

Life is Too Short? Bereaved Managers and Investment Decisions *

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Abstract

We examine whether bereavement affects managerial investment decisions using the exogenous events of deaths in the family. Consistent with bereavement inducing higher risk-aversion, we find in separate samples of mutual funds and publicly traded firms that bereaved managers take less risk. Mutual funds managed by bereaved managers exhibit smaller tracking errors, lower active share measures, and higher portfolio weights on larger stocks after bereavement events. Firms managed by bereaved CEOs exhibit lower capital expenditures, fewer acquisitions, and lower CEO ownerships after bereavement events. The risk-shifting by bereaved managers has negative implications on the performance of funds and firms they manage.

Keywords: Life Experience, Bereavement, Anxiety, Investment Decisions, Mutual Fund, Public Firms, Risk Taking, Endogenous Matching

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We examine whether bereavement affects managerial investment decisions using the exogenous events of deaths in the family. Consistent with bereavement inducing higher risk-aversion, we find in separate samples of mutual funds and publicly traded firms that bereaved managers take less risk. Mutual funds managed by bereaved managers exhibit smaller tracking errors, lower active share measures, and higher portfolio weights on larger stocks after bereavement events. Firms managed by bereaved CEOs exhibit lower capital expenditures, fewer acquisitions, and lower CEO ownerships after bereavement events. The risk-shifting by bereaved managers has negative implications on the performance of funds and firms they manage.

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1. Introduction

A fast-growing body of research links economic agents' personal life experience to their investment decisions. The pioneering works of Malmendier and Tate (2005) and Malmendier and Nagel (2011) reveal that personal life experiences, e.g., having gone through the Great Depression, have significant impacts on the financial investment decisions of investors and corporate managers. Recent studies also document how corporate policies are related to personal characteristics of managers, including personal wealth (Becker, 2006), familiarity with investees (Pool et al., 2012), personal leverage (Cronqvist et al., 2012), peers' risk aversion (Ahern et al., 2014), overconfidence (Hackbarth, 2008; Ho et al., 2016; Koh et al., 2018; Phua et al., 2018; Banerjee et al., 2018), facial masculinity (Jia et al., 2014), retirement preference (Jenter and Lewellen, 2015), luxury good ownership (Davidson et al., 2015), narcissism (Aktas et al., 2016), pilot license (Cain and McKeon, 2016; Sunder et al., 2017), gender of child (Cronqvist and Yu, 2017), sports car ownership (Brown et al., 2018), and personal managerial indiscretions (Cline et al., 2018).

There are, however, two challenges to establishing the causal link between corporate policies and managerial preference or personal life experience. The first challenge is the possibility of omitted variables driving both corporate policies and managerial characteristics that proxy for managerial preference. Recent studies address this concern using *early* life experience or events that are likely independent to firm fundamentals, such as military service (Malmendier et al., 2011; Benmelech and Frydman, 2015), previous professional experience (Dittmar and Duchin, 2016), market conditions when CEOs started their career (Schoar and Zuo, 2017), early-life disasters (Bernile et al., 2017), family background (Chuprinin and Sosyura, 2018), cultural heritage (Nguyen et al., 2018), and birth month (Bai et al., 2019).

The second issue, the possibility of “endogenous matching,” is more difficult to overcome and also challenges the early life experience literature. In an ideal experiment, managers with varying characteristics and personal life experiences would be randomly allocated to firms, allowing for a clean identification of whether such characteristics and/or experiences affect investment decisions. However, we do not observe this empirically as the employment decisions of managers are likely to be endogenous. For example, a firm that intends to make aggressive investments may hire managers whose early life experiences result in lower risk

aversions. The idea of endogenous matching can be traced back to Akerberg and Botticini (2002) and is clearly explained by Graham et al. (2013): “*We cannot determine the direction of causality between corporate growth and executive personality. Managers may self-select into companies (or companies may hire managers) who have the ‘right’ personality traits for the particular company. What we document is that there is a significant relationship between CEO characteristics and company characteristics.*” Consistent with this assertion, Fee et al. (2013) observe large corporate policy changes after endogenous departures of firm CEOs but not following exogenous departures. A recent study by Pool et al. (2019) attempts to address the endogenous matching issue by exploiting the exogenous wealth shocks associated with the collapse of the housing market and documenting that the decline in fund managers’ personal wealth reduces mutual fund risk taking.

This paper attempts to overcome these two challenges by examining whether parental deaths, a common personal life experience, affects the investment decisions of (i) managers of actively managed mutual funds and (ii) Chief Executive Officers (CEOs) of publicly traded U.S. firms. We choose the setting of parental deaths because these deaths are exogenous to the operations of the organization managed by the bereaved individuals, addressing potential concerns of omitted variables or endogenous matching that can be pervasive in many settings.¹ Additionally, research has documented large and long-term negative emotional effects of parental death on adult children.² The long-term emotional consequences allow us to distinguish bereavement from the temporary limited attention due to physical distractions associated with parental loss (e.g., arranging and attending funerals).

Prior research has established links between negative emotions and risk-taking. While early studies document that risks are perceived to be higher under negative emotions than under positive emotions (e.g., Johnson and Tversky, 1983), recent evidence suggests more nuanced effects, implying that negative emotions such as sadness and anxiety may have distinct and potentially conflicting effects on human subjects’ risk-taking propensity. For instance, Raghunathan and Pham (1999) and Raghunathan et al. (2006) show in controlled experiments that anxious subjects prefer the low-risk/low-reward options whereas sad subjects prefer the high-

¹ A typical issue with research on events in managers’ personal lives is that managerial performance could directly influence these events, e.g., divorces (Lu et al., 2016).

² See, for example, Umberson and Chen (1994), Marks et al. (2007), and Leopold and Lechner (2015).

risk/high reward options. These tendencies occur because anxiety and sadness seem to prime different implicit goals: anxiety primes uncertainty reduction, whereas sadness primes reward replacement. Consistent with deaths in the family resulting in elevated anxiety, Kettlewell (2019) finds that family deaths are associated with increased risk aversion based on survey data that track life events of almost five thousand Australians between 2004–2016. Using experiments, Kuhnen and Knutson (2011) also find that the propensity to take risks is decreased by anxiety introduced in the lab environment. They argue that anxiety triggers higher activation in the part of the emotional brain that controls higher risk-aversion.

If parental deaths increase adult children’s anxiety about their own lives (i.e., life is too short) and consequently experience higher risk aversion, we predict that these events would reduce bereaved managers’ risk-taking propensity in their investment decisions. Sadness, on the other hand, does not seem to generate consistent predictions regarding risk-taking. While Raghunathan and Pham (1999), Raghunathan et al. (2006), and Pham (2007) show that sadness fosters more risk-taking, Leith and Baumeister (1996) and Hockey et al. (2000) do not find such effects.

For generalizability, our empirical analyses use two distinct samples of managers: managers of actively managed mutual funds and CEOs of public firms. The first sample includes 304 U.S. mutual funds that are actively managed by managers who experience parental deaths during the 1999–2013 period. To identify “bereaved managers”, we start with all mutual fund managers in the Morningstar database, and then search for parental death events experienced by these fund managers on the LexisNexis Accurint database, which contains a broad set of personal information collected from over 37 billion U.S. public records. We follow the same methodology to construct the second sample that eventually includes 312 U.S. public firms whose CEOs experience parental deaths during the 1994–2014 period (i.e., “bereaved CEOs”). Consistent with the exogenous nature of parental death events, the samples of funds and firms whose managers experience parental death events well represent the underlying populations of mutual funds and firms, respectively.

Our tests use a difference-in-difference (“diff-in-diff”) analysis. For the mutual fund analysis, we calculate the first “diff” as the change in observable fund characteristics (e.g., tracking error) around the bereavement event for both treated funds (whose managers experience bereavement) and control funds, which

are matched by investment objective, fund size, and manager age. We then calculate the second “diff” as the difference in the changes in these observable characteristics between treated and control funds. This diff-in-diff approach controls for both cross-sectional differences in fund and managerial characteristics as well as the general time-series patterns. We follow the same methodology to conduct the diff-in-diff analysis to compare treated firms (whose CEOs experience bereavement) and control firms matched by industry, firm size, and CEO age. In addition to the univariate diff-in-diff analysis using these matched samples, we also estimate diff-in-diff regressions that control for a broad set of firm and fund characteristics.

