fund family and the total number of funds and the total TNA of all funds in the fund family. Manager's time in industry and fund age are expressed in months. Managers are identified as foreign if they have attended a foreign college or university for at least one of their degrees, with universities and colleges located in Canada excluded from this definition. All variables are known at the end of month  $t - 1$ . The sample period is 1993-2016. Standard errors, clustered by fund and month, are reported in parentheses.

Model	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Female	-0.0002 (-0.84)	-0.0002 (-1.12)	-0.0002 (-0.90)	0.0001 (0.67)	0.0001 (0.70)	-0.0002 (-0.84)	-0.0003 (-1.46)	-0.0002 (-1.04)	-0.0004 (-1.50)	-0.0004 (-1.60)
Time in industry	.	.	.	.	.	.	.	.	.	0.0015 (0.88)
Time in industry <sup>2</sup>	.	.	.	.	.	.	.	.	.	-0.0001 (-1.01)
Foreign	.	.	.	.	.	.	0.0006 (1.70)	0.0008 (2.17)	0.0005 (1.64)	0.0005 (1.56)
Foreign×female	.	.	.	.	.	.	.	-0.0017 (-1.73)	.	.
MBA	.	.	.	.	.	.	0.0002 (1.01)	0.0002 (1.05)	0.0002 (1.04)	0.0003 (1.58)
MA	.	.	.	.	.	.	0.0000 (0.23)	0.0000 (0.17)	0.0000 (0.23)	0.0001 (0.35)
PhD	.	.	.	.	.	.	-0.0002 (-0.67)	-0.0003 (-0.72)	-0.0002 (-0.62)	-0.0001 (-0.39)
Other degree	.	.	.	.	.	.	.	.	.	-0.0001 (-0.30)
CFA	.	.	.	.	.	.	.	.	.	-0.0000 (-0.13)
Top school	.	.	.	.	.	.	.	.	.	-0.0003 (-1.66)
Time at the fund	.	.	.	.	.	.	.	.	-0.0001 (-1.03)	.
Fund flow controls	Y	N	Y	Y	Y	Y	Y	Y	Y	Y
Fund return controls	Y	Y	N	Y	Y	Y	Y	Y	Y	Y
Fund controls	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Year dummy	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Month dummy	Y	Y	Y	Y	Y	N	Y	Y	Y	Y
Fund family dummy	Y	Y	Y	N	N	Y	Y	Y	Y	Y
Fund family controls	N	N	N	Y	Y	N	N	N	N	N
Obs.	153931	157596	153931	153931	153946	153931	128455	128455	128455	128455
Adj. RSq.	0.0096	0.0094	0.0089	0.0022	0.0020	0.0095	0.0112	0.0112	0.0112	0.0113

**Table V**  
**Explaining manager firings**

This table presents the results of the monthly-frequency linear probability regressions explaining manager firings. We assume that a manager is fired when s/he permanently disappears from the mutual fund industry and is under 60 years old or has less than 30 years of fund management experience if age information is unavailable. *Alpha* and *FFlow* are the managers' CAPM alpha and fund flow ranks, 1 through 10, computed each month within each investment objective code based on the 12-month trailing alpha and fund flows; subscripts  $t - 1$ ,  $t - 2$ , and  $t - 3$  indicate that the variables were lagged by 1, 2, and 3 years respectively. When an investment objective category contains fewer than 10 funds in a particular month, the ranks are set to missing values. When a manager manages more than one fund, the manager's fund-level ranking are aggregated over all the fund s/he manages by weighting the individual fund rankings by the fraction of the fund management responsibilities that the manager has, computed as  $\frac{1}{\text{number of co-managers}}$ . Index funds are excluded from the analysis. *Early-career* is a dummy variable equal to one if a manager has been managing funds between 3 and 10 years, and to zero otherwise; *Late-career* is a dummy variable equal to one if a manager has been managing funds for over 20 years, and to zero otherwise. *Foreign* dummy is set to one if a manager has school information available and has attended a foreign college or university (excluding those in Canada), and to zero otherwise. *Foreign incl.guess* dummy also includes a guess of whether a manager is of a foreign origin for records with missing school information. The guesses are made based on the first and last names of the manager. *Advanced degree* is set to one if a manager has school information available and has obtained an MBA, MA, PhD or Other degree, and zero otherwise. *Top school* equals to one if a manager has available school information and attended a top-ten-ranked college, university or MBA program, or an Ivy League school for at least one of the degrees, and to zero otherwise. *Foreign, Adv. degree*, and *Top school* dummies are set to missing values for the records with missing school information.  $\alpha$  dummy is computed as follows. We first compute the alpha rank as described above, but use the 36-month trailing alpha.  $\alpha$  dummy is set to one if the rank is 1 or 2 (the bottom 20% of performance) and to zero otherwise. *FFlow dummy* is computed similarly. We first compute the fund flow as described above, but use the 36-month trailing average fund flow. *FFlow dummy* is set to one if the rank is 1 or 2 (the bottom 20% of fund flows) and to zero otherwise. Controls include the standard deviation of the returns of the manager' portfolio over the trailing 36 months, the number of funds that the manager manages, the number of funds squared, and the total TNA that the manager manages (when manager co-manages a fund, we divide the fund's TNA by the number of co-managers). The sample includes only managers that have at least 36 months of uninterrupted fund management history. Panel A presents the results for all managers, Panel B only for managers who are sole managers and have no concurrent co-management responsibilities, and Panel C only for co-managers who have no concurrent sole-management responsibilities. Standard errors, clustered by manager and year, and  $t$ -statistics are reported in parentheses. Because of the concern that some managers may be having a career gap, the end of the sample period is moved back, resulting in the sample period January 1992 – January 2017.

Panel A: All managers

Model	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(9)	(10)	(11)	(12)	(13)
Female	0.0022 (7.68)	0.0022 (7.93)	0.0016 (5.32)	0.0017 (5.68)	0.0014 (2.60)	0.0016 (5.28)	0.0015 (4.87)	0.0016 (5.31)	0.0016 (5.30)	0.0014 (4.54)	0.0014 (4.53)	0.0014 (4.53)
Alpha <sub>t-1</sub>	.	.	-0.0004 (-10.92)	-0.0004 (-10.86)	-0.0004 (-10.86)	-0.0003 (-7.28)	-0.0004 (-10.96)	-0.0004 (-10.92)	-0.0003 (-7.28)	-0.0005 (-11.32)	-0.0005 (-11.32)	-0.0003 (-7.96)
Alpha <sub>t-2</sub>	.	.	-0.0003 (-8.02)	-0.0003 (-7.97)	-0.0003 (-7.97)	-0.0002 (-4.80)	-0.0003 (-8.20)	-0.0003 (-8.02)	-0.0002 (-4.80)	-0.0003 (-7.08)	-0.0003 (-7.08)	-0.0002 (-4.16)
Alpha <sub>t-3</sub>	.	.	-0.0001 (-3.04)	-0.0001 (-3.11)	-0.0001 (-3.11)	-0.0000 (-0.91)	-0.0001 (-3.16)	-0.0001 (-3.04)	-0.0000 (-0.91)	-0.0001 (-1.97)	-0.0001 (-1.97)	0.0000 (0.00)
FFlow <sub>t-1</sub>	.	.	-0.0005 (-10.77)	-0.0005 (-10.67)	-0.0005 (-10.67)	-0.0005 (-10.27)	-0.0004 (-8.73)	-0.0005 (-10.77)	-0.0005 (-10.27)	-0.0005 (-9.17)	-0.0005 (-9.16)	-0.0004 (-8.70)
FFlow <sub>t-2</sub>	.	.	-0.0002 (-4.28)	-0.0002 (-4.03)	-0.0002 (-4.03)	-0.0002 (-3.95)	-0.0001 (-2.53)	-0.0002 (-4.28)	-0.0002 (-3.96)	-0.0002 (-4.18)	-0.0002 (-4.18)	-0.0002 (-3.91)
FFlow <sub>t-3</sub>	.	.	-0.0001 (-2.15)	-0.0001 (-2.10)	-0.0001 (-2.11)	-0.0001 (-2.37)	-0.0001 (-1.20)	-0.0001 (-2.15)	-0.0001 (-2.37)	-0.0001 (-2.03)	-0.0001 (-2.03)	-0.0001 (-2.25)
Early career	.	.	.	-0.0013 (-6.14)	-0.0014 (-5.99)	.	.	.	.	.	.	.
Late career	.	.	.	0.0022 (5.25)	0.0021 (4.83)	.	.	.	.	.	.	.
Foreign (incl.guess)	.	.	.	.	.	.	.	0.0002 (0.65)	0.0003 (0.90)	.	.	.
Foreign	.	.	.	.	.	.	.	.	.	0.0003 (0.73)	0.0003 (0.74)	0.0003 (0.84)
Adv. degree	.	.	.	.	.	.	.	.	.	.	-0.0000 (-0.06)	0.0000 (0.05)
Top school	.	.	.	.	.	.	.	.	.	.	0.0000 (0.18)	0.0000 (0.14)
$\alpha$ dummy	.	.	.	.	.	0.0046 (12.54)	.	.	0.0046 (12.59)	.	.	0.0045 (7.29)
FFlow dummy	.	.	.	.	.	.	0.0024 (6.57)	.	.	.	.	.
Female $\times \alpha$ dummy	.	.	.	.	.	-0.0008 (-0.82)	.	.	.	.	.	.
Foreign(+guess) $\times \alpha$ dummy	.	.	.	.	.	.	.	.	-0.0005 (-0.49)	.	.	-0.0003 (-0.39)
Adv.deg. $\times \alpha$ dummy	.	.	.	.	.	.	.	.	.	.	.	.
Female $\times$ FFlow dummy	.	.	.	.	.	.	0.0006 (0.64)	.	.	.	.	.
Female $\times$ early career	.	.	.	.	0.0004 (0.58)	.	.	.	.	.	.	.
Female $\times$ late career	.	.	.	.	0.0011 (0.72)	.	.	.	.	.	.	.
Controls	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Year dummy	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Fund family dummy	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Obs.	759509	759509	686282	686282	686282	686282	686282	686282	686282	582845	582845	582845
Adj. RSq.	0.0016	0.0003	0.0047	0.0048	0.0048	0.0049	0.0048	0.0049	0.0052	0.0046	0.0046	0.0049

Panel B: Only sole managers

Model	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(9)	(10)	(11)	(12)	(13)
Female	0.0015 (2.33)	0.0015 (2.38)	0.0008 (1.15)	0.0008 (1.11)	-0.0011 (-0.87)	0.0014 (1.84)	0.0009 (1.21)	0.0008 (1.15)	0.0008 (1.12)	0.0002 (0.23)	0.0002 (0.31)	0.0002 (0.30)
Alpha <sub>t-1</sub>	.	.	-0.0005 (-5.99)	-0.0005 (-5.98)	-0.0005 (-5.97)	-0.0005 (-4.93)	-0.0005 (-6.00)	-0.0005 (-5.99)	-0.0005 (-4.94)	-0.0005 (-5.42)	-0.0005 (-5.42)	-0.0004 (-4.40)
Alpha <sub>t-2</sub>	.	.	-0.0004 (-4.47)	-0.0004 (-4.43)	-0.0004 (-4.43)	-0.0003 (-3.51)	-0.0004 (-4.54)	-0.0004 (-4.46)	-0.0003 (-3.53)	-0.0003 (-3.61)	-0.0003 (-3.60)	-0.0003 (-2.72)
Alpha <sub>t-3</sub>	.	.	-0.0003 (-3.01)	-0.0003 (-3.02)	-0.0003 (-3.03)	-0.0002 (-2.41)	-0.0003 (-3.03)	-0.0003 (-3.00)	-0.0002 (-2.40)	-0.0003 (-2.71)	-0.0003 (-2.71)	-0.0002 (-2.10)
FFlow <sub>t-1</sub>	.	.	-0.0004 (-3.24)	-0.0003 (-3.18)	-0.0003 (-3.14)	-0.0003 (-3.08)	-0.0003 (-2.31)	-0.0004 (-3.24)	-0.0003 (-3.08)	-0.0004 (-3.32)	-0.0004 (-3.30)	-0.0004 (-3.13)
FFlow <sub>t-2</sub>	.	.	-0.0002 (-1.46)	-0.0001 (-1.34)	-0.0001 (-1.29)	-0.0001 (-1.37)	-0.0001 (-0.59)	-0.0002 (-1.46)	-0.0001 (-1.36)	-0.0001 (-1.04)	-0.0001 (-1.03)	-0.0001 (-0.93)
FFlow <sub>t-3</sub>	.	.	-0.0002 (-2.43)	-0.0002 (-2.39)	-0.0002 (-2.36)	-0.0003 (-2.46)	-0.0002 (-1.94)	-0.0002 (-2.43)	-0.0003 (-2.49)	-0.0002 (-2.06)	-0.0002 (-2.06)	-0.0002 (-2.12)
Early career	.	.	.	-0.0009 (-1.64)	-0.0013 (-2.19)	.	.	.	.	.	.	.
Late career	.	.	.	0.0022 (1.85)	0.0023 (1.76)	.	.	.	.	.	.	.
Foreign (incl.guess)	.	.	.	.	.	.	.	-0.0013 (-1.47)	-0.0016 (-1.67)	.	.	.
Foreign	.	.	.	.	.	.	.	.	.	-0.0010 (-0.96)	-0.0010 (-0.96)	-0.0010 (-0.97)
Adv. degree	.	.	.	.	.	.	.	.	.	.	0.0005 (0.91)	0.0005 (0.84)
Top school	.	.	.	.	.	.	.	.	.	.	0.0000 (0.04)	0.0000 (0.03)
$\alpha$ dummy	.	.	.	.	.	0.0028 (3.53)	.	.	0.0021 (2.67)	.	.	0.0023 (1.79)
FFlow dummy	.	.	.	.	.	.	0.0025 (2.90)	.	.	.	.	.
Female $\times \alpha$ dummy	.	.	.	.	.	-0.0037 (-2.02)	.	.	.	.	.	.
Foreign(+guess) $\times \alpha$ dummy	.	.	.	.	.	.	.	.	0.0020 (0.86)	.	.	.
Adv.deg. $\times \alpha$ dummy	.	.	.	.	.	.	.	.	.	.	.	-0.0000 (-0.00)
Female $\times$ FFlow dummy	.	.	.	.	.	.	-0.0006 (-0.29)	.	.	.	.	.
Female $\times$ early career	.	.	.	.	0.0029 (1.90)	.	.	.	.	.	.	.
Female $\times$ late career	.	.	.	.	-0.0000 (-0.01)	.	.	.	.	.	.	.
Controls	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Year dummy	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Fund family dummy	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Obs.	110606	110606	97130.0	97130.0	97130.0	97130.0	97130.0	97130.0	97130.0	84471.0	84471.0	84471.0
Adj. RSq.	0.0046	0.0008	0.0079	0.0080	0.0080	0.0081	0.0080	0.0084	0.0085	0.0100	0.0100	0.0101