We first examine whether bereaved fund managers become more risk-averse in their investment decisions. We find that these fund managers act more like quasi-indexers in the year after the parental death events. Specifically, bereaved funds exhibit smaller tracking errors and are associated with lower levels of the “active share” measure (Cremers and Petajisto, 2009), indicating that their portfolio holdings mimic their peers’ more after the parental death events. Bereaved managers also increase their portfolio allocation to larger stocks, consistent with a heightened preference for “safer” assets. These results are obtained in diff-in-diff settings using matched funds, and they are robust in diff-in-diff regressions that control for a broad set of fund characteristics. Overall, these findings are consistent with the prediction that bereavement affects managers’ risk aversion and in turn their investment decisions.

We next examine bereaved CEOs of publicly listed firms. Following parental deaths, firms managed by bereaved CEOs reduce their capital expenditures in both the event year and subsequent years, consistent with a persistent negative effect on the level of corporate investments. These firms also reduce their activities in mergers and acquisitions (M&As), in terms of both the number of acquisitions and the total dollar values of deals, in the event year and subsequent years. Additionally, bereaved CEOs also become more conservative with respect to their personal investment portfolio as their stock ownerships of the companies they manage decrease significantly after parental deaths. Overall, these results are consistent with a long-term shift in bereaved CEOs’ risk-taking preferences and their firms’ investment activities.

Our multitudes of findings are unlikely to be explained by physical distractions (or limited attention) associated with parental deaths (e.g., arranging and attending funerals) for several reasons. First, these physical

distractions tend to be temporary while the observed changes in investment behaviors last from one to at least three years after each parental death. Second, distractions predict inactiveness of the managers, which cannot explain the observed activities undertaken by mutual funds managers (e.g., the shifts in portfolio weights) and CEOs (e.g., the shifts in their stock ownerships). Third, the degree of distractions should not be a function of manager age, while the effects of emotions are likely to affect managers at different age groups. We find that for most of our outcome variables, the observed effects are stronger (with varying levels of statistical significance) for younger fund managers and younger CEOs. Fourth, we demonstrate that the distraction effects are short-lived and economically insignificant by examining a major physical distraction that could last longer: selling the deceased parent's real estate properties.³ We find that only 18% of the death events in our sample of mutual funds are followed by the sales of real estate properties, out of which only half take more than a year. Additionally, the average transaction price of approximately \$250,000 is unlikely to have a substantial long-term impact on our sample managers.

Do changes in risk-taking and investment decisions affect fund or firm performance? On one hand, if the changes in investment behaviors make bereaved managers/CEOs deviate from optimal profit maximization strategies, then we expect fund/firm performance to worsen following parental deaths. On the other hand, we might not observe any effects of bereavement on fund/firm performance. For instance, in the context of fund performance, a long line of studies indicate that actively managed mutual funds do not seem to deliver superior performance relative to passive benchmarks (e.g., Jensen, 1968; Fama and French, 2010). If mutual fund managers contribute little to their funds' returns, the effect of manager bereavement would cause a trivial change in fund performance. In the context of firm performance, prior studies show that corporate investments can result from agency issues (e.g., Jensen, 1986) and lead to lower firm performance (e.g., Titman et al., 2004; Cooper et al., 2008). If this is the case, the reduction in corporate investments might lead to little change or even improvement in firm performance.

Our diff-in-diff analyses show that bereaved funds experience an average decline in the Fama-French

³ The LexisNexis Accurant database allows us to identify such real estate transactions and gauge this possibility for mutual fund managers.

five-factor alpha of 1.36 percentage points over the four-month parental death event window relative to the pre-event window.⁴ This performance decline is robust across various other measures of fund performance such as raw fund return, Fama-French three-factor fund alpha, and Pastor and Stambaugh (2003) five-factor fund alpha. Additionally, this underperformance persists for up to a year following the parental deaths (a total decline of 3.45 percentage points in Fama-French five-factor alpha), which cannot be explained by limited attention caused by short-term physical distractions.

Regarding the effect of CEO bereavement on firm performance, we document a 1.3 percentage points decline in return on assets (ROA) during the year of the CEO's parental death. We also find a decrease in DGTW-adjusted stock return of 0.47% per month during the event year for bereaved firms although the decline is not statistically significant (t-stat of -1.35). The observed relatively weak negative effect on firm performance can be attributable to the possibility that bereavement also mitigates CEOs' overinvestment problem, as discussed above. Consistent with this explanation, we find that the declines in both ROA and stock returns are much stronger (weaker) among bereaved firms that have relatively low (high) asset growth in the pre-bereavement period, suggesting that bereavement leads to lower performance in firms that were less likely to be afflicted by over-investment to begin with.

The evidence in this paper contributes to the growing literature on the effects of personal life experiences on financial decisions and outcomes by explicitly addressing the endogenous matching problem. Our results indicate that bereavement due to parental death, an exogenous event in this context, has a substantial impact on the investment decisions and performance of professional investors and corporate managers. We thus provide unambiguous empirical support for the hypothesis that common life experience can have a large influence on economic agent's performance and behaviors.

This paper also contributes specifically to the behavioral finance literature on the effects of human

⁴ One particular issue related to parental death events is that the impact of parental death events could start long before the date of death, as more than 80% of deaths are categorized as "expected" rather than "sudden" such as heart attack or car accident (Singer et al., 2015). A large fraction – around 42.2% (Teno et al., 2013) – of these expected deaths ultimately leads to hospice care, which is often used after a patient is deemed as terminally ill. Because the average length of hospice care is around 70 days (National Hospice and Palliative Care Organization, 2015), we set the start of the event window around two months before the date of parental death depending on the data availability.

emotion. Motivated by the experimental evidence on the relation between emotions and decision making, previous studies have documented that weather-induced negative emotions could affect stock market outcomes and investor decisions (e.g., Hirshleifer and Shumway, 2003; Goetzmann et al., 2014). By focusing on bereavement, our analysis provides new evidence in this line of research and improves the understanding about how emotions affect investment behaviors.

Finally, our findings are related to the debate regarding the general role of fund and firm managers in determining the performance of their organizations, i.e., do fund managers and CEOs matter?. Our finding regarding firm performance supports Bennesen et al.'s (2010) finding that CEO deaths (as well as CEO family deaths) negatively affect firms' ROA. Our study is fundamentally different from Bennesen et al. (2010) in three aspects. First, we focus on large public U.S. firms in the S&P 1500 index (average assets of USD 5.3 billion) that have very different management structures from their sample of relatively small Danish firms (average assets of USD 8.3 million).⁵ Second, our study identifies CEO risk-taking as the main mechanism through which family deaths affect both investment and performance (ROA and stock returns), while they focus on how distraction impacts performance (ROA).⁶ Distraction should be more important for small firms that are closely managed by family members. Third, beyond examining CEOs, our study examines mutual fund managers' parental deaths. This analysis contributes to the strand of literature documenting that actively managed mutual funds fail to deliver superior performance relative to passive benchmarks (e.g., Jensen, 1968; Fama and French, 2010). Our findings of the deterioration of performance due to managerial bereavement illustrate the crucial role that mutual fund managers and CEOs play in creating value for fund and firm investors.

2. Data and Methodology

⁵ The event firms with CEO and family deaths in Bennesen et al. (2010) on average have total assets of 67.2 million Danish Kroner (DKR), or USD 8.3 million, and non-event firms on average have total assets of DKR 27.2 million, or USD 3.4 million (see the 2006 version of the paper).

⁶ Bennesen et al. (2010) also touches on firm investment (the asset growth result in Table 9 model 2), and their analysis uses the combined sample of events of CEO deaths and CEO family deaths. We focus on the events of CEO family deaths which is not subject to the concern of endogenous matching.