Panel C: Only co-managers

Model	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(9)	(10)	(11)	(12)	(13)
Female	0.0016 (5.00)	0.0016 (5.02)	0.0014 (4.35)	0.0015 (4.65)	0.0020 (3.38)	0.0014 (4.11)	0.0014 (4.17)	0.0014 (4.35)	0.0014 (4.36)	0.0014 (4.01)	0.0014 (4.00)	0.0014 (4.03)
Alpha <sub>t-1</sub>	.	.	-0.0003 (-6.45)	-0.0003 (-6.43)	-0.0003 (-6.43)	-0.0003 (-5.57)	-0.0003 (-6.45)	-0.0003 (-6.45)	-0.0003 (-5.58)	-0.0003 (-6.40)	-0.0003 (-6.39)	-0.0003 (-5.58)
Alpha <sub>t-2</sub>	.	.	-0.0002 (-3.91)	-0.0002 (-3.86)	-0.0002 (-3.85)	-0.0002 (-3.19)	-0.0002 (-3.97)	-0.0002 (-3.91)	-0.0002 (-3.18)	-0.0002 (-3.96)	-0.0002 (-3.96)	-0.0002 (-3.33)
Alpha <sub>t-3</sub>	.	.	-0.0000 (-0.77)	-0.0000 (-0.77)	-0.0000 (-0.78)	-0.0000 (-0.29)	-0.0000 (-0.79)	-0.0000 (-0.77)	-0.0000 (-0.28)	-0.0000 (-0.19)	-0.0000 (-0.18)	0.0000 (0.25)
FFlow <sub>t-1</sub>	.	.	-0.0002 (-3.36)	-0.0002 (-3.35)	-0.0002 (-3.37)	-0.0002 (-3.28)	-0.0002 (-2.78)	-0.0002 (-3.36)	-0.0002 (-3.27)	-0.0002 (-3.09)	-0.0002 (-3.09)	-0.0002 (-3.01)
FFlow <sub>t-2</sub>	.	.	-0.0002 (-2.68)	-0.0002 (-2.61)	-0.0002 (-2.60)	-0.0002 (-2.62)	-0.0001 (-2.07)	-0.0002 (-2.68)	-0.0002 (-2.63)	-0.0001 (-2.26)	-0.0001 (-2.26)	-0.0001 (-2.21)
FFlow <sub>t-3</sub>	.	.	-0.0001 (-0.97)	-0.0000 (-0.94)	-0.0000 (-0.95)	-0.0001 (-1.02)	-0.0000 (-0.61)	-0.0001 (-0.97)	-0.0001 (-1.02)	-0.0001 (-1.92)	-0.0001 (-1.94)	-0.0001 (-1.98)
Early career	.	.	.	-0.0006 (-2.76)	-0.0005 (-2.23)	.	.	.	.	.	.	.
Late career	.	.	.	0.0016 (3.74)	0.0014 (3.22)	.	.	.	.	.	.	.
Foreign (incl.guess)	.	.	.	.	.	.	.	0.0001 (0.34)	0.0003 (0.75)	.	.	.
Foreign	.	.	.	.	.	.	.	.	.	-0.0001 (-0.36)	-0.0002 (-0.44)	-0.0002 (-0.39)
Adv. degree	.	.	.	.	.	.	.	.	.	.	0.0001 (0.20)	0.0002 (0.62)
Top school	.	.	.	.	.	.	.	.	.	.	-0.0002 (-0.99)	-0.0002 (-1.01)
$\alpha$ dummy	.	.	.	.	.	0.0015 (3.11)	0.0015 (3.27)	.	0.0018 (3.76)	.	.	0.0029 (3.37)
FFlow dummy	.	.	.	.	.	.	.	.	.	.	.	.
Female $\times$ $\alpha$ dummy	.	.	.	.	.	0.0006 (0.48)	.	.	.	.	.	.
Foreign(+guess) $\times$ $\alpha$ dummy	.	.	.	.	.	.	.	.	-0.0024 (-1.61)	.	.	-0.0019 (-1.95)
Adv.deg. $\times$ $\alpha$ dummy	.	.	.	.	.	.	.	.	.	.	.	.
Female $\times$ FFlow dummy	.	.	.	.	.	.	0.0005 (0.35)	.	.	.	.	.
Female $\times$ early career	.	.	.	.	-0.0009 (-1.23)	.	.	.	.	.	.	.
Female $\times$ late career	.	.	.	.	0.0031 (1.85)	.	.	.	.	.	.	.
Controls	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Year dummy	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Fund family dummy	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Obs.	354961	354961	330821	330821	330821	330821	330821	330821	330821	283347	283347	283347
Adj. RSq.	0.0034	0.0002	0.0063	0.0064	0.0065	0.0064	0.0064	0.0065	0.0065	0.0055	0.0055	0.0055

**Table VI**  
**Explaining manager demotions**

This table presents the results of the monthly-frequency linear probability regressions explaining manager demotions. We assume that a manager is demoted when a manager loses at least one sole-managed fund or loses at least one co-managed fund or swaps one fund for another with a lower TNA responsibility, without getting a additional fund(s) to sole-manage, or is fired from the industry as described in the caption to Table V. *Alpha* and *FFlow* are the managers' CAPM alpha and fund flow ranks, 1 through 10, computed each month within each investment objective code based on the 12-month trailing alpha and fund flows; subscripts  $t - 1$ ,  $t - 2$ , and  $t - 3$  indicate that the variables were lagged by 1, 2, and 3 years respectively. When an investment objective category contains fewer than 10 funds in a particular month, the ranks are set to missing values. When a manager manages more than one fund, the manager's fund-level ranking are aggregated over all the fund s/he manages by weighting the individual fund rankings by the fraction of the fund management responsibilities that the manager has, computed as  $\frac{1}{\text{number of co-managers}}$ . Index funds are excluded from the analysis. *Early-career* is a dummy variable equal to one if a manager has been managing funds between 3 and 10 years, and to zero otherwise; *Late-career* is a dummy variable equal to one if a manager has been managing funds for over 20 years, and to zero otherwise. *Foreign* dummy is set to one if a manager has school information available and has attended a foreign college or university (excluding those in Canada), and to zero otherwise. *Foreign incl.guess* dummy also includes a guess of whether a manager is of a foreign origin for records with missing school information. The guesses are made based on the first and last names of the manager. *Advanced degree* is set to one if a manager has school information available and has obtained an MBA, MA, PhD or Other degree, and zero otherwise. *Top school* equals to one if a manager has available school information and attended a top-ten-ranked college, university or MBA program, or an Ivy League school for at least one of the degrees, and to zero otherwise. *Foreign, Adv. degree*, and *Top school* dummies are set to missing values for the records with missing school information. *alpha dummy* is computed as follows. We first compute the alpha rank as described above, but use the 36-month trailing alpha. *alpha dummy* is set to one if the rank is 1 or 2 (the bottom 20% of performance) and to zero otherwise. *FFlow dummy* is computed similarly. We first compute the fund flow as described above, but use the 36-month trailing average fund flow. *FFlow dummy* is set to one if the rank is 1 or 2 (the bottom 20% of fund flows) and to zero otherwise. Controls include the standard deviation of the returns of the manager's portfolio over the trailing 36 months, the number of funds that the manager manages, the number of funds squared, and the total TNA that the manager manages (when manager co-manages a fund, we divide the fund's TNA by the number of co-managers). The sample includes only managers that have at least 36 months of uninterrupted fund management history. Panel A presents the results for all managers, Panel B only for managers who are sole managers and have no concurrent co-management responsibilities, and Panel C only for co-managers who have no concurrent sole-management responsibilities. Standard errors, clustered by manager and year, and *t*-statistics are reported in parentheses. Because of the concern that some managers may be having a career gap, the end of the sample period is moved back, resulting in the sample period January 1992 – January 2017.



Panel A: All managers

Model	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(9)	(10)	(11)	(12)	(13)
Female	-0.0016 (-2.59)	-0.0013 (-2.19)	-0.0009 (-1.47)	-0.0008 (-1.22)	0.0006 (0.52)	-0.0009 (-1.36)	-0.0007 (-1.10)	-0.0009 (-1.45)	-0.0009 (-1.43)	-0.0013 (-1.84)	-0.0012 (-1.67)	-0.0012 (-1.66)
Alpha <sub>t-1</sub>	.	.	-0.0013 (-15.39)	-0.0013 (-15.30)	-0.0013 (-15.30)	-0.0013 (-14.23)	-0.0013 (-15.36)	-0.0013 (-15.39)	-0.0013 (-14.25)	-0.0015 (-15.15)	-0.0015 (-15.16)	-0.0014 (-13.89)
Alpha <sub>t-2</sub>	.	.	-0.0013 (-14.97)	-0.0013 (-14.91)	-0.0013 (-14.90)	-0.0013 (-13.97)	-0.0013 (-14.85)	-0.0013 (-14.98)	-0.0013 (-13.96)	-0.0014 (-14.67)	-0.0014 (-14.67)	-0.0014 (-13.56)
Alpha <sub>t-3</sub>	.	.	-0.0006 (-6.39)	-0.0006 (-6.46)	-0.0006 (-6.45)	-0.0005 (-5.89)	-0.0005 (-6.32)	-0.0006 (-6.39)	-0.0005 (-5.88)	-0.0006 (-5.96)	-0.0006 (-5.97)	-0.0005 (-5.37)
FFlow <sub>t-1</sub>	.	.	-0.0008 (-7.76)	-0.0008 (-7.64)	-0.0008 (-7.65)	-0.0008 (-7.66)	-0.0009 (-8.62)	-0.0008 (-7.76)	-0.0008 (-7.66)	-0.0009 (-7.58)	-0.0009 (-7.58)	-0.0009 (-7.46)
FFlow <sub>t-2</sub>	.	.	-0.0007 (-7.32)	-0.0007 (-7.06)	-0.0007 (-7.07)	-0.0008 (-7.25)	-0.0009 (-8.16)	-0.0008 (-7.32)	-0.0008 (-7.28)	-0.0008 (-7.21)	-0.0008 (-7.19)	-0.0008 (-7.11)
FFlow <sub>t-3</sub>	.	.	0.0000 (0.53)	0.0001 (0.57)	0.0001 (0.56)	0.0000 (0.48)	-0.0000 (-0.07)	0.0001 (0.54)	0.0000 (0.50)	0.0000 (0.20)	0.0000 (0.21)	0.0000 (0.15)
Early career	.	.	.	-0.0035 (-7.59)	-0.0032 (-6.63)	.	.	.	.	.	.	.
Late career	.	.	.	-0.0000 (-0.05)	-0.0003 (-0.27)	.	.	.	.	.	.	.
Foreign (incl.guess)	.	.	.	.	.	.	.	-0.0013 (-1.87)	-0.0006 (-0.82)	.	.	.
Foreign	.	.	.	.	.	.	.	.	.	-0.0018 (-2.21)	-0.0018 (-2.13)	-0.0017 (-2.08)
Adv. degree	.	.	.	.	.	.	.	.	.	.	0.0010 (1.93)	0.0006 (1.04)
Top school	.	.	.	.	.	.	.	.	.	.	0.0006 (1.17)	0.0006 (1.17)
α dummy	.	.	.	.	.	0.0020 (2.49)	.	.	0.0026 (3.34)	.	.	-0.0004 (-0.27)
FFlow dummy	.	.	.	.	.	.	-0.0032 (-4.01)	.	.	.	.	.
Female×α dummy	.	.	.	.	.	-0.0002 (-0.09)	.	.	.	.	.	.
Foreign(+guess)×α dummy	.	.	.	.	.	.	.	.	-0.0065 (-2.99)	.	.	0.0043 (2.60)
Adv.deg.×α dummy	.	.	.	.	.	.	.	.	.	.	.	.
Female×FFlow dummy	.	.	.	.	.	.	-0.0019 (-0.97)	.	.	.	.	.
Female×early career	.	.	.	.	-0.0023 (-1.66)	.	.	.	.	.	.	.
Female×late career	.	.	.	.	0.0036 (1.09)	.	.	.	.	.	.	.
Controls	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Year dummy	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Fund family dummy	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Obs.	759509	759509	686282	686282	686282	686282	686282	686282	686282	582845	582845	582845
Adj. RSq.	0.0039	0.0011	0.0148	0.0149	0.0149	0.0149	0.0149	0.0157	0.0157	0.0158	0.0159	0.0159