2.1. Mutual Fund Manager Sample

We construct our sample of mutual funds by combining the i) CRSP Survivorship Bias Free Mutual Fund Database, ii) Thomson Financial CDA/Spectrum holdings database, and iii) Morningstar Mutual Fund Database. Specifically, we first obtain mutual fund data from the CRSP Survivorship Bias Free Mutual Fund Database and restrict the sample to actively-managed domestic equity mutual funds.⁷ We then merge the CRSP sample with the Thomson Financial CDA/Spectrum holdings database using the MFLINKS file based on Wermers (2000).⁸

We obtain fund managers' background information from Morningstar, and match it with the CRSP sample using fund tickers. A small number of ticker matches have different fund names between Morningstar and CRSP mainly due to reasons such as fund issuers vs. fund management companies, or mergers of financial companies. We manually screen and confirm the validity of these matches. This approach generates 8,529 unique mutual funds as identified by CRSP_FundNo (the CRSP's fund identifier). We focus on the more recent period after 1999 because our analyses require daily fund returns that become available only after 1999. After this filter, we have 2,047 fund managers with available information on education background and employment history.

We identify the events of parents' death using the LexisNexis Accurint database, which contains a broad set of personal information by linking over 37 billion U.S. public records. This search process takes three steps. We first identify a mutual fund manager in the LexisNexis Accurint database using the information on name, age range (based on the year of graduate school or college graduation), and employment history.⁹ We are

⁷ We follow the procedure in Huang, Sialm, and Zhang (2011) and select funds with the following Lipper objectives: CA, CG, CS, EI, FS, G, GI, H, ID, LCCE, LCGE, LCVE, MC, MCCE, MCGE, MCVE, MLCE, MLGE, MLVE, MR, NR, S, SCCE, SCGE, SCVE, SG, SP, TK, TL, UT. If a fund does not have any of the above objectives, we select funds with the following Strategic Insights objectives: AGG, ENV, FIN, GMC, GRI, GRO, HLT, ING, NTR, SCG, SEC, TEC, UTI, GLD, RLE. If a fund has neither the Lipper nor the SI objective, then we use the Wiesenberger Fund Type Code to select funds with the following objectives: G, G-I, G-S, GCI, IEQ, ENR, FIN, GRI, HLT, LTG, MCG, SCG, TCH, UTL, GPM. If none of these objectives are available and the fund has a CS policy or holds more than 80% of its value in common shares, then the fund will be included. We also drop a fund if its index fund flag is non-missing.

⁸ Specifically, we require the sample funds from the CRSP Mutual Fund Database to have WFICNs in the MFLINKS file. The MFLINKS file is available through the Wharton Research Data Services (WRDS).

⁹ Often, a manager's education information includes only the graduate degree which is associated with a wide age range. When necessary, we search the year of college graduation from various sources online, such as LinkedIn and Morningstar fund management pages. When necessary, we also use the state of a manager's current residence (from LinkedIn) to narrow

able to identify 1,839 fund managers, where each manager is linked to a LexID, which is the unique personal identifier in all databases contained in LexisNexis Accurint. For the second step, we identify parent(s) of a manager in the LexisNexis Accurint databases. For each manager, we use the LexID to retrieve a list of relatives, which contains for each relative the name, year and month of birth, age (age at death for a deceased person), and current address. Relatives of a person are defined as those who ever lived at the same address as the person and share the same last name. We identify parent(s) of a fund manager from the list of relatives according to the age of the manager and the age of potential parent(s). For the majority of the fund managers, there are exactly one male individual and one female individual from the list of relatives that fall in the age range of parents. For a small number of fund managers, the list of relatives has only one or no individual that fits the age range of potential parents.¹⁰

For the third step, we identify the deaths of individuals identified as parents of fund managers in the second step. In the list of relatives on LexisNexis, a red “D” mark next to the name of a relative denotes a deceased individual. We then search for the death record of the deceased parent using the name, year and month of birth, zip code or state of the last address, and age at death. We collect the exact date of death for the deceased parent from this death record. Using this approach, we identify 471 fund managers who experienced at least one parental death.

We require the event of parental death to occur during the period when a fund manager manages at least one fund in the mutual fund sample. Our final sample contains 304 bereaved funds from 1999 to 2013 influenced by 161 parental death events. Panel A of Table 1 shows that the sample events are relatively evenly distributed across years, which is consistent with parental deaths being exogenous events that are unrelated to potential omitted variables such as economic or capital market conditions. Panel B of Table 1 shows that sample

down the potential candidates. To be conservative, for most cases we require an identified manager to have at least one employment record in the LexisNexis Accurint database to match the employment history in Morningstar.

¹⁰ A very small fraction of managers have more than two relatives that fit the age of parents. To be conservative, we exclude these cases. Additionally, for a female fund manager, a deceased relative falling in the age range of parent can be a parent in law instead of parent. There are only a small number of female managers, and we carefully examine the historical address to ensure the deceased person shared address with the manager in early years (i.e., who is the parent instead of parent in law).

funds fall into 11 investment objective (IOC) categories. The IOCs with the highest number of sample funds are growth funds, small-cap funds, and growth and income funds. When we identify funds' objective codes, we first use Lipper codes which cover 70% of sample funds. Funds with missing Lipper codes are assigned to investment objective groups based on their CRSP-assigned codes, which are then mapped to the most closely matched Lipper code.¹¹

[Table 1 about here]

Panel C of Table 1 reports summary statistics of the characteristics of bereaved funds. The constructions of the fund characteristics are described in Table A1 of the Appendix. Bereaved funds on average have total assets under management of \$1.20 billion (\$1.22 billion for fund universe), annual turnover ratio of 0.865 (1.04 for fund universe), annual expense ratio of 1.3 percent (1.3 percent for fund universe), age of 12.3 years (13.7 years for fund universe), and 2.4 classes (3.0 classes for fund universe). Therefore, the characteristics of bereaved funds are reasonably close to those of the fund universe.

2.2. CEO Sample

We obtain our initial sample of CEOs from Standard and Poor's ExecuComp database which contains information about CEOs of firms in the S&P 1500 index (including those removed from the index but are still trading). Our sample starts from 1994 when ExecuComp starts to have comprehensive coverage. Since the risk-taking measures and behaviors of financial firms can differ from other sectors, we exclude financial firms (SIC codes between 6000 and 6999 during our sample period). Our initial sample of CEOs contains 5,876 CEOs from 2,825 nonfinancial firms during the 1994-2014 period. For each CEO, we have information of name, present age, and beginning and ending dates as CEO.

We repeat the same three steps described in the previous subsection to identify the CEOs in the

¹¹ For example, for funds with both Lipper and CRSP codes, all funds with "G" (growth) code in Lipper classification are assigned to "EDYG" group in CRSP classification. Therefore, funds with EDYG classification in CRSP but with missing Lipper code are grouped into the same objective code as funds with G code in Lipper.

LexisNexis Accurint database using the information on name, present age, and employment history.¹² We then identify the parents of a CEO in the LexisNexis Accurint database and the events of parental deaths. Since CEOs tend to be older than mutual fund managers, we also include relatively rare cases of CEO children deaths.¹³ For a CEO, we identify a deceased child as a deceased relative in the age range of their child. Since relatives of a person in the Accurint database are defined as those who ever lived at the same address as the person and share the same last name, a deceased female relative in the age range of child could be a daughter in law instead of daughter. For such a case, we search additional information online such as the obituary or examine the deceased person's name history to verify if the person is daughter instead of daughter in law.¹⁴ Our final sample includes a total of 336 bereavement events, including 317 parental death events and 19 child death events. We also report the summary characteristics of the firms in our final sample in Table 2.

[Table 2 about here]

Panel A of Table 2 reports the annual frequency of the CEO bereavement events, which are also relatively evenly distributed across years. This result is consistent with these death events being exogenous to firm fundamentals. Panel B of Table 2 further shows the distribution of CEO bereavement events across industries. Firms in the manufacturing, high-tech, and shopping industries have the highest number of bereavement events, which is in line with the industry distribution of the Compustat or ExecuComp universe. Panel C of Table 2 presents the summary statistics of bereaved firms' characteristics, which are very similar to those of the ExecuComp universe over the same period. For our sample firms, the natural logarithm of market capitalization is 7.28 on average (7.32 for ExecuComp); the book-to-market ratio is 0.63 (0.60 for ExecuComp); ROA is 5% (5% for ExecuComp); Tobin's Q is 1.81 (1.93 for ExecuComp); capital expenditure is 0.06 (0.06 for ExecuComp); dividend ratio is 1% (1% for ExecuComp), and asset tangibility of 0.30 (0.27 for ExecuComp). These similarities further illustrate that the family death events are exogenous to firm

¹² The CEO's employment history includes the CEO's firm as well as his/her historical firms in the ExecuComp. To be conservative, for most cases we require an identified manager to have at least one employment record in the LexisNexis Accurint database to match the employment history in ExecuComp.