Panel B: Only sole managers

Model	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(9)	(10)	(11)	(12)	(13)
Female	-0.0014 (-0.98)	-0.0012 (-0.93)	-0.0011 (-0.76)	-0.0012 (-0.82)	-0.0018 (-0.68)	0.0003 (0.18)	-0.0005 (-0.33)	-0.0011 (-0.76)	-0.0011 (-0.76)	-0.0010 (-0.62)	-0.0009 (-0.57)	-0.0009 (-0.57)
Alpha <sub>t-1</sub>	.	.	-0.0008 (-4.40)	-0.0008 (-4.43)	-0.0008 (-4.43)	-0.0007 (-3.53)	-0.0008 (-4.40)	-0.0008 (-4.40)	-0.0007 (-3.56)	-0.0010 (-5.08)	-0.0010 (-5.08)	-0.0009 (-4.32)
Alpha <sub>t-2</sub>	.	.	-0.0008 (-4.32)	-0.0008 (-4.36)	-0.0008 (-4.36)	-0.0007 (-3.49)	-0.0008 (-4.35)	-0.0008 (-4.32)	-0.0007 (-3.52)	-0.0009 (-4.11)	-0.0008 (-4.10)	-0.0007 (-3.43)
Alpha <sub>t-3</sub>	.	.	-0.0005 (-2.47)	-0.0005 (-2.50)	-0.0005 (-2.50)	-0.0004 (-1.97)	-0.0005 (-2.48)	-0.0005 (-2.47)	-0.0004 (-1.96)	-0.0005 (-2.45)	-0.0005 (-2.45)	-0.0004 (-2.02)
FFlow <sub>t-1</sub>	.	.	-0.0002 (-1.02)	-0.0002 (-1.02)	-0.0002 (-1.02)	-0.0002 (-0.88)	-0.0001 (-0.53)	-0.0002 (-1.02)	-0.0002 (-0.89)	-0.0002 (-0.87)	-0.0002 (-0.89)	-0.0002 (-0.77)
FFlow <sub>t-2</sub>	.	.	-0.0005 (-2.26)	-0.0005 (-2.26)	-0.0005 (-2.26)	-0.0005 (-2.18)	-0.0004 (-1.72)	-0.0005 (-2.26)	-0.0005 (-2.18)	-0.0007 (-2.78)	-0.0007 (-2.78)	-0.0007 (-2.72)
FFlow <sub>t-3</sub>	.	.	-0.0002 (-0.71)	-0.0002 (-0.70)	-0.0001 (-0.70)	-0.0002 (-0.73)	-0.0001 (-0.45)	-0.0002 (-0.71)	-0.0002 (-0.76)	-0.0001 (-0.36)	-0.0001 (-0.36)	-0.0001 (-0.40)
Early career	.	.	.	0.0013 (1.09)	0.0011 (0.94)	.	.	.	.	.	.	.
Late career	.	.	.	0.0060 (2.43)	0.0059 (2.17)	.	.	.	.	.	.	.
Foreign (incl.guess)	.	.	.	.	.	.	.	-0.0002 (-0.09)	0.0002 (0.11)	.	.	.
Foreign	.	.	.	.	.	.	.	.	.	0.0011 (0.49)	0.0012 (0.55)	0.0012 (0.55)
Adv. degree	.	.	.	.	.	.	.	.	.	.	-0.0002 (-0.17)	-0.0005 (-0.33)
Top school	.	.	.	.	.	.	.	.	.	.	0.0011 (0.85)	0.0011 (0.85)
$\alpha$ dummy	.	.	.	.	.	0.0053 (3.14)	.	.	0.0041 (2.53)	.	.	0.0025 (0.89)
FFlow dummy	.	.	.	.	.	.	0.0033 (1.86)	.	.	.	.	.
Female $\times \alpha$ dummy	.	.	.	.	.	-0.0086 (-2.27)	.	.	.	.	.	.
Foreign(+guess) $\times \alpha$ dummy	.	.	.	.	.	.	.	.	-0.0023 (-0.47)	.	.	0.0015 (0.46)
Adv.deg. $\times \alpha$ dummy	.	.	.	.	.	.	.	.	.	.	.	.
Female $\times$ FFlow dummy	.	.	.	.	.	.	-0.0038 (-0.96)	.	.	.	.	.
Female $\times$ early career	.	.	.	.	0.0008 (0.26)	.	.	.	.	.	.	.
Female $\times$ late career	.	.	.	.	0.0010 (0.15)	.	.	.	.	.	.	.
Controls	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Year dummy	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Fund family dummy	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Obs.	110606	110606	97130.0	97130.0	97130.0	97130.0	97130.0	97130.0	97130.0	84471.0	84471.0	84471.0
Adj. RSq.	0.0068	0.0010	0.0137	0.0138	0.0138	0.0138	0.0137	0.0144	0.0145	0.0153	0.0153	0.0154

Panel C: Only co-managers

Model	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(9)	(10)	(11)	(12)	(13)
Female	-0.0008 (-0.79)	-0.0001 (-0.14)	-0.0009 (-0.89)	-0.0005 (-0.52)	0.0008 (0.48)	-0.0012 (-1.20)	-0.0007 (-0.68)	-0.0009 (-0.85)	-0.0008 (-0.83)	-0.0012 (-1.05)	-0.0011 (-0.96)	-0.0011 (-0.96)
Alpha <sub>t-1</sub>	.	.	-0.0017 (-11.50)	-0.0017 (-11.46)	-0.0017 (-11.46)	-0.0015 (-10.06)	-0.0017 (-11.50)	-0.0017 (-11.49)	-0.0015 (-10.08)	-0.0018 (-11.18)	-0.0018 (-11.18)	-0.0017 (-9.98)
Alpha <sub>t-2</sub>	.	.	-0.0019 (-12.80)	-0.0019 (-12.73)	-0.0019 (-12.73)	-0.0018 (-11.52)	-0.0019 (-12.78)	-0.0019 (-12.81)	-0.0018 (-11.53)	-0.0021 (-12.88)	-0.0021 (-12.88)	-0.0020 (-11.82)
Alpha <sub>t-3</sub>	.	.	-0.0008 (-5.30)	-0.0008 (-5.35)	-0.0008 (-5.35)	-0.0006 (-4.48)	-0.0008 (-5.30)	-0.0008 (-5.30)	-0.0006 (-4.49)	-0.0007 (-4.50)	-0.0007 (-4.50)	-0.0006 (-3.83)
FFlow <sub>t-1</sub>	.	.	-0.0017 (-9.18)	-0.0017 (-9.09)	-0.0017 (-9.10)	-0.0017 (-9.05)	-0.0017 (-9.27)	-0.0017 (-9.19)	-0.0017 (-9.04)	-0.0016 (-8.06)	-0.0016 (-8.06)	-0.0016 (-7.96)
FFlow <sub>t-2</sub>	.	.	-0.0011 (-6.05)	-0.0011 (-5.85)	-0.0011 (-5.85)	-0.0011 (-5.96)	-0.0011 (-6.19)	-0.0011 (-6.05)	-0.0011 (-5.96)	-0.0012 (-6.03)	-0.0012 (-6.03)	-0.0012 (-5.93)
FFlow <sub>t-3</sub>	.	.	-0.0000 (-0.23)	-0.0000 (-0.17)	-0.0000 (-0.17)	-0.0001 (-0.32)	-0.0001 (-0.37)	-0.0000 (-0.23)	-0.0000 (-0.31)	-0.0000 (-0.27)	-0.0000 (-0.26)	-0.0001 (-0.32)
Early career	.	.	.	-0.0051 (-7.19)	-0.0048 (-6.48)	.	.	.	.	.	.	.
Late career	.	.	.	0.0000 (0.01)	-0.0001 (-0.10)	.	.	.	.	.	.	.
Foreign (incl.guess)	.	.	.	.	.	.	.	-0.0025 (-2.33)	-0.0018 (-1.59)	.	.	.
Foreign	.	.	.	.	.	.	.	.	.	-0.0039 (-3.11)	-0.0040 (-3.12)	-0.0039 (-3.06)
Adv. degree	.	.	.	.	.	.	.	.	.	.	0.0011 (1.32)	0.0008 (0.98)
Top school	.	.	.	.	.	.	.	.	.	.	0.0003 (0.34)	0.0002 (0.31)
α dummy	.	.	.	.	.	0.0072 (4.85)	.	.	0.0089 (6.05)	.	.	0.0043 (1.53)
FFlow dummy	.	.	.	.	.	.	-0.0015 (-1.05)	.	.	.	.	.
Female×α dummy	.	.	.	.	.	0.0057 (1.41)	.	.	.	.	.	.
Foreign(+guess)×α dummy	.	.	.	.	.	.	.	.	-0.0120 (-2.63)	.	.	.
Adv.deg.×α dummy	.	.	.	.	.	.	.	.	.	.	.	0.0038 (1.20)
Female×FFlow dummy	.	.	.	.	.	.	-0.0033 (-0.80)	.	.	.	.	.
Female×early career	.	.	.	.	-0.0023 (-1.09)	.	.	.	.	.	.	.
Female×late career	.	.	.	.	0.0033 (0.65)	.	.	.	.	.	.	.
Controls	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Year dummy	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Fund family dummy	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Obs.	354961	354961	330821	330821	330821	330821	330821	330821	330821	283347	283347	283347
Adj. RSq.	0.0061	0.0018	0.0157	0.0159	0.0159	0.0158	0.0157	0.0169	0.0170	0.0163	0.0164	0.0164

**Table VII**  
**Explaining manager promotions**

This table presents the results of the monthly-frequency linear probability regressions explaining manager promotions. We assume that a manager is promoted when a manager gains at least one sole-managed fund or gains at least one co-managed fund or swaps one fund for another with a higher TNA responsibility, without losing a sole-managed fund(s). *Alpha* and *FFlow* are the managers' CAPM alpha and fund flow ranks, 1 through 10, computed each month within each investment objective code based on the 12-month trailing alpha and fund flows; subscripts  $t - 1$ ,  $t - 2$ , and  $t - 3$  indicate that the variables were lagged by 1, 2, and 3 years respectively. When an investment objective category contains fewer than 10 funds in a particular month, the ranks are set to missing values. When a manager manages more than one fund, the manager's fund-level ranking are aggregated over all the fund s/he manages by weighting the individual fund rankings by the fraction of the fund management responsibilities that the manager has, computed as  $\frac{1}{\text{number of co-managers}}$ . Index funds are excluded from the analysis. *Early-career* is a dummy variable equal to one if a manager has been managing funds between 3 and 10 years, and to zero otherwise; *Late-career* is a dummy variable equal to one if a manager has been managing funds for over 20 years, and to zero otherwise. *Foreign* dummy is set to one if a manager has school information available and has attended a foreign college or university (excluding those in Canada), and to zero otherwise. *Foreign incl.guess* dummy also includes a guess of whether a manager is of a foreign origin for records with missing school information. The guesses are made based on the first and last names of the manager. *Advanced degree* is set to one if a manager has school information available and has obtained an MBA, MA, PhD or Other degree, and zero otherwise. *Top school* equals to one if a manager has available school information and attended a top-ten-ranked college, university or MBA program, or an Ivy League school for at least one of the degrees, and to zero otherwise. *Foreign, Adv. degree*, and *Top school* dummies are set to missing values for the records with missing school information.  $\alpha$  *dummy* is computed as follows. We first compute the alpha rank as described above, but use the 36-month trailing alpha.  $\alpha$  *dummy* is set to one if the rank is 9 or 10 (the top 20% of performance) and to zero otherwise. *FFlow dummy* is computed similarly. We first compute the fund flow as described above, but use the 36-month trailing average fund flow. *FFlow dummy* is set to one if the rank is 9 or 10 (the top 20% of fund flows) and to zero otherwise. Controls include the standard deviation of the returns of the manager' portfolio over the trailing 36 months, the number of funds that the manager manages, the number of funds squared, and the total TNA that the manager manages (when manager co-manages a fund, we divide the fund's TNA by the number of co-managers). The sample includes only managers that have at least 36 months of uninterrupted fund management history. Panel A presents the results for all managers, Panel B only for managers who are sole managers and have no concurrent co-management responsibilities, and Panel C only for co-managers who have no concurrent sole-management responsibilities. Standard errors, clustered by manager and year, and *t*-statistics are reported in parentheses. The sample period January 1992 – January 2017.

Panel A: All managers

Model	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(9)	(10)	(11)	(12)	(13)
Female	-0.0025 (-4.52)	-0.0024 (-4.28)	-0.0027 (-4.29)	-0.0028 (-4.49)	-0.0034 (-3.13)	-0.0027 (-4.05)	-0.0029 (-4.37)	-0.0027 (-4.24)	-0.0027 (-4.27)	-0.0028 (-3.89)	-0.0027 (-3.76)	-0.0027 (-3.80)
Alpha <sub>t-1</sub>	.	.	0.0002 (2.89)	0.0002 (2.83)	0.0002 (2.83)	0.0004 (4.65)	0.0003 (2.94)	0.0002 (2.90)	0.0004 (4.65)	0.0002 (2.40)	0.0002 (2.39)	0.0004 (4.15)
Alpha <sub>t-2</sub>	.	.	0.0003 (3.66)	0.0003 (3.61)	0.0003 (3.61)	0.0005 (5.30)	0.0003 (3.57)	0.0003 (3.65)	0.0005 (5.28)	0.0003 (3.19)	0.0003 (3.19)	0.0005 (4.80)
Alpha <sub>t-3</sub>	.	.	0.0001 (0.87)	0.0001 (0.90)	0.0001 (0.90)	0.0002 (2.13)	0.0001 (0.64)	0.0001 (0.85)	0.0002 (2.11)	0.0001 (0.71)	0.0001 (0.70)	0.0002 (1.95)
FFlow <sub>t-1</sub>	.	.	0.0007 (7.26)	0.0007 (7.23)	0.0007 (7.23)	0.0008 (7.73)	0.0010 (9.29)	0.0007 (7.26)	0.0008 (7.72)	0.0008 (6.66)	0.0008 (6.66)	0.0008 (7.14)
FFlow <sub>t-2</sub>	.	.	0.0005 (5.30)	0.0005 (5.17)	0.0005 (5.17)	0.0006 (5.61)	0.0008 (7.48)	0.0005 (5.30)	0.0006 (5.62)	0.0006 (5.18)	0.0006 (5.20)	0.0006 (5.53)
FFlow <sub>t-3</sub>	.	.	0.0002 (2.48)	0.0002 (2.47)	0.0002 (2.47)	0.0002 (2.27)	0.0003 (3.53)	0.0002 (2.49)	0.0002 (2.28)	0.0002 (2.36)	0.0002 (2.38)	0.0002 (2.19)
Early career	.	.	.	0.0019 (4.20)	0.0017 (3.70)	.	.	.	.	.	.	.
Late career	.	.	.	-0.0022 (-2.63)	-0.0020 (-2.34)	.	.	.	.	.	.	.
Foreign (incl.guess)	.	.	.	.	.	.	.	-0.0020 (-3.03)	-0.0016 (-2.33)	.	.	.
Foreign	.	.	.	.	.	.	.	.	.	-0.0024 (-2.99)	-0.0022 (-2.82)	-0.0022 (-2.77)
Adv. degree	.	.	.	.	.	.	.	.	.	.	0.0007 (1.29)	0.0002 (0.33)
Top school	.	.	.	.	.	.	.	.	.	.	0.0012 (2.33)	0.0012 (2.41)
$\alpha$ dummy	.	.	.	.	.	-0.0050 (-6.84)	.	.	-0.0047 (-6.39)	.	.	-0.0083 (-6.19)
FFlow dummy	.	.	.	.	.	.	-0.0072 (-9.24)	.	.	.	.	.
Female $\times$ $\alpha$ dummy	.	.	.	.	.	-0.0003 (-0.14)	.	.	.	.	.	.
Foreign(+guess) $\times$ $\alpha$ dummy	.	.	.	.	.	.	.	.	-0.0025 (-1.33)	.	.	.
Adv.deg. $\times$ $\alpha$ dummy	.	.	.	.	.	.	.	.	.	.	.	0.0039 (2.57)
Female $\times$ FFlow dummy	.	.	.	.	.	.	0.0022 (1.11)	.	.	.	.	.
Female $\times$ early career	.	.	.	.	0.0011 (0.83)	.	.	.	.	.	.	.
Female $\times$ late career	.	.	.	.	-0.0024 (-0.80)	.	.	.	.	.	.	.
Controls	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Year dummy	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Fund family dummy	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Obs.	794266	794266	625557	625557	625557	625557	625557	625557	625557	526435	526435	526435
Adj. RSq.	0.0042	0.0018	0.0064	0.0065	0.0065	0.0065	0.0066	0.0081	0.0082	0.0070	0.0070	0.0071

Panel B: Only sole managers

Model	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(9)	(10)	(11)	(12)	(13)
Female	-0.0021 (-1.87)	-0.0015 (-1.42)	-0.0020 (-1.46)	-0.0020 (-1.43)	-0.0009 (-0.39)	-0.0017 (-1.15)	-0.0022 (-1.51)	-0.0020 (-1.43)	-0.0020 (-1.44)	-0.0021 (-1.35)	-0.0019 (-1.22)	-0.0019 (-1.22)
Alpha <sub>t-1</sub>	.	.	0.0003 (1.84)	0.0003 (1.83)	0.0003 (1.82)	0.0003 (1.57)	0.0003 (1.84)	0.0003 (1.85)	0.0003 (1.57)	0.0003 (1.76)	0.0003 (1.77)	0.0003 (1.68)
Alpha <sub>t-2</sub>	.	.	0.0001 (0.78)	0.0001 (0.76)	0.0001 (0.75)	0.0001 (0.58)	0.0001 (0.78)	0.0001 (0.79)	0.0001 (0.57)	0.0000 (0.23)	0.0000 (0.24)	0.0000 (0.21)
Alpha <sub>t-3</sub>	.	.	-0.0001 (-0.46)	-0.0001 (-0.46)	-0.0001 (-0.46)	-0.0001 (-0.59)	-0.0001 (-0.49)	-0.0001 (-0.46)	-0.0001 (-0.61)	0.0000 (0.02)	0.0000 (0.01)	-0.0000 (-0.00)
FFlow <sub>t-1</sub>	.	.	0.0006 (3.17)	0.0006 (3.15)	0.0006 (3.13)	0.0006 (3.12)	0.0007 (3.40)	0.0006 (3.18)	0.0006 (3.12)	0.0007 (3.05)	0.0007 (3.04)	0.0007 (3.03)
FFlow <sub>t-2</sub>	.	.	0.0000 (0.14)	0.0000 (0.09)	0.0000 (0.05)	0.0000 (0.09)	0.0001 (0.49)	0.0000 (0.14)	0.0000 (0.10)	0.0001 (0.46)	0.0001 (0.48)	0.0001 (0.49)
FFlow <sub>t-3</sub>	.	.	0.0001 (0.59)	0.0001 (0.58)	0.0001 (0.56)	0.0001 (0.60)	0.0002 (0.82)	0.0001 (0.57)	0.0001 (0.60)	0.0002 (1.13)	0.0002 (1.12)	0.0002 (1.12)
Early career	.	.	.	0.0006 (0.64)	0.0010 (0.90)	.	.	.	.	.	.	.
Late career	.	.	.	-0.0018 (-0.89)	-0.0024 (-1.13)	.	.	.	.	.	.	.
Foreign (incl.guess)	.	.	.	.	.	.	.	-0.0029 (-1.81)	-0.0019 (-1.05)	.	.	.
Foreign	.	.	.	.	.	.	.	.	.	-0.0026 (-1.33)	-0.0026 (-1.31)	-0.0026 (-1.34)
Adv. degree	.	.	.	.	.	.	.	.	.	.	0.0012 (1.02)	0.0005 (0.41)
Top school	.	.	.	.	.	.	.	.	.	.	0.0009 (0.80)	0.0010 (0.84)
$\alpha$ dummy	.	.	.	.	.	0.0011 (0.81)	.	.	0.0014 (1.03)	.	.	-0.0026 (-1.06)
FFlow dummy	.	.	.	.	.	.	-0.0021 (-1.35)	.	.	.	.	.
Female $\times$ $\alpha$ dummy	.	.	.	.	.	-0.0025 (-0.67)	.	.	.	.	.	.
Foreign(+guess) $\times$ $\alpha$ dummy	.	.	.	.	.	.	.	.	-0.0047 (-1.30)	.	.	.
Adv.deg. $\times$ $\alpha$ dummy	.	.	.	.	.	.	.	.	.	.	.	0.0037 (1.35)
Female $\times$ FFlow dummy	.	.	.	.	.	.	0.0014 (0.37)	.	.	.	.	.
Female $\times$ early career	.	.	.	.	-0.0023 (-0.84)	.	.	.	.	.	.	.
Female $\times$ late career	.	.	.	.	0.0037 (0.70)	.	.	.	.	.	.	.
Controls	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Year dummy	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Fund family dummy	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Obs.	112983	112983	73653.0	73653.0	73653.0	73653.0	73653.0	73653.0	73653.0	62678.0	62678.0	62678.0
Adj. RSq.	0.0050	0.0011	0.0064	0.0065	0.0065	0.0065	0.0065	0.0074	0.0075	0.0074	0.0074	0.0075

Panel C: Only co-managers

Model	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(9)	(10)	(11)	(12)	(13)
Female	-0.0028 (-3.07)	-0.0024 (-2.72)	-0.0032 (-3.22)	-0.0034 (-3.43)	-0.0033 (-1.93)	-0.0030 (-2.96)	-0.0034 (-3.34)	-0.0032 (-3.20)	-0.0032 (-3.20)	-0.0027 (-2.48)	-0.0027 (-2.47)	-0.0027 (-2.47)
Alpha <sub>t-1</sub>	.	.	0.0002 (1.40)	0.0002 (1.37)	0.0002 (1.37)	0.0003 (1.93)	0.0002 (1.43)	0.0002 (1.40)	0.0003 (1.93)	0.0002 (1.18)	0.0002 (1.17)	0.0003 (1.71)
Alpha <sub>t-2</sub>	.	.	0.0005 (3.30)	0.0005 (3.25)	0.0005 (3.25)	0.0006 (3.77)	0.0005 (3.23)	0.0005 (3.30)	0.0006 (3.77)	0.0006 (3.67)	0.0006 (3.67)	0.0007 (4.11)
Alpha <sub>t-3</sub>	.	.	-0.0001 (-0.67)	-0.0001 (-0.67)	-0.0001 (-0.67)	-0.0000 (-0.23)	-0.0001 (-0.76)	-0.0001 (-0.68)	-0.0000 (-0.25)	-0.0001 (-0.52)	-0.0001 (-0.53)	-0.0000 (-0.12)
FFlow <sub>t-1</sub>	.	.	0.0008 (4.41)	0.0008 (4.40)	0.0008 (4.41)	0.0008 (4.59)	0.0010 (5.44)	0.0008 (4.41)	0.0008 (4.58)	0.0009 (4.44)	0.0009 (4.44)	0.0009 (4.62)
FFlow <sub>t-2</sub>	.	.	0.0009 (5.00)	0.0009 (4.94)	0.0009 (4.94)	0.0009 (5.08)	0.0011 (6.07)	0.0009 (5.00)	0.0009 (5.09)	0.0009 (4.82)	0.0009 (4.82)	0.0010 (4.92)
FFlow <sub>t-3</sub>	.	.	0.0003 (1.93)	0.0003 (1.92)	0.0003 (1.92)	0.0003 (1.89)	0.0004 (2.46)	0.0003 (1.93)	0.0003 (1.87)	0.0003 (1.60)	0.0003 (1.64)	0.0003 (1.61)
Early career	.	.	.	0.0020 (2.88)	0.0020 (2.72)	.	.	.	.	.	.	.
Late career	.	.	.	-0.0023 (-1.89)	-0.0021 (-1.64)	.	.	.	.	.	.	.
Foreign (incl.guess)	.	.	.	.	.	.	.	-0.0009 (-0.85)	-0.0004 (-0.37)	.	.	.
Foreign	.	.	.	.	.	.	.	.	.	-0.0010 (-0.83)	-0.0008 (-0.65)	-0.0008 (-0.65)
Adv. degree	.	.	.	.	.	.	.	.	.	.	-0.0004 (-0.51)	-0.0010 (-1.13)
Top school	.	.	.	.	.	.	.	.	.	.	0.0016 (2.14)	0.0017 (2.20)
$\alpha$ dummy	.	.	.	.	.	-0.0031 (-2.39)	.	.	-0.0026 (-2.00)	.	.	-0.0084 (-3.39)
FFlow dummy	.	.	.	.	.	.	-0.0079 (-5.62)	.	.	.	.	.
Female $\times$ $\alpha$ dummy	.	.	.	.	.	-0.0019 (-0.50)	.	.	.	.	.	.
Foreign(+guess) $\times$ $\alpha$ dummy	.	.	.	.	.	.	.	.	-0.0060 (-1.67)	.	.	.
Adv.deg. $\times$ $\alpha$ dummy	.	.	.	.	.	.	.	.	.	.	.	0.0066 (2.32)
Female $\times$ FFlow dummy	.	.	.	.	.	.	0.0040 (1.04)	.	.	.	.	.
Female $\times$ early career	.	.	.	.	0.0001 (0.04)	.	.	.	.	.	.	.
Female $\times$ late career	.	.	.	.	-0.0036 (-0.77)	.	.	.	.	.	.	.
Controls	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Year dummy	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Fund family dummy	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Obs.	375621	375621	320251	320251	320251	320251	320251	320251	320251	273585	273585	273585
Adj. RSq.	0.0062	0.0027	0.0080	0.0081	0.0081	0.0080	0.0081	0.0102	0.0102	0.0088	0.0089	0.0089

**Table VIII**  
**Career outcomes of co-managers with identical performance history**

This table presents results on subsequent career outcomes of co-managers who started co-managing the same fund in the same month and had no other mutual fund management responsibilities and no prior fund management history. The table explains the probability of a subsequent promotion and demotion, as well as a summary career outcome variable, that are demeaned by the mean realizations for the co-managers in the same cohort. We consider a manager to be promoted if s/he gets an additional fund(s) to co-manage or gets a sole-managed fund(s). We consider a manager to be demoted if s/he loses the fund co-management assignment and gains no other fund management responsibilities. Career outcome is a summary variable that is set to 1 for a promotion,  $-1$  for a demotion, and 0 for no change in the fund management responsibilities by the end of the sample period. A manager is considered to be foreign if s/he added a foreign, non-Canadian, college or university. Panel A presents the sample characteristics and Panel B presents regression results. The sample period is July 1924 – March 2017. <sup>a</sup>, <sup>b</sup>, and <sup>c</sup> indicate significance at the 1%, 5%, and 10% levels, respectively.