¹³ These are adult children because the Accurint database typically include only people who have social or legal records such as driver licenses.

¹⁴ In most of these cases, we find that the deceased individual is a daughter rather than a daughter in law.

fundamentals. Table A1 of the Appendix provides detailed calculations of firm characteristics.

We acknowledge that because we examine a broad set of corporate outcome variables, our approach of selecting control funds or firms may not fully capture the differences in all the determinants of all these outcome variables between event funds/firms and their control funds/firms during the pre-event period. To ensure that our results are not driven by such differences, we formally conduct tests for the parallel trend assumption (report in Table A2 of the Appendix) and discuss them in the following sections. The results of these tests indicate our results are not driven by the levels or trends of the dependent variables in the pre-event window.

3. The Impact of Parental Death on Fund Managers' Investment Behaviors

In this section, we examine how bereavement affects mutual fund managers' investment behaviors. Specifically, we examine whether parental death causes mutual fund managers to take less risk in their investment decisions. Our analysis represents a diff-in-diff analysis as the fund is measured *relative* to control funds. As discussed earlier, for each bereaved fund we identify a control fund as the equity mutual fund in the same size (*TNA*) quintile within the same investment objective category that has the closest manager age to that of the event fund.¹⁵ For funds with multiple managers, we take the age of the eldest manager.¹⁶ If there are multiple funds with the same absolute fund manager age difference, we choose the control fund with the closest size to that of the event fund.

3.1 Tracking Errors

First, we examine whether bereaved funds act more like quasi-indexers after the parental death events. We focus on the tracking error of a fund, which is the volatility of daily fund returns in excess of the average return of funds with the same investment objective. A lower tracking error indicates that a specific fund's

¹⁵ Since the information regarding manager age is available only for the 1,839 fund managers that we are able to identify in the Accurant data, the matched funds are also selected from this sample. For robustness, we also try selecting matched funds from all other funds in the fund universe using only investment objectives and fund size, and repeat the analyses. The results, reported in Table A6 of the Appendix, are very similar to our main results.

¹⁶ The results are qualitatively similar if we use the average manager age.

returns co-move more with the average peer funds. Thus, a lower tracking error around a fund manager's parental death indicates that the fund's strategy, or at least the resulting return pattern, is more similar to other funds with the same investment objective (or can be more easily explained by return factors). In other words, the managers become more passive and make fewer active bets in attempting to generate abnormal returns.

It is worth noting that the impact of parental death events could start long before the date of death. For example, Singer et al. (2015) document that more than 80% of deaths are "expected" rather than "sudden" such as heart attack or car accident. Additionally, a large fraction – around 42.2% (Teno et al., 2013) – of these expected deaths involve hospice care, which serves those deemed as terminally ill. Because the average length of hospice care is around 70 days (National Hospice and Palliative Care Organization, 2015), we start the event window around two months before the date of parental death. Specifically, we estimate tracking errors over three mutually exclusive windows around fund manager's bereavement events: pre-event months $[-6, -3]$, event months $[-2, +1]$, and post-event months $[+2, +12]$, where month 0 is the month of the bereavement event.

[Table 3 about here]

Panel A of Table 3 presents the diff-in-diff results. There is a clear evidence that bereaved funds experience decreases in tracking errors from the $[-6, -3]$ pre-event window to both the $[-2, +1]$ event window and the $[+2, +12]$ post-event window (i.e., from 5.98% to 5.55% and then 5.26%). In contrast, the control sample of matched funds does not exhibit such declines over the same windows. The diff-in-diff in average tracking error between the pre-event window and the event window is $-0.40%$ (t-stat of -2.25). Similar to the results in the event window, we observe a significant decline ($-0.69%$, t-stat of -2.88) in average tracking error in the $[+2, +12]$ post-event windows. The observed decreases are economically significant: the decrease of $-0.69%$ during the $[+2, +12]$ window alone is about 12% of the average tracking error during the pre-event window.

Panel B of Table 3 reports the DID regressions of tracking errors for bereaved funds and control funds during the pre-event window, event window, as well as the post-event window. The DID regressions allow us to control for an array of variables that might be correlated with tracking error, such as total assets under

management (*TNA*), portfolio turnover ratio (*Turnover*), expense ratio (*Expenses*), fund return (*Return*), fund flows (*Flow*), and fund age (*Fund Age*). We also include fund fixed effects and year-month fixed effects to control for time-invariant fund characteristics and time trends, respectively. We focus on the interaction terms between the indicator variable *Event* and the two indicator variables $Post[-2, +1]$ and $Post[+2, +12]$. *Event* equals one for bereaved funds and zero for control funds. $Post[-2, +1]$ and $Post[+2, +12]$ are the two dummy variables for the windows $[-2, +1]$ and $[+2, +12]$, respectively.¹⁷ In both columns, the coefficients on the interaction terms are significantly negative, indicating that bereaved funds' tracking errors decrease more than control funds' tracking errors during the post-event windows.

We further conduct a parallel trend analysis by replacing the *Post* dummy with a *Pre* dummy in the full regression (Column 2 of Panel A). The *Pre* dummy equals one for the window $[-10, -7]$, which is the window before the pre-event window $[-6, -3]$ symmetric to the event window $[-2, +1]$. The result is reported in the first column in Panel A of Table A2 of the Appendix, which shows that the coefficient of $Pre \times Event$ is small and not statistically different from zero. This confirms that our results are not driven by the differential trends in tracking errors between event funds and control funds. Overall, our analysis of tracking errors provides empirical evidence consistent with the hypothesis that bereaved managers become less likely to employ investment strategies that are distinct from return factors and/or their peers.

3.2. Active Share

In addition to examining return-based measures, we also directly examine fund holdings. We employ the active share measure proposed by Cremers and Petajisto (2009) to test the hypothesis that bereaved managers become more passive. Specifically, active share is defined as the sum of absolute differences in portfolio weights between a fund and its corresponding benchmark divided by two, measuring the degree to which a fund manager deviates from the benchmark. Given the difficulty in identifying a specific benchmark for each fund in our sample, we use the aggregate holdings of all mutual funds in the same objective code as the benchmark for each fund. If bereaved managers become more risk-averse after parental deaths, we expect

¹⁷ The main effect on the *Event* indicator is absorbed by fund-fixed effects.

a decline in active share after these events. Since fund holdings data are at quarterly frequency, we calculate active share using the last available quarterly holdings in the pre-event quarters [Q-2, Q-1] and the last available quarterly holdings in the event window [Q, Q+1] and post-event window [Q+2, Q+3], where quarter Q represents the quarter of the parental death events.

[Table 4 about here]

Table 4 presents the results of this analysis. We start by comparing active share for the pre-event window [Q-2, Q-1] and the event window [Q, Q+1] in Panel A. We find that bereaved funds' average active share declines from the pre-event window to the event and post-event windows. On the other hand, there is no similar decline for control funds over these windows. The difference-in-difference for the event window [Q, Q+1] is a significant -0.86% (t-stat of -2.00), indicating that bereaved managers become less willing to deviate from their benchmarks. The difference-in-difference for the post-event window [Q+2, Q+3] is a significant -1.43% (t-stat of -2.63). These results suggest that bereaved managers become more risk-averse following parental death events.

Panel B presents the DID regression of the active share measure, which include various control variables, fund, and year-quarter fixed effects, and the interaction terms of the event-fund dummy with the event- and post event-window indicators. The coefficients of the interaction terms are significantly negative, indicating a significant decline in the active share measure for bereaved funds relative to control funds, consistent with the univariate results.¹⁸

3.3 Portfolio Stock Characteristics

To further test whether bereaved managers become more risk-averse, we directly examine the portfolio stocks held by bereaved funds using the Thomson Financial CDA/Spectrum mutual fund holdings database. If bereaved managers become more risk-averse, we expect them to adopt safer strategies by reallocating their

¹⁸ We also conduct a parallel trend test by replacing the *Post* dummy with a *Pre* dummy which equals one for the window [Q-4, Q-3], the window symmetric to the event window. The results reported in the second column in Panel A of Table A2 of the Appendix show that the coefficient of interaction of *Pre* is not statistically different from zero, confirming that our results are not driven by the differential trends in active share between event funds and control funds.

portfolios to safer stocks. Specifically, we examine whether they allocate a higher fraction of their portfolios to stocks with larger market capitalizations.