Panel A: Sample characteristics

No. of cohorts	Avg. no. of co-managers	No. of unique managers	Fraction female
139	3.33	375	0.43

	Foreign	MBA	MA	PhD	Other deg.	CFA	Top School
Male	0.25	0.31	0.15	0.06	0.04	0.35	0.45
Female	0.19	0.22	0.11	0.01	0.03	0.29	0.36



Panel B: Explaining career outcomes

Model	Demotions				Promotions				Summary career outcomes			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
Female	0.092 (3.30)	0.105 (3.25)	0.097 (3.00)	0.101 (3.07)	-0.037 (-1.31)	-0.056 (-1.62)	-0.051 (-1.45)	-0.056 (-1.57)	-0.129 (-2.65)	-0.162 (-2.80)	-0.148 (-2.56)	-0.157 (-2.67)
Foreign	.	0.025 (0.66)	0.036 (0.92)	0.029 (0.71)	.	-0.024 (-0.58)	-0.016 (-0.39)	-0.013 (-0.30)	.	-0.048 (-0.72)	-0.053 (-0.75)	-0.042 (-0.58)
MBA	.	.	-0.040 (-1.16)	-0.037 (-1.01)	.	.	0.039 (1.05)	0.040 (1.02)	.	.	0.079 (1.29)	0.077 (1.18)
MA	.	.	-0.111 (-2.70)	-0.107 (-2.57)	.	.	0.025 (0.56)	0.026 (0.58)	.	.	0.136 (1.85)	0.134 (1.79)
PhD	.	.	.	0.041 (0.60)	.	.	.	-0.043 (-0.58)	.	.	.	-0.084 (-0.69)
Other degree	.	.	.	0.085 (1.17)	.	.	.	-0.050 (-0.64)	.	.	.	-0.135 (-1.04)
Top school	.	.	.	0.002 (0.07)	.	.	.	-0.042 (-1.16)	.	.	.	-0.044 (-0.74)
CFA	.	.	.	-0.003 (-0.10)	.	.	.	0.038 (1.10)	.	.	.	0.042 (0.72)
Obs.	375	250	250	250	375	250	250	250	375	250	250	250
Adj. RSq.	0.028	0.042	0.070	0.077	0.005	0.011	0.016	0.029	0.018	0.032	0.048	0.058

**Table IX**  
**Hazard rates for promotion and time to promotion for co-managers with identical performance history**

This table presents Cox proportional hazard rates for promotion for co-managers who started co-managing the same fund in the same month and had not other mutual fund management responsibilities and no prior fund management history. We consider a manager to be promoted if s/he gets an additional fund(s) to co-manage or gets a sole-managed fund(s). A manager is considered to be foreign if s/he added a foreign, non-Canadian, college or university. Panel A presents the sample characteristics and Panel B presents regression results. Standard errors (in parentheses) and hazard ratios (in italics) are reported below the coefficient estimates. The sample period is July 1924 – March 2017. <sup>a</sup>, <sup>b</sup>, and <sup>c</sup> indicate significance at the 1%, 5%, and 10% levels, respectively.

Panel A: Sample characteristics										
No. of cohorts	No. of mgrs	Avg. no. of co-mgrs	Fraction of							
			Female	Foreign	MBA	MA	PhD	Other deg.	CFA	Top Sch.
439	1,083	2.87	0.17	0.17	0.39	0.12	0.04	0.04	0.39	0.43

Panel B: Hazard rates of promotion										
Model	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
Female	-0.010 (0.123) <i>0.990</i>	.	.	.	0.063 (0.142) <i>1.066</i>	-0.265 (0.240) <i>0.767</i>	-0.264 (0.240) <i>0.768</i>	-0.266 (0.244) <i>0.767</i>	-0.289 (0.245) <i>0.749</i>	
Foreign	.	-0.001 (0.122) <i>0.999</i>	.	.	0.021 (0.123) <i>1.021</i>	0.258 (0.273) <i>1.295</i>	0.311 (0.266) <i>1.365</i>	0.229 (0.272) <i>1.258</i>	0.198 (0.279) <i>1.220</i>	
Adv. deg.	.	.	0.148 (0.106) <i>1.160</i>	.	0.118 (0.109) <i>1.126</i>	0.449 <sup>b</sup> (0.180) <i>1.566</i>	.	.	.	
MBA	.	.	.	.	.	.	0.580 <sup>a</sup> (0.166) <i>1.786</i>	0.605 <sup>a</sup> (0.167) <i>1.831</i>	0.648 <sup>a</sup> (0.176) <i>1.912</i>	
MA	.	.	.	.	.	.	0.090 (0.228) <i>1.094</i>	0.114 (0.230) <i>1.121</i>	0.112 (0.234) <i>1.118</i>	
PhD	.	.	.	.	.	.	.	0.276 (0.348) <i>1.317</i>	0.306 (0.350) <i>1.359</i>	
Other deg.	.	.	.	.	.	.	.	0.405 (0.385) <i>1.499</i>	0.448 (0.388) <i>1.566</i>	
Top sch.	.	.	.	0.183 <sup>c</sup> (0.098) <i>1.201</i>	0.162 (0.101) <i>1.176</i>	-0.124 (0.182) <i>0.883</i>	.	.	-0.236 (0.185) <i>0.790</i>	
CFA	.	.	.	.	.	0.145 (0.182) <i>1.155</i>	.	.	0.137 (0.185) <i>1.147</i>	
Obs.	1083	807	807	807	807	807	807	807	807	

**Table AI**  
**Statistics on managers by investment objective categories**

This table presents statistics on mutual fund managers by the investment objective categories of the funds they manage, as defined by Morningstar. Only investment objective codes with at least 10 unique managers over the time period are reported. The sample period is January 1992 – December 2016.

IOC	Top		Foreign	MBA	MA	PhD	Other		Age	No of obs.
	Female	school					degree	CFA		
Allocation - 15% - 30% Equity	0.11	0.37	0.09	0.32	0.15	0.03	0.04	0.37	49.3	16460
Allocation - 30% - 50% Equity	0.10	0.36	0.06	0.41	0.14	0.06	0.02	0.52	46.9	82504
Allocation - 50% - 70% Equity	0.11	0.28	0.04	0.45	0.14	0.04	0.02	0.50	46.6	182413
Allocation - 70% - 85% Equity	0.10	0.37	0.05	0.38	0.17	0.05	0.02	0.46	47.8	51385
Allocation - 85%+ Equity	0.09	0.55	0.07	0.36	0.14	0.07	0.07	0.48	46.3	16922
Bank Loan	0.12	0.37	0.01	0.56	0.03	0.01	0.01	0.40	49.7	9451
Bear Market	0.16	0.52	0.13	0.24	0.15	0.00	0.02	0.53	46.4	8279
China Region	0.19	0.40	0.37	0.32	0.17	0.05	0.04	0.26	47.5	7272
Commodities Broad Basket	0.05	0.51	0.06	0.33	0.10	0.05	0.01	0.27	41.6	7440
Commodities Precious Metals	0.00	0.00	0.50	0.50	0.50	0.50	0.50	0.50	57.8	82
Communications	0.07	0.20	0.09	0.41	0.15	0.00	0.01	0.52	43.8	4547
Conservative Allocation	0.00		0.00	0.00	0.00	0.00	0.00	0.00		34
Consumer Cyclical	0.13	0.28	0.06	0.37	0.20	0.02	0.01	0.41	35.2	3529
Consumer Defensive	0.05	0.18	0.10	0.39	0.13	0.08	0.01	0.62	39.8	1073
Convertibles	0.14	0.16	0.04	0.58	0.13	0.00	0.02	0.46	46.0	11343
Corporate Bond	0.06	0.31	0.03	0.51	0.16	0.03	0.02	0.53	47.4	18770
Diversified Emerging Mkts	0.15	0.36	0.29	0.36	0.22	0.07	0.04	0.37	44.9	83990
Diversified Pacific/Asia	0.13	0.23	0.38	0.34	0.16	0.01	0.01	0.27	44.1	6407
Emerging Markets - Local Currency Bond	0.09	0.65	0.13	0.24	0.14	0.12	0.06	0.36	42.2	2165
Emerging Markets Bond	0.12	0.44	0.19	0.21	0.20	0.06	0.03	0.36	47.3	23163
Energy Limited Partnership	0.01	0.33	0.04	0.37	0.12	0.04	0.08	0.26	49.3	1631
Equity Energy	0.04	0.27	0.12	0.33	0.22	0.04	0.07	0.39	42.6	7627
Equity Precious Metals	0.05	0.18	0.22	0.29	0.17	0.01	0.08	0.40	48.2	8697
Europe Stock	0.15	0.32	0.31	0.25	0.19	0.03	0.02	0.27	43.1	18873
Financial	0.15	0.25	0.08	0.44	0.16	0.02	0.01	0.35	44.4	13968
Foreign Large Blend	0.14	0.37	0.27	0.39	0.20	0.05	0.03	0.42	46.8	140016
Foreign Large Growth	0.10	0.32	0.29	0.42	0.28	0.04	0.04	0.35	46.2	54127
Foreign Large Value	0.17	0.45	0.20	0.48	0.20	0.08	0.06	0.50	47.0	59396
Foreign Small/Mid Blend	0.18	0.46	0.21	0.41	0.21	0.06	0.03	0.33	44.8	11072
Foreign Small/Mid Growth	0.10	0.45	0.25	0.39	0.26	0.03	0.02	0.37	43.0	13694
Foreign Small/Mid Value	0.13	0.39	0.21	0.48	0.20	0.06	0.04	0.39	44.4	10567
Global Real Estate	0.09	0.37	0.20	0.47	0.12	0.03	0.03	0.35	47.0	23965
Health	0.16	0.41	0.10	0.40	0.15	0.07	0.07	0.51	44.0	19374
High Yield Bond	0.10	0.29	0.02	0.48	0.08	0.02	0.03	0.51	46.4	84703
High Yield Muni	0.19	0.18	0.00	0.47	0.12	0.01	0.04	0.46	46.4	19430
India Equity	0.01	0.45	0.61	0.53	0.20	0.01	0.10	0.38	38.8	1537
Industrials	0.12	0.23	0.08	0.46	0.27	0.03	0.00	0.28	34.6	3258
Inflation-Protected Bond	0.08	0.45	0.04	0.45	0.11	0.08	0.01	0.42	45.9	17994
Infrastructure	0.07	0.33	0.09	0.36	0.19	0.02	0.15	0.41	53.2	4131

IOC	Top		Other					Age	No of obs.	
	Female	school	Foreign	MBA	MA	PhD	degree			CFA
Intermediate Government	0.10	0.23	0.05	0.45	0.15	0.03	0.01	0.38	44.5	55324
Intermediate-Term Bond	0.09	0.26	0.03	0.49	0.11	0.02	0.01	0.47	46.2	217955
Japan Stock	0.10	0.28	0.32	0.32	0.23	0.05	0.05	0.19	46.4	9943
Large Blend	0.10	0.29	0.05	0.47	0.15	0.05	0.03	0.48	47.1	295777
Large Growth	0.10	0.27	0.04	0.48	0.12	0.02	0.03	0.51	47.6	294591
Large Value	0.11	0.30	0.04	0.56	0.13	0.04	0.03	0.53	47.6	220135
Latin America Stock	0.22	0.33	0.33	0.45	0.18	0.04	0.00	0.40	43.8	5621
Long Government	0.06	0.30	0.02	0.46	0.20	0.05	0.01	0.30	46.8	4511
Long-Short Credit	0.15	0.38	0.06	0.34	0.15	0.03	0.03	0.16	42.8	1980
Long-Term Bond	0.06	0.20	0.04	0.50	0.10	0.01	0.01	0.41	47.7	7878
Long/Short Equity	0.05	0.29	0.06	0.38	0.12	0.05	0.03	0.47	47.6	22990
Managed Futures	0.07	0.30	0.09	0.22	0.19	0.11	0.01	0.22	46.5	5854
Market Neutral	0.06	0.29	0.06	0.32	0.18	0.11	0.02	0.36	46.4	16135
Mid-Cap Blend	0.10	0.31	0.07	0.47	0.13	0.02	0.04	0.50	48.0	66355
Mid-Cap Growth	0.10	0.29	0.04	0.50	0.12	0.02	0.03	0.53	46.5	126666
Mid-Cap Value	0.10	0.29	0.03	0.54	0.13	0.04	0.03	0.48	49.0	58401
Miscellaneous Region	0.10	0.33	0.21	0.41	0.23	0.05	0.08	0.19	46.6	5709
Miscellaneous Sector	0.10	0.79	0.10	0.22	0.04	0.00	0.00	0.33	46.7	385
Moderate Allocation	0.10	0.00	0.00	0.36	0.00	0.00	0.08	0.56	50.7	130
Multialternative	0.06	0.40	0.09	0.35	0.14	0.09	0.04	0.34	47.4	35158
Multicurrency	0.08	0.57	0.15	0.28	0.31	0.18	0.04	0.20	42.1	4786
Multisector Bond	0.07	0.23	0.07	0.48	0.12	0.04	0.02	0.43	46.9	38949
Muni California Intermediate	0.17	0.24	0.00	0.36	0.05	0.01	0.00	0.30	45.1	15737
Muni California Long	0.12	0.18	0.01	0.43	0.14	0.03	0.03	0.39	45.0	20798
Muni Massachusetts	0.20	0.12	0.00	0.43	0.14	0.01	0.04	0.42	46.2	11228
Muni Minnesota	0.21	0.11	0.00	0.46	0.11	0.00	0.02	0.42	46.0	10623
Muni National Interm	0.20	0.14	0.01	0.38	0.08	0.01	0.01	0.38	46.1	49711
Muni National Long	0.19	0.13	0.01	0.37	0.12	0.00	0.02	0.39	45.5	37193
Muni National Short	0.20	0.17	0.01	0.35	0.08	0.01	0.01	0.32	45.1	29675
Muni New Jersey	0.17	0.15	0.00	0.43	0.16	0.01	0.02	0.36	44.7	11270
Muni New York Intermediate	0.21	0.20	0.01	0.34	0.11	0.00	0.02	0.32	47.6	11128
Muni New York Long	0.12	0.09	0.01	0.38	0.16	0.02	0.04	0.41	45.2	16730
Muni Ohio	0.15	0.14	0.00	0.40	0.14	0.00	0.02	0.46	45.2	10828
Muni Pennsylvania	0.17	0.16	0.00	0.40	0.17	0.01	0.02	0.37	44.2	14039
Muni Single State Interm	0.17	0.11	0.01	0.29	0.12	0.00	0.01	0.34	44.0	50419
Muni Single State Long	0.18	0.09	0.01	0.37	0.16	0.02	0.03	0.35	42.4	58811
Muni Single State Short	0.09	0.28	0.00	0.50	0.17	0.00	0.04	0.26	44.6	11651
Natural Resources	0.08	0.30	0.12	0.35	0.13	0.03	0.03	0.46	42.1	13266
Nontraditional Bond	0.03	0.27	0.06	0.42	0.09	0.03	0.03	0.43	47.8	19081
Option Writing	0.02	0.25	0.08	0.40	0.16	0.08	0.03	0.43	46.7	6061
Pacific/Asia ex-Japan Stk	0.20	0.27	0.41	0.27	0.20	0.02	0.05	0.24	43.7	14268
Preferred Stock	0.05	0.14	0.08	0.41	0.14	0.00	0.00	0.27	43.3	1922
Real Estate	0.06	0.42	0.02	0.52	0.15	0.02	0.01	0.40	46.2	33352
Retirement Income	0.13	0.41	0.06	0.32	0.13	0.04	0.01	0.46	45.9	14653
Short Government	0.13	0.24	0.01	0.45	0.11	0.02	0.00	0.40	43.5	38482
Short-Term Bond	0.11	0.25	0.02	0.48	0.09	0.02	0.02	0.47	45.5	77183

IOC	Female	Top school	Foreign	MBA	MA	PhD	Other degree	CFA	Age	No of obs.
Small Blend	0.13	0.29	0.05	0.48	0.12	0.03	0.03	0.53	47.4	118718
Small Growth	0.11	0.32	0.04	0.50	0.10	0.02	0.03	0.57	46.9	150537
Small Value	0.08	0.26	0.06	0.53	0.17	0.06	0.03	0.52	48.0	72177
Tactical Allocation	0.07	0.26	0.06	0.37	0.15	0.09	0.02	0.38	47.9	30333
Target-Date 2000-2010	0.09	0.55	0.07	0.35	0.14	0.06	0.04	0.44	45.8	14287
Target-Date 2015	0.09	0.57	0.08	0.32	0.15	0.05	0.03	0.50	47.6	12238
Target-Date 2020	0.11	0.51	0.07	0.33	0.15	0.06	0.02	0.45	46.6	17090
Target-Date 2025	0.09	0.57	0.08	0.32	0.15	0.05	0.03	0.49	47.5	12334
Target-Date 2030	0.11	0.51	0.07	0.33	0.15	0.06	0.02	0.45	46.6	16975
Target-Date 2035	0.09	0.57	0.08	0.32	0.15	0.05	0.03	0.49	47.3	12141
Target-Date 2040	0.11	0.52	0.07	0.34	0.15	0.06	0.02	0.44	46.8	16949
Target-Date 2045	0.09	0.57	0.08	0.31	0.15	0.04	0.03	0.48	47.4	11255
Target-Date 2050	0.10	0.54	0.06	0.35	0.15	0.05	0.02	0.49	47.5	13058
Target-Date 2055	0.08	0.72	0.10	0.32	0.17	0.05	0.07	0.51	48.8	5555
Target-Date 2060+	0.09	0.67	0.05	0.41	0.14	0.03	0.01	0.55	50.6	1975
Technology	0.09	0.31	0.05	0.41	0.18	0.02	0.02	0.39	43.4	37769
Trading-Inverse Debt	0.08	0.42	0.12	0.26	0.15	0.00	0.00	0.58	39.4	1711
Trading-Leveraged Debt	0.15	0.29	0.12	0.18	0.14	0.00	0.00	0.63	39.4	910
Trading-Leveraged Equity	0.11	0.49	0.10	0.12	0.13	0.00	0.00	0.34	42.9	14976
Ultrashort Bond	0.14	0.21	0.02	0.46	0.13	0.02	0.01	0.38	44.2	28941
Utilities	0.17	0.31	0.04	0.49	0.10	0.04	0.01	0.51	46.3	9131
Volatility	0.09	0.57	0.09	0.50	0.27	0.00	0.00	0.57	48.6	267
World Allocation	0.10	0.39	0.13	0.39	0.19	0.09	0.02	0.45	47.8	54946
World Bond	0.11	0.35	0.23	0.33	0.21	0.08	0.02	0.32	44.7	53717
World Stock	0.12	0.38	0.19	0.41	0.19	0.05	0.06	0.43	46.4	134080

**Table AII**

**Descriptive statistics on mutual fund managers of mainstream active domestic equity funds**

This table presents descriptive statistics on mutual fund managers, corresponding to Table II in the main text. However, the sample only includes current managers of the mainstream active domestic equity funds.

Panel A: Statistics on promotions and demotions (monthly probabilities)	
Promotion - additional sole-managed fund(s)	0.00497
Promotion - additional co-managed fund(s)	0.02009
Promotion - swap for a higher TNA fund (sole-managed)	0.00007
Promotion - swap for a higher TNA responsibility (co-managed)	0.00044
Cumulative promotion probability	0.02127
<hr/>	
Demotion - lose sole-managed fund(s)	0.00601
Demotion - lose co-managed fund(s)	0.01750
Demotion - swap for a lower-TNA fund (sole-managed)	0.00010
Demotion - swap for a lower-TNA responsibility (co-managed)	0.00181
Demotion - employment gap over 6 months	0.00147
Fired (leave the industry <60 y.o. or <30 yrs experience)	0.00644
Cumulative demotion probability	0.02297

Panel B: Male vs. Female managers

	Male	Female	Difference	<i>t</i> -statistic
Fraction of manager-months	0.900	0.100		
Number of unique managers	6,139	733		
Years in industry	10.050	9.068	-0.982	(-37.17)
Age	48.801	46.314	-2.487	(-39.17)
Age first started	32.245	32.325	0.080	( 0.17)
Under 35 y. o.	0.054	0.047	-0.007	( -4.21)
Over 55 y. o.	0.254	0.142	-0.112	(-41.37)
Foreign	0.043	0.060	0.017	( 1.81)
MBA	0.454	0.385	-0.069	( -3.64)
MA	0.118	0.127	0.008	( 0.65)
PhD	0.029	0.029	0.000	( 0.02)
Other degree	0.032	0.016	-0.015	( -2.96)
Top school	0.405	0.417	0.013	( 0.57)
CFA	0.470	0.437	-0.034	( -1.73)
No. of sole-managed funds	0.442	0.405	-0.037	( -8.53)
No. of co-managed funds	2.143	2.312	0.169	( 12.00)
Managed TNA (mil)	834.015	580.056	-253.96	(-24.79)
No. of managers in fund family	42.950	49.504	6.554	( 27.36)
Return rank	4.516	4.523	0.006	( 0.14)
Fund flow rank	4.414	4.434	0.020	( 0.47)
Prob. employment gap over 6 mo.	0.001	0.001	-0.000	( -1.22)
Length of empl. gap (yrs)	2.223	2.315	0.091	( 0.45)
Prob. fired	0.006	0.009	0.002	( 5.28)
Prob. demoted	0.023	0.025	0.002	( 2.31)
Prob. promoted	0.021	0.023	0.002	( 2.03)

**Table AIII**  
**Explaining fund flows**

This table presents the results of OLS regressions explaining monthly fund flows, unadjusted for style. The sample and variable definitions correspond to Table III in the main text, and regression specifications include investment objective code dummies..



Model	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Female	-0.0007 (-1.17)	-0.0008 (-1.24)	-0.0004 (-0.67)	-0.0006 (-1.06)	-0.0007 (-1.14)	-0.0007 (-1.16)	0.0000 (0.05)	0.0001 (0.16)	0.0001 (0.11)	0.0001 (0.11)
Time in industry	.	.	.	.	.	.	.	.	.	0.0046 (0.92)
Time in industry <sup>2</sup>	.	.	.	.	.	.	.	.	.	-0.0003 (-0.79)
Foreign	.	.	.	.	.	.	0.0045 (4.45)	0.0046 (4.36)	0.0045 (4.51)	0.0053 (5.20)
Foreign × female	.	.	.	.	.	.	.	-0.0014 (-0.48)	.	.
MBA	.	.	.	.	.	.	0.0003 (0.69)	0.0003 (0.70)	0.0003 (0.64)	0.0002 (0.39)
MA	.	.	.	.	.	.	0.0008 (1.26)	0.0008 (1.24)	0.0008 (1.26)	0.0007 (1.14)
PhD	.	.	.	.	.	.	0.0026 (2.38)	0.0026 (2.37)	0.0025 (2.32)	0.0023 (2.12)
Other degree	.	.	.	.	.	.	.	.	.	-0.0051 (-3.88)
CFA	.	.	.	.	.	.	.	.	.	0.0004 (0.96)
Top school	.	.	.	.	.	.	.	.	.	0.0000 (0.01)
Time at the fund	.	.	.	.	.	.	.	.	0.0004 (1.34)	.
Fund flow controls	Y	N	Y	Y	Y	Y	Y	Y	Y	Y
Fund return controls	Y	Y	N	Y	Y	Y	Y	Y	Y	Y
Fund controls	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Year dummy	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Month dummy	Y	Y	Y	Y	Y	N	Y	Y	Y	Y
IOC dummy	Y	Y	Y	Y	N	Y	Y	Y	Y	Y
Fund family dummy	Y	Y	Y	N	N	Y	Y	Y	Y	Y
Fund family controls	N	N	N	Y	Y	N	N	N	N	N
Obs.	150260	153111	150270	150260	150270	150260	125323	125323	125323	125323
Adj. RSq.	0.0830	0.0634	0.0541	0.0725	0.0715	0.0817	0.0880	0.0880	0.0880	0.0882

**Table AIV**  
**Explaining fund returns**

This table presents the results of OLS regressions explaining fund CAPM alphas (Panel A) and raw returns (Panel B), unadjusted for style. The sample and variable definitions correspond to Table IV in the main text, and regression specifications include investment objective code dummies.

Panel A: CAPM Alphas

Model	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Female	-0.0005 (-1.71)	-0.0005 (-1.72)	-0.0005 (-1.81)	-0.0001 (-0.39)	0.0000 (0.17)	-0.0005 (-1.69)	-0.0009 (-2.81)	-0.0007 (-2.23)	-0.0009 (-2.86)	-0.0009 (-2.94)
Time in industry	.	.	.	.	.	.	.	.	.	-0.0031 (-1.43)
Time in industry <sup>2</sup>	.	.	.	.	.	.	.	.	.	0.0002 (1.27)
Foreign	.	.	.	.	.	.	0.0008 (1.77)	0.0011 (2.42)	0.0007 (1.71)	0.0007 (1.50)
Foreign×female	.	.	.	.	.	.	.	-0.0030 (-2.28)	.	.
MBA	.	.	.	.	.	.	0.0001 (0.64)	0.0001 (0.69)	0.0001 (0.67)	0.0001 (0.69)
MA	.	.	.	.	.	.	0.0001 (0.30)	0.0001 (0.21)	0.0001 (0.30)	0.0001 (0.34)
PhD	.	.	.	.	.	.	-0.0010 (-2.20)	-0.0011 (-2.26)	-0.0010 (-2.14)	-0.0010 (-2.05)
Other degree	.	.	.	.	.	.	.	.	.	0.0004 (0.64)
CFA	.	.	.	.	.	.	.	.	.	0.0001 (0.42)
Top school	.	.	.	.	.	.	.	.	.	0.0000 (0.10)
Time at the fund	.	.	.	.	.	.	.	.	-0.0002 (-1.25)	.
Fund flow controls	Y	N	Y	Y	Y	Y	Y	Y	Y	Y
Fund return controls	Y	Y	N	Y	Y	Y	Y	Y	Y	Y
Fund controls	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Year dummy	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Month dummy	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
IOC dummy	Y	Y	Y	Y	N	Y	Y	Y	Y	Y
Fund family dummy	Y	Y	Y	N	N	Y	Y	Y	Y	Y
Fund family controls	N	N	N	Y	Y	N	N	N	N	N
Obs.	153931	157596	153931	153931	153946	153931	128455	128455	128455	128455
Adj. RSq.	0.0273	0.0276	0.0243	0.0218	0.0205	0.0237	0.0296	0.0296	0.0296	0.0297

Panel B: Raw returns

Model	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Female	-0.0009 (-1.84)	-0.0009 (-1.93)	-0.0009 (-1.77)	-0.0005 (-1.20)	-0.0004 (-0.82)	-0.0009 (-1.83)	-0.0013 (-2.33)	-0.0010 (-1.84)	-0.0012 (-2.27)	-0.0013 (-2.40)
Time in industry	.	.	.	.	.	.	.	.	.	-0.0040 (-1.03)
Time in industry <sup>2</sup>	.	.	.	.	.	.	.	.	.	0.0002 (0.96)
Foreign	.	.	.	.	.	.	0.0008 (0.99)	0.0013 (1.57)	0.0008 (1.06)	0.0008 (1.05)
Foreign×female	.	.	.	.	.	.	.	-0.0045 (-1.93)	.	.
MBA	.	.	.	.	.	.	0.0002 (0.60)	0.0002 (0.65)	0.0002 (0.56)	0.0002 (0.62)
MA	.	.	.	.	.	.	0.0004 (0.91)	0.0004 (0.85)	0.0004 (0.91)	0.0005 (0.92)
PhD	.	.	.	.	.	.	-0.0000 (-0.00)	-0.0000 (-0.06)	-0.0001 (-0.07)	0.0000 (0.04)
Other degree	.	.	.	.	.	.	.	.	.	-0.0005 (-0.54)
CFA	.	.	.	.	.	.	.	.	.	0.0001 (0.38)
Top school	.	.	.	.	.	.	.	.	.	-0.0000 (-0.13)
Time at the fund	.	.	.	.	.	.	.	.	0.0004 (1.46)	.
Fund flow controls	Y	N	Y	Y	Y	Y	Y	Y	Y	Y
Fund return controls	Y	Y	N	Y	Y	Y	Y	Y	Y	Y
Fund controls	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Year dummy	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Month dummy	Y	Y	Y	Y	Y	N	Y	Y	Y	Y
IOC dummy	Y	Y	Y	Y	N	Y	Y	Y	Y	Y
Fund family dummy	Y	Y	Y	N	N	Y	Y	Y	Y	Y
Fund family controls	N	N	N	Y	Y	N	N	N	N	N
Obs.	153931	157596	153931	153931	153946	153931	128455	128455	128455	128455
Adj. RSq.	0.1195	0.1187	0.1115	0.1163	0.1158	0.0929	0.1177	0.1177	0.1177	0.1177

**Table AV**  
**Explaining manager firings, demotions and promotions: Sample starts in 2006**

This table presents the results of linear probability regressions explaining manager firings, demotions and promotions. The sample starts in January 2006. Panels A, B and C correspond to Panels A of Table V, Table VI and Table VII in the main text, respectively.