In general, mutual funds tend to allocate most of their portfolios in relatively large stocks.¹⁹ As such, our analysis focuses on stocks above the median market capitalization. We divide these above-median stocks into two categories: the largest market capitalization quartile (“Large”) and the second size quartile (“Small”). We calculate the aggregate portfolio fractions of each category in three portfolio snapshots of each bereaved fund: the last holding snapshot (before the end) of the pre-event window [Q−2, Q−1], the last holding snapshot of the event window [Q, Q+1], and the last holding snapshot of the post-event window [Q+2, Q+3]. We calculate both equal-weighted fraction (e.g., the number of “Large” firms in the portfolio divided by the total number of firms in the portfolio) and value-weighted fraction (e.g., the dollar value invested in “Large” firms divided by the total dollar value of the portfolio). We then calculate the change in the fractions of large and small stocks for both the bereaved funds and the control funds.

[Table 5 about here]

Table 5 presents the results of the diff-in-diff analysis. For equal-weighted fraction, bereaved funds hold a disproportionately higher fraction of large stocks than small stocks. During the pre-event window, 79.53% of their portfolios are allocated to large stocks, and only about 16.25% of their portfolios are in small stocks. During the event window, the “Large” fraction increases by 1.17% and the “Small” fraction declines by about the same amount (or about 7% of its average pre-event weight). In contrast, control funds experience little change in portfolio weights. The difference-in-difference for the fraction in large stocks is 1.17% (t-stat of 2.33) and in small stocks is −1.21% (t-stat of −2.66). We observe a similar pattern for value-weighted fractions. Panel B reports the results of shifting portfolio weights during the post-event window. The difference-in-difference for the equal-weighted fraction in large stocks is 1.39% (t-stat of 2.26) and in small stocks is −1.33% (t-stat of −2.47). The pattern is similar for value-weighted fractions.

Panel C reports the estimates from DID regressions of the value-weighted proportion measures. We

¹⁹ Only less than 5 percent of stocks in the average mutual fund portfolio have below median market capitalization; these stocks make up less than 2.5 percent of the average portfolio by dollar value.

first estimate regressions that include only the interaction terms of the *Event* firm indicator and the two *Post* indicators, and then include various control variables into the regressions. We observe significantly negative coefficients for the interaction terms in the small stock fraction regressions (Models 1 and 2), consistent with bereaved funds shifting their portfolio away from small stocks. We observe significantly positive coefficients of similar magnitudes for the interaction terms in the large stock fraction regressions, indicating that bereaved funds reallocate their portfolio towards large stocks.²⁰ Overall, the results in Table 5 are consistent with bereaved managers becoming more risk-averse by shifting their holdings to larger stocks.²¹

To summarize, this section documents that bereaved funds experience lower tracking errors in fund return, deviate less from the average holdings of funds with the same investment objective, and shift their portfolio holdings to larger stocks. These findings are consistent with the notion that bereaved mutual fund managers become more risk-averse following parental deaths.

4. The Impact of CEO Bereavement Events on Firm Investments

In this section, we examine how bereavement may affect CEOs' decisions about investments. If bereavement affects CEOs' risk attitudes, we expect that the investment behaviors of the firms they manage to exhibit less risk-taking, to the extent that their personal preferences affect corporate decisions. Specifically, we expect bereaved managers to reduce operating risk by cutting investments (i.e., reducing capital expenditures and M&A activities). These investments are long-term projects that require relatively large inputs, have a higher probability of failure, and generate highly volatile payoffs.

The risk reduction may also occur at the CEO's personal portfolio composition. In general, a CEO's personal wealth tends to be tied heavily to her inside stock ownership, resulting in a portfolio with relatively low diversification. A more risk-averse CEO is likely to prefer a more diversified portfolio with a lower

²⁰ We repeat the DID regressions for the equal-weighted proportion measures and find similar results (i.e., the interaction terms are significantly negative for small stocks but significantly positive for large stocks). For brevity we present these results in Table A3 of the Appendix.

²¹ We also conduct parallel trends tests by replacing the *Post* dummy with a *Pre* dummy which equals one for the window [Q-4, Q-3], the window symmetric to the event window. The results in the third and four columns in Panel A of Table A2 of the Appendix shows our results are not driven by the differential trends between event funds and control funds.

ownership level of her own company's stocks. If the bereavement due to parental death induces a higher risk aversion, we expect to observe a decrease in the CEO's ownership of her firm after a parental death event.

4.1 Capital Expenditures

To examine whether bereaved firms cut back on capital expenditures, we obtain data on annual capital expenditures from Compustat. Capital expenditure (CAPX) of a firm is scaled by the lagged total asset and calculated over five years around the CEO's bereavement event: pre-event year $t-1$, event year t , and post-event years $t+1$, $t+2$, and $t+3$, where year t is the year of CEO parental death. As discussed earlier, for each event firm, we identify a control firm by first selecting a set of candidate firms that operate in the same FF-10 industry and in the same size quintile as the event firm. We then choose the control firm as the candidate firm whose CEO has the closest age to that of the event firm's CEO. In the cases for which there are multiple candidate firms with the same absolute CEO age difference, we choose the candidate firm with the closest book-to-market ratio to that of the event firm.

Table 6 reports the average capital expenditure of the event firms, control firms, the difference between event firms and control firms, as well as the difference-in-difference between the pre-event window and subsequent windows. Panel A provides the comparison between the pre-event year ($t-1$) and the event year (t). Bereaved firms reduce their capital expenditures in the event year by 0.61% of assets (t stat of -1.95), relative to the pre-event year, while the control firms' capital expenditures only experience minimal changes. The difference-in-difference is not statistically significant.

[Table 6 about here]

The decline in bereaved firms' capital expenditure is more pronounced in subsequent years ($t+1$ onwards), as reported in Panels B to D.²² Indeed, bereaved firms display lower capital expenditure in each of the subsequent three years relative to the pre-event year (i.e., -1.01% , -1.13% , and -1.42% , respectively), while the control firms' capital expenditures experience almost no change. The difference-in-difference (i.e., -1.06% ,

²² Note that the number of observations decreases from Panels A to D due to the declining number of event firms with available data in longer period after the events.

−1.04%, and −1.39%, respectively) is statistically significant. This persistent decline in capital expenditure, lasting for at least three years, is difficult to explained by short-term distractions experienced by bereaved CEOs.

Inferences are similar when we perform DID regressions, which are presented in Panel E of Table 6. The sample for each of these regressions includes the bereaved firms and their control firms. A firm’s capital expenditures are measured for the five-year period starting from the year before the CEO’s parental death. The main independent variables are the interactions of event-firm indicator (*Event*) and indicators of four years in the event and post-event windows (*Post_t* to *Post_{t+3}*), respectively. We control for firm and year fixed effects in the regressions. Model (1) presents the regressions of the interaction terms, in which the coefficients for all three years in the post-event window are significantly negative, consistent with the univariate analyses that bereaved firms experience a significant decline in capital expenditures in the post-event years relative to that for control firms. Model (2) includes various control variables, and the interaction terms for the post-event years remain significantly negative. Regarding control variables, the coefficients on Tobin’s Q and sales growth are significantly positive and that on dividend is significantly negative. These results are consistent with findings in the existing literature that firms with higher investments tend to have higher growth and lower payout (e.g. Hubbard, 1998; Bliss et al. 2015; Gulen and Ion, 2016). Similar to the parallel trend tests for the mutual fund analyses, we also conduct these tests for all CEO analyses by replacing the *Post* dummy with a *Pre* dummy which equals one for the year t-2, the window symmetric to the event window. The results in Panel B of Table A2 of the Appendix indicate that our results are not driven by differential pre-event trends between event firms and control firms. Overall, the results in Table 6 are consistent with the hypothesis that bereaved CEOs become more risk-averse and reduce capital expenditures.