Panel A: Firings

Model	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(9)	(10)	(11)	(12)	(13)
Female	0.0023 (5.75)	0.0023 (5.99)	0.0017 (4.23)	0.0018 (4.43)	0.0019 (2.95)	0.0018 (4.10)	0.0019 (4.39)	0.0017 (4.20)	0.0017 (4.15)	0.0017 (4.03)	0.0017 (4.05)	0.0017 (4.01)
Alpha <sub>t-1</sub>	.	.	-0.0004 (-7.37)	-0.0004 (-7.33)	-0.0004 (-7.33)	-0.0002 (-4.43)	-0.0004 (-7.39)	-0.0004 (-7.37)	-0.0002 (-4.43)	-0.0004 (-7.33)	-0.0004 (-7.33)	-0.0003 (-4.57)
Alpha <sub>t-2</sub>	.	.	-0.0004 (-7.51)	-0.0004 (-7.47)	-0.0004 (-7.47)	-0.0003 (-4.85)	-0.0004 (-7.63)	-0.0004 (-7.51)	-0.0003 (-4.84)	-0.0004 (-6.43)	-0.0004 (-6.42)	-0.0002 (-3.95)
Alpha <sub>t-3</sub>	.	.	-0.0001 (-1.26)	-0.0001 (-1.26)	-0.0001 (-1.26)	0.0000 (0.60)	-0.0001 (-1.34)	-0.0001 (-1.26)	0.0000 (0.61)	-0.0000 (-0.19)	-0.0000 (-0.19)	0.0001 (1.58)
FFlow <sub>t-1</sub>	.	.	-0.0005 (-8.07)	-0.0005 (-8.05)	-0.0005 (-8.05)	-0.0005 (-7.66)	-0.0004 (-6.73)	-0.0005 (-8.08)	-0.0005 (-7.66)	-0.0005 (-7.37)	-0.0005 (-7.36)	-0.0005 (-6.97)
FFlow <sub>t-2</sub>	.	.	-0.0002 (-3.02)	-0.0002 (-2.92)	-0.0002 (-2.92)	-0.0002 (-2.82)	-0.0001 (-1.94)	-0.0002 (-3.02)	-0.0002 (-2.83)	-0.0002 (-2.60)	-0.0002 (-2.59)	-0.0002 (-2.42)
FFlow <sub>t-3</sub>	.	.	-0.0001 (-0.98)	-0.0001 (-0.97)	-0.0001 (-0.97)	-0.0001 (-1.19)	-0.0000 (-0.39)	-0.0001 (-0.98)	-0.0001 (-1.19)	-0.0001 (-1.16)	-0.0001 (-1.15)	-0.0001 (-1.34)
Early career	.	.	.	-0.0009 (-3.12)	-0.0008 (-2.83)	.	.	.	.	.	.	.
Late career	.	.	.	0.0021 (4.43)	0.0020 (4.14)	.	.	.	.	.	.	.
Foreign (incl.guess)	.	.	.	.	.	.	.	0.0003 (0.80)	0.0005 (1.13)	.	.	.
Foreign	.	.	.	.	.	.	.	.	.	0.0004 (0.79)	0.0004 (0.85)	0.0004 (0.90)
Adv. degree	.	.	.	.	.	.	.	.	.	.	0.0000 (0.08)	0.0001 (0.32)
Top school	.	.	.	.	.	.	.	.	.	.	0.0003 (0.93)	0.0003 (0.96)
$\alpha$ dummy	.	.	.	.	.	0.0051 (10.13)	.	.	0.0051 (10.25)	.	.	0.0055 (6.55)
FFlow dummy	.	.	.	.	.	.	0.0024 (4.86)	.	.	.	.	.
Female $\times \alpha$ dummy	.	.	.	.	.	-0.0006 (-0.50)	.	.	.	.	.	.
Foreign(+guess) $\times \alpha$ dummy	.	.	.	.	.	.	.	.	-0.0011 (-0.90)	.	.	.
Adv.deg. $\times \alpha$ dummy	.	.	.	.	.	.	.	.	.	.	.	-0.0009 (-0.95)
Female $\times$ FFlow dummy	.	.	.	.	.	.	-0.0014 (-1.11)	.	.	.	.	.
Female $\times$ early career	.	.	.	.	-0.0003 (-0.38)	.	.	.	.	.	.	.
Female $\times$ late career	.	.	.	.	0.0007 (0.41)	.	.	.	.	.	.	.
Controls	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Year dummy	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Fund family dummy	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Obs.	424683	424683	389489	389489	389489	389489	389489	389489	389489	328354	328354	328354
Adj. RSq.	0.0036	0.0002	0.0073	0.0074	0.0074	0.0076	0.0074	0.0074	0.0077	0.0074	0.0074	0.0077

Panel B: Demotions

Model	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(9)	(10)	(11)	(12)	(13)
Female	-0.0021 (-2.48)	-0.0020 (-2.48)	-0.0012 (-1.43)	-0.0012 (-1.33)	-0.0008 (-0.56)	-0.0013 (-1.44)	-0.0011 (-1.24)	-0.0012 (-1.37)	-0.0012 (-1.35)	-0.0018 (-1.80)	-0.0017 (-1.70)	-0.0017 (-1.70)
Alpha <sub>t-1</sub>	.	.	-0.0013 (-10.95)	-0.0013 (-10.90)	-0.0013 (-10.89)	-0.0012 (-10.21)	-0.0013 (-10.94)	-0.0013 (-10.95)	-0.0012 (-10.22)	-0.0014 (-10.79)	-0.0014 (-10.79)	-0.0014 (-10.24)
Alpha <sub>t-2</sub>	.	.	-0.0013 (-11.27)	-0.0013 (-11.22)	-0.0013 (-11.22)	-0.0013 (-10.61)	-0.0013 (-11.18)	-0.0013 (-11.27)	-0.0013 (-10.62)	-0.0015 (-11.30)	-0.0015 (-11.30)	-0.0015 (-10.81)
Alpha <sub>t-3</sub>	.	.	-0.0005 (-4.13)	-0.0005 (-4.13)	-0.0005 (-4.13)	-0.0004 (-3.81)	-0.0005 (-4.08)	-0.0005 (-4.13)	-0.0004 (-3.81)	-0.0004 (-3.36)	-0.0004 (-3.36)	-0.0004 (-3.16)
FFlow <sub>t-1</sub>	.	.	-0.0007 (-4.89)	-0.0007 (-4.85)	-0.0007 (-4.85)	-0.0007 (-4.83)	-0.0008 (-5.55)	-0.0007 (-4.88)	-0.0007 (-4.82)	-0.0007 (-4.67)	-0.0007 (-4.66)	-0.0007 (-4.63)
FFlow <sub>t-2</sub>	.	.	-0.0009 (-6.71)	-0.0009 (-6.60)	-0.0009 (-6.60)	-0.0009 (-6.68)	-0.0010 (-7.28)	-0.0009 (-6.70)	-0.0009 (-6.69)	-0.0010 (-6.32)	-0.0010 (-6.31)	-0.0010 (-6.29)
FFlow <sub>t-3</sub>	.	.	-0.0000 (-0.01)	0.0000 (0.00)	-0.0000 (-0.00)	-0.0000 (-0.04)	-0.0001 (-0.42)	-0.0000 (-0.01)	-0.0000 (-0.04)	-0.0001 (-0.39)	-0.0001 (-0.38)	-0.0001 (-0.39)
Early career	.	.	.	-0.0024 (-4.09)	-0.0023 (-3.69)	.	.	.	.	.	.	.
Late career	.	.	.	0.0005 (0.49)	0.0003 (0.28)	.	.	.	.	.	.	.
Foreign (incl.guess)	.	.	.	.	.	.	.	-0.0015 (-1.64)	-0.0010 (-1.05)	.	.	.
Foreign	.	.	.	.	.	.	.	.	.	-0.0026 (-2.52)	-0.0026 (-2.45)	-0.0026 (-2.44)
Adv. degree	.	.	.	.	.	.	.	.	.	.	0.0008 (1.18)	0.0004 (0.60)
Top school	.	.	.	.	.	.	.	.	.	.	0.0008 (1.12)	0.0008 (1.13)
$\alpha$ dummy	.	.	.	.	.	0.0014 (1.30)	.	.	0.0020 (1.87)	.	.	-0.0019 (-0.96)
FFlow dummy	.	.	.	.	.	.	-0.0034 (-3.12)	.	.	.	.	.
Female $\times$ $\alpha$ dummy	.	.	.	.	.	0.0006 (0.24)	.	.	.	.	.	.
Foreign(+guess) $\times$ $\alpha$ dummy	.	.	.	.	.	.	.	.	-0.0044 (-1.61)	.	.	.
Adv.deg. $\times$ $\alpha$ dummy	.	.	.	.	.	.	.	.	.	.	.	0.0039 (1.76)
Female $\times$ FFlow dummy	.	.	.	.	.	.	-0.0011 (-0.41)	.	.	.	.	.
Female $\times$ early career	.	.	.	.	-0.0010 (-0.54)	.	.	.	.	.	.	.
Female $\times$ late career	.	.	.	.	0.0025 (0.72)	.	.	.	.	.	.	.
Controls	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Year dummy	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Fund family dummy	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Obs.	424683	424683	389489	389489	389489	389489	389489	389489	389489	328354	328354	328354
Adj. RSq.	0.0069	0.0016	0.0192	0.0192	0.0192	0.0192	0.0192	0.0197	0.0197	0.0201	0.0201	0.0201

Panel C: Promotions

Model	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(9)	(10)	(11)	(12)	(13)
Female	-0.0040 (-5.35)	-0.0040 (-5.46)	-0.0029 (-3.74)	-0.0031 (-3.98)	-0.0036 (-2.87)	-0.0030 (-3.69)	-0.0031 (-3.83)	-0.0029 (-3.76)	-0.0029 (-3.76)	-0.0030 (-3.45)	-0.0031 (-3.51)	-0.0031 (-3.52)
Alpha <sub>t-1</sub>	.	.	0.0004 (3.67)	0.0004 (3.60)	0.0004 (3.60)	0.0004 (3.74)	0.0004 (3.68)	0.0004 (3.67)	0.0004 (3.75)	0.0004 (3.27)	0.0004 (3.27)	0.0004 (3.44)
Alpha <sub>t-2</sub>	.	.	0.0004 (3.62)	0.0004 (3.55)	0.0004 (3.54)	0.0004 (3.70)	0.0004 (3.60)	0.0004 (3.63)	0.0004 (3.71)	0.0004 (3.72)	0.0004 (3.72)	0.0005 (3.88)
Alpha <sub>t-3</sub>	.	.	0.0001 (0.82)	0.0001 (0.82)	0.0001 (0.82)	0.0001 (0.95)	0.0001 (0.78)	0.0001 (0.82)	0.0001 (0.95)	0.0002 (1.49)	0.0002 (1.50)	0.0002 (1.67)
FFlow <sub>t-1</sub>	.	.	0.0005 (3.98)	0.0005 (3.94)	0.0005 (3.94)	0.0005 (4.02)	0.0005 (4.26)	0.0005 (3.97)	0.0005 (4.02)	0.0005 (3.42)	0.0005 (3.43)	0.0005 (3.52)
FFlow <sub>t-2</sub>	.	.	0.0004 (3.38)	0.0004 (3.24)	0.0004 (3.24)	0.0004 (3.40)	0.0005 (3.68)	0.0004 (3.37)	0.0004 (3.41)	0.0005 (3.63)	0.0005 (3.62)	0.0005 (3.69)
FFlow <sub>t-3</sub>	.	.	0.0001 (1.10)	0.0001 (1.09)	0.0001 (1.09)	0.0001 (1.08)	0.0002 (1.31)	0.0001 (1.10)	0.0001 (1.08)	0.0001 (1.17)	0.0002 (1.19)	0.0001 (1.18)
Early career	.	.	.	0.0024 (4.51)	0.0023 (4.11)	.	.	.	.	.	.	.
Late career	.	.	.	-0.0041 (-4.61)	-0.0042 (-4.52)	.	.	.	.	.	.	.
Foreign (incl.guess)	.	.	.	.	.	.	.	0.0004 (0.52)	0.0005 (0.60)	.	.	.
Foreign	.	.	.	.	.	.	.	.	.	0.0008 (0.83)	0.0009 (0.94)	0.0009 (0.94)
Adv. degree	.	.	.	.	.	.	.	.	.	.	-0.0010 (-1.54)	-0.0014 (-2.10)
Top school	.	.	.	.	.	.	.	.	.	.	0.0005 (0.91)	0.0006 (0.95)
$\alpha$ dummy	.	.	.	.	.	-0.0008 (-0.86)	.	.	-0.0006 (-0.63)	.	.	-0.0037 (-2.27)
FFlow dummy	.	.	.	.	.	.	-0.0018 (-1.84)	.	.	.	.	.
Female $\times$ $\alpha$ dummy	.	.	.	.	.	0.0011 (0.43)	.	.	.	.	.	.
Foreign(+guess) $\times$ $\alpha$ dummy	.	.	.	.	.	.	.	.	-0.0007 (-0.30)	.	.	.
Adv.deg. $\times$ $\alpha$ dummy	.	.	.	.	.	.	.	.	.	.	.	0.0037 (1.98)
Female $\times$ FFlow dummy	.	.	.	.	.	.	0.0023 (0.95)	.	.	.	.	.
Female $\times$ early career	.	.	.	.	0.0008 (0.48)	.	.	.	.	.	.	.
Female $\times$ late career	.	.	.	.	0.0011 (0.34)	.	.	.	.	.	.	.
Controls	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Year dummy	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Fund family dummy	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Obs.	460541	460541	422470	422470	422470	422470	422470	422470	422470	354919	354919	354919
Adj. RSq.	0.0069	0.0022	0.0135	0.0136	0.0136	0.0135	0.0135	0.0140	0.0140	0.0138	0.0138	0.0138



**Table AVI**

**Explaining manager firings, demotions and promotions: Only current managers of the mainstream active domestic equity funds**

This table presents the results of linear probability regressions explaining manager firings, demotions and promotions. The sample of managers includes only managers of the mainstream active domestic equity funds. Panels A, B and C correspond to Panels A of Table V, Table VI and Table VII in the main text, respectively.

Panel A: Firings

Model	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(9)	(10)	(11)	(12)	(13)
Female	0.0020 (4.20)	0.0019 (4.22)	0.0017 (3.38)	0.0017 (3.55)	0.0005 (0.57)	0.0014 (2.71)	0.0016 (3.04)	0.0017 (3.36)	0.0017 (3.39)	0.0013 (2.50)	0.0013 (2.45)	0.0013 (2.47)
Alpha <sub>t-1</sub>	.	.	-0.0006 (-8.95)	-0.0006 (-8.92)	-0.0006 (-8.93)	-0.0004 (-6.43)	-0.0006 (-8.99)	-0.0006 (-8.97)	-0.0004 (-6.45)	-0.0005 (-8.66)	-0.0005 (-8.66)	-0.0004 (-6.29)
Alpha <sub>t-2</sub>	.	.	-0.0005 (-8.17)	-0.0005 (-8.18)	-0.0005 (-8.19)	-0.0004 (-5.88)	-0.0005 (-8.30)	-0.0005 (-8.18)	-0.0004 (-5.88)	-0.0005 (-7.57)	-0.0005 (-7.57)	-0.0004 (-5.38)
Alpha <sub>t-3</sub>	.	.	-0.0002 (-3.65)	-0.0002 (-3.73)	-0.0002 (-3.74)	-0.0001 (-2.10)	-0.0002 (-3.73)	-0.0002 (-3.66)	-0.0001 (-2.10)	-0.0001 (-2.23)	-0.0001 (-2.23)	-0.0000 (-0.77)
FFlow <sub>t-1</sub>	.	.	-0.0004 (-5.49)	-0.0004 (-5.34)	-0.0004 (-5.34)	-0.0004 (-5.07)	-0.0004 (-4.44)	-0.0004 (-5.50)	-0.0004 (-5.09)	-0.0004 (-4.88)	-0.0004 (-4.89)	-0.0004 (-4.52)
FFlow <sub>t-2</sub>	.	.	-0.0003 (-4.01)	-0.0003 (-3.80)	-0.0003 (-3.81)	-0.0003 (-3.76)	-0.0002 (-3.08)	-0.0003 (-4.01)	-0.0003 (-3.76)	-0.0003 (-3.91)	-0.0003 (-3.92)	-0.0003 (-3.73)
FFlow <sub>t-3</sub>	.	.	-0.0001 (-1.01)	-0.0001 (-0.91)	-0.0001 (-0.91)	-0.0001 (-1.22)	-0.0000 (-0.54)	-0.0001 (-1.02)	-0.0001 (-1.24)	-0.0001 (-1.45)	-0.0001 (-1.46)	-0.0001 (-1.64)
Early career	.	.	.	-0.0015 (-4.23)	-0.0017 (-4.55)	.	.	.	.	.	.	.
Late career	.	.	.	0.0017 (2.50)	0.0015 (2.14)	.	.	.	.	.	.	.
Foreign (incl.guess)	.	.	.	.	.	.	.	0.0010 (1.38)	0.0014 (1.88)	.	.	.
Foreign	.	.	.	.	.	.	.	.	.	0.0012 (1.30)	0.0012 (1.32)	0.0012 (1.34)
Adv. degree	.	.	.	.	.	.	.	.	.	.	-0.0002 (-0.42)	-0.0002 (-0.46)
Top school	.	.	.	.	.	.	.	.	.	.	-0.0001 (-0.40)	-0.0002 (-0.47)
$\alpha$ dummy	.	.	.	.	.	0.0044 (7.87)	.	.	0.0048 (8.87)	.	.	0.0043 (4.46)
FFlow dummy	.	.	.	.	.	.	0.0018 (3.22)	.	.	.	.	.
Female $\times \alpha$ dummy	.	.	.	.	.	0.0022 (1.45)	.	.	.	.	.	.
Foreign(+guess) $\times \alpha$ dummy	.	.	.	.	.	.	.	.	-0.0040 (-1.73)	.	.	.
Adv.deg. $\times \alpha$ dummy	.	.	.	.	.	.	.	.	.	.	.	0.0002 (0.18)
Female $\times$ FFlow dummy	.	.	.	.	.	.	0.0007 (0.48)	.	.	.	.	.
Female $\times$ early career	.	.	.	.	0.0018 (1.72)	.	.	.	.	.	.	.
Female $\times$ late career	.	.	.	.	0.0022 (0.81)	.	.	.	.	.	.	.
Controls	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Year dummy	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Fund family dummy	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Obs.	327517	327517	292708	292708	292708	292708	292708	292708	292708	254233	254233	254233
Adj. RSq.	0.0031	0.0003	0.0070	0.0071	0.0071	0.0072	0.0070	0.0073	0.0075	0.0069	0.0069	0.0071

Panel B: Demotions

Model	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(9)	(10)	(11)	(12)	(13)
Female	-0.0014 (-1.47)	-0.0003 (-0.34)	-0.0010 (-0.99)	-0.0009 (-0.91)	-0.0003 (-0.19)	-0.0013 (-1.24)	-0.0009 (-0.87)	-0.0010 (-0.98)	-0.0009 (-0.96)	-0.0012 (-1.09)	-0.0013 (-1.19)	-0.0013 (-1.20)
Alpha <sub>t-1</sub>	.	.	-0.0012 (-10.07)	-0.0012 (-10.06)	-0.0012 (-10.05)	-0.0010 (-8.07)	-0.0012 (-10.11)	-0.0012 (-10.06)	-0.0010 (-8.06)	-0.0013 (-9.65)	-0.0013 (-9.64)	-0.0011 (-7.80)
Alpha <sub>t-2</sub>	.	.	-0.0013 (-10.35)	-0.0013 (-10.35)	-0.0013 (-10.36)	-0.0011 (-8.50)	-0.0013 (-10.47)	-0.0013 (-10.34)	-0.0011 (-8.49)	-0.0014 (-9.93)	-0.0014 (-9.91)	-0.0012 (-8.21)
Alpha <sub>t-3</sub>	.	.	-0.0008 (-6.29)	-0.0008 (-6.33)	-0.0008 (-6.33)	-0.0006 (-5.08)	-0.0008 (-6.37)	-0.0008 (-6.29)	-0.0006 (-5.07)	-0.0007 (-5.41)	-0.0007 (-5.39)	-0.0006 (-4.27)
FFlow <sub>t-1</sub>	.	.	-0.0010 (-6.63)	-0.0010 (-6.56)	-0.0010 (-6.55)	-0.0010 (-6.31)	-0.0009 (-5.61)	-0.0010 (-6.62)	-0.0010 (-6.31)	-0.0010 (-5.82)	-0.0010 (-5.85)	-0.0009 (-5.60)
FFlow <sub>t-2</sub>	.	.	-0.0005 (-3.64)	-0.0005 (-3.54)	-0.0005 (-3.54)	-0.0005 (-3.45)	-0.0004 (-2.79)	-0.0005 (-3.64)	-0.0005 (-3.45)	-0.0007 (-3.98)	-0.0007 (-4.01)	-0.0006 (-3.87)
FFlow <sub>t-3</sub>	.	.	0.0000 (0.15)	0.0000 (0.19)	0.0000 (0.19)	-0.0000 (-0.01)	0.0001 (0.57)	0.0000 (0.16)	-0.0000 (-0.00)	-0.0000 (-0.02)	-0.0000 (-0.07)	-0.0000 (-0.21)
Early career	.	.	.	-0.0014 (-2.08)	-0.0013 (-1.80)	.	.	.	.	.	.	.
Late career	.	.	.	0.0012 (0.86)	0.0008 (0.59)	.	.	.	.	.	.	.
Foreign (incl.guess)	.	.	.	.	.	.	.	-0.0011 (-0.75)	-0.0007 (-0.46)	.	.	.
Foreign	.	.	.	.	.	.	.	.	.	-0.0001 (-0.05)	-0.0001 (-0.03)	0.0000 (0.01)
Adv. degree	.	.	.	.	.	.	.	.	.	.	-0.0003 (-0.33)	-0.0011 (-1.29)
Top school	.	.	.	.	.	.	.	.	.	.	-0.0018 (-2.41)	-0.0018 (-2.45)
α dummy	.	.	.	.	.	0.0066 (5.96)	.	.	0.0070 (6.56)	.	.	0.0017 (0.81)
FFlow dummy	.	.	.	.	.	.	0.0035 (3.14)	.	.	.	.	.
Female × α dummy	.	.	.	.	.	0.0028 (0.93)	.	.	.	.	.	.
Foreign(+guess) × α dummy	.	.	.	.	.	.	.	.	-0.0036 (-0.77)	.	.	.
Adv.deg. × α dummy	.	.	.	.	.	.	.	.	.	.	.	0.0071 (3.02)
Female × FFlow dummy	.	.	.	.	.	.	-0.0003 (-0.11)	.	.	.	.	.
Female × early career	.	.	.	.	-0.0012 (-0.57)	.	.	.	.	.	.	.
Female × late career	.	.	.	.	0.0058 (1.09)	.	.	.	.	.	.	.
Controls	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Year dummy	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Fund family dummy	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Obs.	327517	327517	292708	292708	292708	292708	292708	292708	292708	254233	254233	254233
Adj. RSq.	0.0052	0.0015	0.0173	0.0173	0.0173	0.0174	0.0173	0.0182	0.0184	0.0173	0.0173	0.0175

Panel C: Promotions

Model	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(9)	(10)	(11)	(12)	(13)
Female	-0.0008 (-0.89)	0.0002 (0.24)	-0.0007 (-0.74)	-0.0008 (-0.92)	-0.0001 (-0.04)	-0.0006 (-0.64)	-0.0009 (-0.96)	-0.0007 (-0.77)	-0.0007 (-0.78)	-0.0002 (-0.19)	-0.0002 (-0.20)	-0.0002 (-0.22)
Alpha <sub>t-1</sub>	.	.	0.0005 (4.31)	0.0005 (4.28)	0.0005 (4.28)	0.0005 (4.38)	0.0005 (4.31)	0.0005 (4.28)	0.0005 (4.35)	0.0005 (4.39)	0.0005 (4.39)	0.0006 (4.60)
Alpha <sub>t-2</sub>	.	.	0.0005 (4.33)	0.0005 (4.33)	0.0005 (4.34)	0.0005 (4.40)	0.0005 (4.30)	0.0005 (4.31)	0.0005 (4.38)	0.0004 (3.16)	0.0004 (3.16)	0.0005 (3.42)
Alpha <sub>t-3</sub>	.	.	0.0001 (0.49)	0.0001 (0.57)	0.0001 (0.58)	0.0001 (0.65)	0.0001 (0.45)	0.0001 (0.47)	0.0001 (0.63)	0.0000 (0.25)	0.0000 (0.25)	0.0001 (0.51)
FFlow <sub>t-1</sub>	.	.	0.0005 (3.47)	0.0005 (3.34)	0.0005 (3.33)	0.0005 (3.53)	0.0005 (3.65)	0.0005 (3.46)	0.0005 (3.52)	0.0005 (3.38)	0.0005 (3.38)	0.0005 (3.50)
FFlow <sub>t-2</sub>	.	.	0.0005 (3.39)	0.0004 (3.20)	0.0004 (3.20)	0.0005 (3.44)	0.0005 (3.57)	0.0005 (3.39)	0.0005 (3.43)	0.0006 (3.64)	0.0006 (3.63)	0.0006 (3.74)
FFlow <sub>t-3</sub>	.	.	0.0001 (0.78)	0.0001 (0.70)	0.0001 (0.69)	0.0001 (0.75)	0.0001 (0.91)	0.0001 (0.76)	0.0001 (0.73)	0.0001 (0.86)	0.0001 (0.86)	0.0001 (0.81)
Early career	.	.	.	0.0022 (3.55)	0.0023 (3.52)	.	.	.	.	.	.	.
Late career	.	.	.	-0.0041 (-3.41)	-0.0038 (-3.02)	.	.	.	.	.	.	.
Foreign (incl.guess)	.	.	.	.	.	.	.	0.0019 (1.45)	0.0026 (1.85)	.	.	.
Foreign	.	.	.	.	.	.	.	.	.	0.0049 (2.83)	0.0049 (2.82)	0.0049 (2.81)
Adv. degree	.	.	.	.	.	.	.	.	.	.	0.0000 (0.02)	-0.0005 (-0.60)
Top school	.	.	.	.	.	.	.	.	.	.	-0.0002 (-0.35)	-0.0002 (-0.32)
α dummy	.	.	.	.	.	-0.0008 (-0.79)	.	.	-0.0005 (-0.57)	.	.	-0.0039 (-2.22)
FFlow dummy	.	.	.	.	.	.	-0.0014 (-1.29)	.	.	.	.	.
Female × α dummy	.	.	.	.	.	-0.0005 (-0.19)	.	.	.	.	.	.
Foreign(+guess) × α dummy	.	.	.	.	.	.	.	.	-0.0049 (-1.37)	.	.	.
Adv.deg. × α dummy	.	.	.	.	.	.	.	.	.	.	.	0.0034 (1.71)
Female × FFlow dummy	.	.	.	.	.	.	0.0019 (0.73)	.	.	.	.	.
Female × early career	.	.	.	.	-0.0009 (-0.47)	.	.	.	.	.	.	.
Female × late career	.	.	.	.	-0.0046 (-1.00)	.	.	.	.	.	.	.
Controls	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Year dummy	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Fund family dummy	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Obs.	341766	341766	305774	305774	305774	305774	305774	305774	305774	265049	265049	265049
Adj. RSq.	0.0046	0.0024	0.0078	0.0080	0.0080	0.0078	0.0078	0.0095	0.0095	0.0080	0.0080	0.0080