4.2 Mergers and Acquisitions (M&As)

M&As are among the most important corporate events, typically involving large investments by the acquirers. To test whether bereaved firms take lower risk and hence engage in fewer M&As, we obtain the data on M&As from the SDC Platinum database. We start with all unique deals from SDC platinum and follow the literature to exclude deals for which: i) the deal value is missing; ii) the deal is classified by SDC as rumors,

recapitalizations, repurchases, or spinoffs; iii) the bidder holds more than 50% of the target's shares at the announcement date of the bid; or iv) the bidder is seeking to acquire less than 50% of the target shares.²³

We focus on bereaved and control firms' acquisitions over five years around firm CEO's bereavement event: pre-event year $t-1$, event year t , and post-event years $t+1$, $t+2$, and $t+3$, where year t is the year of bereavement event. We examine two annual measures of M&A activities: the number of acquisitions announced in a year, and the total deal value of those acquisitions. We compare each event firm with a control firm, which is selected using the same approach as described in the previous section.

Table 7 reports the average number of acquisition deals and the natural log of the total deal value for the event firms and control firms, as well as the difference between event firms and control firms, and the difference-in-differences between the pre-event window and the subsequent windows. The figures in Panel A indicate that bereaved firms do not significantly reduce their M&As in the year that their CEOs experience parental deaths. Specifically, bereaved firms tend to engage in about 0.5 acquisitions per year, which is similar to that of the control firm, and the difference-in-difference in Panel A is -0.009 (t-stat of -0.12).

[Table 7 about here]

However, we observe a significant reduction in bereaved firms' M&As in the subsequent year (Panel B), which continues in the subsequent two years (Panels C and D). The difference-in-differences are significantly negative for these post-event years. For instance, the decrease in M&As for bereaved firms is -0.14 in year $t+1$, whereas the M&As for control firms hardly change (difference of 0.028). The difference-in-difference is a -0.17 (t-stat of -1.91). The inference is similar when we focus on natural log of deal value as the difference-in-difference is -0.88 (t-stat of -2.24) for year $t+1$. Again, this persistent decline in M&As cannot be explained by bereaved CEOs' short-term distractions.

Inferences are similar from DID regressions, which are presented in Panel E of Table 7. In each of these regressions, we include both bereaved firms and control firms. The regressions include M&A activities for the five-year period starting from the year before CEO parental death. We observe significantly negative

²³ The results are similar if we further exclude deals that less than 1% or 5% of the acquirer's market value of equity.

coefficients for the interaction term between *Event* and *Post* indicator variables, reflecting significant differences in the reductions of the number and the value of M&A activities for bereaved firms from the pre-event year to the post-event years, relative to those for control firms. The regressions in Columns (2) and (4) include various control variables, for which the significant coefficient estimates are generally consistent with the literature. Specifically, firms with higher growth as measured by Tobin Q and sales growth invest more, while mature firms paying dividends invest less. Overall, the results in Table 7 are consistent with the hypothesis that bereaved CEOs become more risk-averse and in turn less active in M&As.

4.3 CEO Stock Ownership

Motivated by our findings that bereaved CEOs reduce their firms' investment, we further examine whether bereaved CEOs also become more conservative in their personal investment. Specifically, we examine how deaths in the family influence CEOs' inside stock ownerships. As CEOs' personal wealth is heavily tied to the value of the firm's stocks, their personal investment portfolios tend to be less diversified. A more risk-averse CEO is likely to prefer a more diversified portfolio with a lower ownership level of her firm's own stocks. If the bereavement due to parental death induces a higher risk aversion, we expect to observe a decrease in the CEO's ownership of her firm after a death in the family.

To test this prediction, we obtain CEOs' inside stock ownership from the ExecuComp database and construct two measures of CEO ownerships: (1) excluding options and (2) including options. CEO ownerships excluding options (in percentages of total shares outstanding) are directly obtained from ExecuComp, whereas CEO ownerships including options are calculated as the sum of the number of stocks held by CEO and option deltas of all stock options held by a CEO, scaled by the sum of the number of shares outstanding and the delta of all outstanding stock options. Delta of stock options is calculated using the Black-Scholes (1973) formula.²⁴ More details about the construction of this variable are provided in Table A1 of the Appendix.

We calculate CEO ownership with and without options over five years around firm CEO's

²⁴ For new grants (awarded during the current year), parameters for the Black-Scholes formula are readily available. For existing grants, parameters for exercise price and time to maturity are estimated following the methodology in Core and Guay (2002).

bereavement events: pre-event year t-1, event year t, and post-event years t+1, t+2, and t+3, where year t is the year of bereavement event. We also include control firms identified following the same methodology we use for prior tests. Table 8 reports the average CEO ownerships for the event firms, control firms, the difference between event firms and control firms, as well as the difference-in-differences between the pre-event window and the subsequent windows.

[Table 8 about here]

Panel A of Table 8 shows that CEO ownership does not change during the event year compared to the prior year. For bereaved CEOs, the average stock ownership without (with) options is about 3% (3.6%) both before and after the event. Control firms' CEO ownership is generally lower, at about 1.8% (2.5%) without (with) options. Panel B shows that bereaved CEOs lower their stock ownership by about 0.5% in year t+1 compared with the year before the death in the family. Panels C and D show that this trend tends to persist up to years t+2 and t+3. For instance, CEO ownership without options for year t+2 is 0.93% lower (t-stat of -2.13) compared with the year prior to parental death, while 1.18% lower (t-stat of -1.95) for year t+3.

Panel E reports the DID regression results. Models (1) presents the regression of ownership on the interactions of event dummy with dummies of event- and post-event windows. All four interactions are negative and the interactions of year t+2 and t+3 are statistically significant. Model (2) further controls for firm characteristics, and the statistical significances of the interactions are further reduced, with only the interaction of t+2 being marginally significant. Models (3) and (4) repeat the regression analyses using CEO ownership that includes option values, in which the coefficients of the interactions remain negative but become insignificant. The weaker results for option ownership are expected because options are more difficult to be eliminated from the CEO's portfolio (e.g., CEOs are more likely to keep out-of-money options than selling them). Overall, we find stronger evidence that bereaved managers reduce their non-option stock ownership.

5. Emotion or Distractions?

A possible explanation of the observed changes in investment decisions for bereaved funds and firms is the limited attention of managers due to physical distractions associated with parental loss. For example, a

manager could be distracted by the duties of arranging funerals or other events associated with parental death. This alternative explanation is unlikely to fully explain our results because the physical distractions associated with parental death are typically temporary whereas we observe changes in investment behavior that last from one to three years after the parental death. Additionally, our findings of significant shifts in mutual fund portfolio weights and CEO stock ownerships cannot be explained by inactivity implied by distractions. Third, for most of our outcome variable, we find stronger effects (with varying levels of statistical significance) for younger managers. This evidence is supportive of the emotion hypothesis while inconsistent with the distraction hypothesis as the degree of distractions should not be a function of manager age, while the effects of emotions are likely to affect managers at different age groups.²⁵

We also examine a major physical distraction that could last for a long time after parental deaths: selling the parents' real estate properties. Specifically, if the majority of our sample managers need to sell the houses of deceased parents and this process drags for a long time, then the distractions associated with the real estate sales could lead to the shift in their risk-taking preferences and investment activities even in the long-term window. The LexisNexis Accurint database allows us to identify real estate properties, and we use this information to gauge the probability of real estate sales for our sample managers and test whether these real estate sales may explain our findings. To make this analysis manageable, we focus on mutual fund managers rather than CEOs for two reasons. First, the effects of bereavement on CEO behavior normally last for two to three years, which is unlikely to be driven by distractions around parental death. Second, real estate sales are less likely to be a major distraction for CEOs who have generally worked for many years and are wealthier than mutual fund managers.

The Accurint database contains the transactions of real estate properties of individuals. This information is also linked to the individual's LexID, which allows us to search for each deceased parent's real estate property transactions. From our sample events, we are able to collect information of real estate properties for 133 deceased parents, which account for over 80 percent of our sample events. Among these 133 deceased

²⁵ Specifically, we create a dummy variable which equals one if an event mutual fund manager (or event CEO) is in the bottom age tertile, and zero otherwise. We then repeat the regression analyses that include the interactions of this dummy variable with our main independent variables of interests and present the results in the Tables A7 and A8 of the Appendix.

parents, only 24 (18%) death events are followed by the sales of real estate properties. Moreover, only 17 (9) events are followed by sales over three months (one year) after parental deaths. Additionally, we observe the transaction price for nine of the sales, and the median transaction price is \$250,000. After accounting for agent fees, taxes, mortgage loan repayments, and distribution among siblings, this amount is unlikely to have a large influence on a mutual fund manager. Therefore, both the frequency and the amount of real estate sales suggest that on average real estate sale is unlikely to have a substantial long-term impact on our sample managers.

6. Performance Analysis

Our results so far provide strong evidence that bereavement events have significant impacts on mutual fund managers' and CEOs' investment behaviors. A natural question is how bereavement events affect fund or firm performance. On one hand, the changes in bereaved managers' investment decisions could make their funds or firms deviate from the optimal profit maximization strategies and therefore lower the fund or firm performance. On the other hand, two lines of literature suggest that the bereavement effect might not have a negative effect on fund or firm performance. First, previous studies find that actively managed mutual funds underperform (e.g., Jensen, 1968; Fama and French, 2010), suggesting that fund managers may not create value for mutual fund investors. Therefore, the changes in fund managers' decisions associated with bereavement may cause little change or even improvement in fund performance. Likewise, prior studies show that corporate investments can be associated with agency problems and leading to poor firm performance (e.g., Jensen, 1986; Titman et al., 2004; Cooper et al., 2008), so we may observe little change or even improvements in firm performance. Our examination of bereavement events and performance can also shed light on the roles of mutual fund managers and CEOs in creating value for mutual fund investors and shareholders.

6.1 The Effect of Parental Death on Mutual Fund performance

Consistent with the analysis of investment decisions, we measure performance in three separate windows: pre-event window $[-6, -3]$, event window $[-2, +1]$, and post-event window $[+2, +12]$, where month 0 is the month of parental death. The pre-event window serves as the benchmark, and our analysis examines

the difference between the pre-event window and each of the latter two windows. Besides these three windows, we also present the return results for the second year following the event (i.e., [+13, +24]).

We follow the literature and control for potential variations in risk exposure across funds by subtracting the expected return of each fund as calculated using factor loadings estimated over the previous 36 months. Three factor models are used to generate estimates of expected returns: the Fama-French three factor model (Fama and French, 1993) which includes MKT, SMB and HML; the Fama-French five-factor model (Fama and French, 2015) which includes MKT, SMB, HML, RMW, and CMA; and the Pastor-Stambaugh five-factor model which includes the Fama-French three factors, a momentum factor (UMD), and a liquidity factor (Pastor and Stambaugh, 2003).²⁶

We present in Table 9 the abnormal monthly fund returns in the event and post-event windows, in terms of three-factor alphas (Panel A), Fama-French five-factor alphas (Panel B), and Pastor-Stambaugh five-factor alphas (Panel C). We are particularly interested in the difference between the benchmark pre-event window and the event window (or post-event window), which is reported in the bottom rows of each panel. Even though we do not select control funds based on their pre-event performance, the performance between bereaved funds and the control funds are very similar in the pre-event window. However, bereaved funds experience substantial return declines relative to their control funds during the event window [-2, +1]. For instance, bereaved funds' average monthly Fama-French three-factor alpha in Panel A is negative (-35 bps) in the event window, much more negative than that of the control funds (diff of -30 bps). The diff-in-diff in terms of three-factor alphas is negative 34 bps per month, both economically and statistically significant (t-stat of -2.74). The 34 bps per month corresponds to a total abnormal return of 1.36 percent over the four-month event window.

[Table 9 about here]

We also observe a substantial decline in the return of bereaved funds in the post-event months [+2, +12]. For example, in terms of the Fama-French three-factor alphas in Panel A, the diff-in-diff between the pre-event window and the post-event window is negative 19 bps (t-stat of -2.00), corresponding to a total

²⁶ We thank Kenneth French and Lubos Pastor for making the factor returns available.

lower return of 2.09 percent in this eleven-month window. We find only weak evidence of continued decline in fund performance in the [+13, +24] window as the decline in alphas is a small 8 basis point and not statistically significant (t-stat of -0.81). In sum, bereaved funds experience an underperformance by about 3.45 percentage points in terms of the Fama-French three-factor alphas over the fifteen-month period of event and post-event months [-2, +12].

We also estimate diff-in-diff regressions in Panel D of Table 9. The dependent variable is three-factor alphas in Models (1) and (2), and the Fama-French five-factor alphas in Models (3) and (4). The main independent variables are the interaction terms of the event dummy with the dummies of event- and post event-windows. We further control for a broad set of fund characteristics including total assets under management (TNA), its squared term, turnover ratio, expenses, lagged quarterly fund return and fund flows, and fund age. In all regressions, the coefficients of the interaction terms of [-2, +1] and [+2, +12] are significantly negative, and the coefficient of the interaction term of [+13, +24] is insignificantly negative. These results are consistent with the univariate result of a significant decline in performance for bereaved funds in the event and post-event windows. We also conduct the regression analysis using the Pastor and Stambaugh five-factor alphas and for brevity report the results in Table A4 of the Appendix. The results are similar to those using the three-factor alphas and the Fama-French five-factor alphas.

Note that we follow the literature and calculate alphas based on the betas estimated in the previous rolling windows. This approach does not consider the potential changes in betas because of the shift in the agents' investment behaviors. For robustness, we repeat the analysis using daily fund alphas estimated using daily fund returns and daily return factors in the return windows and report the results in Table A5 of the Appendix. The results are similar.

Overall, our results in this subsection are consistent with the joint hypothesis that (1) parental deaths have a negative impact on mutual fund managers' risk-taking and (2) bereaved fund managers influence fund performance despite any contingency plans in place to ensure smooth operations in these mutual funds managing large amount of financial assets.

6.2 The Effect of Parental Death on Firm performance

We then turn to the performance of bereaved CEOs in terms of both accounting performance and stock performance. Specifically, we examine ROA and stock returns around the bereavement events. Panel A of Table 10 presents the ROA and returns of bereaved firms and control firms in the pre-event year of $t-1$ and the event year of t , as well as difference-in-difference. The left panel shows that ROA of bereaved firms experiences a significant decline of 0.95 percentage point in the event year (t-stat -2.02). This decline is also economically significant, which is about 17% of the ROA in year $t-1$. In contrast, the control firms do not experience a decline in ROA in year t . The difference in difference is 1.31 percentage points and statistically significant (t-stat -1.91).

[Table 10 about here]

The right panel presents the average monthly DGTW characteristics-adjusted returns for event firms and control firms in the years $t-1$ and t . Monthly DGTW-adjusted return is calculated as a firm's monthly raw return minus return of the benchmark portfolio based on size, book-to-market ratio, and momentum (Daniel et al., 1997; Wermers, 2004). We follow the same methodology as in Daniel et al. (1997) with the modification proposed by Wermers (2004) that uses the industry adjusted book-to-market ratio. Event firms experience a decline in returns of 0.34% per month in the event year t relative to year $t-1$, although this change is not statistically significant (t-stat -1.37). Control firms experience little change in returns in the event year, and the difference-in-difference is -0.47% per month (t-stat -1.35). We also examine the performance measures for the years $t+1$, $t+2$, and $t+3$, and the unreported results show little change in performance. Overall, these results indicate a slight decline in firm performance in the event year.

Panel B of Table 10 presents the DID regressions of ROA and DGTW-adjusted returns which control for a broad set of firm characteristics. The main independent variables are the interaction terms of the death event dummy with the dummies of event- and post event-windows. In the regressions of ROA (Models 1 and 2), the coefficient of the interaction term of $Post_t$ is significantly negative. The coefficient of the interaction term of $Post_t$ is negative but insignificant in the regressions of stock returns (Models 3 and 4). These results are consistent with the univariate results.

As discussed earlier, the reduced investment associated with bereaved managers can potentially impact

firm performance through two channels, depending on whether the firm adopts “optimal” level of investment in the pre-event period. While a deviation from the optimal level of investments harms firm performance, lowering investments could positively affect firm performance by alleviating the well-known overinvestment problem (e.g., Jensen, 1986; Titman et al., 2004; Cooper et al., 2008). Our results presented in Panels A and B of Table 10 suggest that the negative effect seems to (weakly) dominate the positive effect, causing an average decline in firm performance in the event year.

To explicitly examine these two channels, we test if the decline in performance varies across asset growth in the pre-event period. Asset growth is a proxy for overinvestments as prior research shows that low (high) asset growth predicts positive (negative) future performance in general (e.g., Cooper et al., 2008), suggesting that low (high) asset growth is associated with less (more) overinvestment. Therefore, we expect the decline in performance to be more pronounced for bereaved firms with lower asset growth in the pre-event period.

In Panel C of Table 10, we include the triple interaction of a dummy of low asset growth ($LowATG$) with the DID interaction. $LowATG$ equals one if the firm is in the bottom tercile of asset growth in the pre-event period, and zero otherwise. The results of ROA regressions (Models 1 and 2) show that the decline in ROA for bereaved firms in the first two years after the event is significantly larger for bereaved firms with lower asset growth prior to the event. Specifically, we observe negative coefficients for $Event \times Post_t \times LowATG$ (-0.052, t-stat of -3.84) as well as for $Event \times Post_{t+1} \times LowATG$ (-0.052, t-stat of -2.95). For high asset-growth firms, on the other hand, there is weak evidence of an increase in ROA for bereaved firms after the events. Specifically, the coefficient estimates for $Event \times Post_t$ and $Event \times Post_{t+1}$ are 0.004 (t-stat of 0.56) and 0.022 (t-stat of 1.88), respectively.

Inferences are similar when we use DGTW-adjusted returns as the performance measure in Models (3) and (4) in Panel C. Specifically, we observe negative coefficients for $Event \times Post_t \times LowATG$, indicating the decline in stock returns during the event year is also stronger for bereaved firms with low asset growth before events. The results in Panel C therefore illustrate the two channels through which bereavement impacts firm performance.

Overall, Table 10 shows that CEO bereavement negatively affects the performance of firms that are unlikely to have over-invested in prior periods.

7. Conclusion

Establishing a causal relation between the personal life experience of managers and their professional decisions is challenging as employment decisions of managers are endogenous. In this study, we utilize parental deaths as exogenous shocks to examine the causal relation between personal life experience and investment decisions. Using two independent samples of mutual fund managers and CEOs of public firms, we find systematic changes in investment behavior that are consistent with the effects of anxiety observed in experimental settings and supported by survey data: Anxiety makes individuals more risk-averse.

Our diff-in-diff analyses show that bereaved mutual fund managers significantly reduce the funds' tracking errors and active share measures. They also shift their portfolio holdings to larger stocks. Bereaved CEOs cut their firms' investments, engage in fewer acquisition activities, and reduce their personal investment in their firms' stocks. We also document that bereaved funds and firms experience a decline in performance relative to their peers after the bereavement events. These results are difficult to reconcile with explanations that rely on physical distractions around parental deaths as these distractions are mostly transitory in nature. Moreover, we examine real estate transactions of inherited properties that have the potential of causing long-term distractions; we find that these transactions are relatively infrequent following parental deaths and the corresponding transaction amounts seem too trivial to generate a prolonged substantial impact on fund managers.

In addition to documenting a causal relation between personal life experience and investment decisions, our study also contributes to the behavioral finance literature by showing that anxiety, a common emotional state, can have a substantial influence on investment decisions. Additionally, our findings underscore the importance of managers' personal life events, which can have a negative effect on the performance of the entities they manage. As such, our findings deliver both good and bad news about managers. On the one hand, the decline of performance around personal life events illustrates the crucial role that mutual fund managers

and CEOs play in creating value for investors in their funds and firms. On the other hand, our results indicate that even these professional money managers and corporate leaders are not immune to the impact of emotions caused by various events of personal nature.

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**Table 1: Sample Distribution and Summary Statistics:
Bereavement Events of Mutual Fund Managers**

This table reports the distribution of bereavement events for our sample mutual fund managers and mutual funds as well as the summary statistics of fund characteristics from 1999 to 2013. Panel A reports the annual frequency of bereavement events for fund managers in our sample. Panel B reports the number of mutual funds managed by bereaved managers in our sample by investment objective codes. Panel C reports the average, standard deviation, 25th percentile, median, and 75th percentile of the characteristics of mutual funds in the sample. TNA is total assets under management. Turnover Ratio is the annual turnover ratio of the fund's portfolio. Expense Ratio is the fund's annual expense ratio. These ratios are calculated as the TNA-weighted average across all share classes for each fund. Fund Age is the age of fund in years. # Classes is the number of classes the fund offers.

Panel A: Number of Bereavement Events ($n = 161$)					
Year	Number of Events	Year	Number of Events		
1999	6	2007	14		
2000	12	2008	11		
2001	6	2009	23		
2002	9	2010	10		
2003	12	2011	13		
2004	8	2012	8		
2005	10	2013	12		
2006	7				

Panel B. Number of Bereaved Funds ($n = 304$)			
CRSP Objective Code	Lipper Objective Code	Objective Name	Number of Bereaved Funds
EDYI	EI	Equity Income Funds	14
EDSF	FS	Financial Services Funds	5
EDYB	GI	Growth and Income Funds	52
EDYG	G/CA	Growth/Capital Appreciation Funds	107
EDSH	H	Health/Biotechnology Funds	6
EDCI	MR	Micro-Cap Funds	5
EDCM	MC	Mid-Cap Funds	39
EDST	TK	Science & Technology Funds	3
EDCS	SG	Small-Cap Funds	69
EDSU	UT	Utility Funds	3
M	S	Specialty/Miscellaneous Funds	1

Panel C. Summary Statistics of Bereaved Funds					
	Mean	STD	P25	Median	P75
TNA	1,198	5,202	40	163	531
Turnover Ratio	0.865	0.890	0.400	0.640	0.995
Expense Ratio	0.013	0.005	0.010	0.012	0.015
Fund Age	12.3	10.0	6.0	9.5	16.0
# Classes	2.4	1.8	1.0	2.0	3.0

**Table 2: Sample Distribution and Summary Statistics:
Bereavement Events of Corporate CEOs**

This table reports the distribution of our sample events and firms and summary statistics of firm characteristics from 1994 to 2014. Panel A reports the annual frequency of bereavement events in our sample. Panel B reports the number of bereaved firms in our sample by industry. Panel C reports the average, standard deviation, 25th percentile, median, and 75th percentile of the event firms' characteristics including natural log of market capitalization, book-to-market ratio, ROA, Tobin's Q, capital expenditure (scaled by the lagged total assets), dividend (scaled by the lagged total assets), asset tangibility, and CEO age.

Panel A: Number of Bereavement Events (n = 336)					
Year	Number of Events	Year	Number of Events		
1994	5	2005	14		
1995	10	2006	22		
1996	12	2007	24		
1997	10	2008	23		
1998	6	2009	19		
1999	13	2010	23		
2000	11	2011	27		
2001	15	2012	21		
2002	19	2013	17		
2003	24	2014	13		
2004	8				

Panel B: Number of Bereaved Firms (n = 312)	
Industry	Number of Bereaved Firms
Non-Durables	28
Durables	6
Manufacturing	60
Energy	16
High Tech	58
Telecommunication	6
Shopping	46
Healthcare	20
Utilities	20
Other	52

Panel C: Summary Statistics of Bereaved Firms					
	Mean	STD	P25	Median	P75
Ln(Mkt. Cap.)	7.28	1.55	6.33	7.22	8.21
BM	0.63	0.59	0.31	0.49	0.76
ROA	0.05	0.09	0.01	0.05	0.10
Q	1.81	1.15	1.13	1.48	2.03
CAPEX	0.06	0.07	0.02	0.04	0.08
Dividend	0.01	0.03	0.00	0.00	0.02
Tangibility	0.30	0.24	0.11	0.21	0.42
CEO Age	54.6	6.3	50.0	55.0	59.0

Table 3: Mutual Fund Tracking Errors around Bereavement Events

This table examines the tracking errors of mutual funds around fund managers' bereavement events. The tracking error of a fund is calculated as the volatility of fund daily returns in excess of the average daily returns of all funds with the same investment objective. The tracking errors are calculated over three mutually exclusive windows around fund manager's bereavement events, pre-event months $[-6, -3]$, event months $[-2, +1]$, and post-event months $[+2, +12]$, where month 0 is the month of the bereavement event. For each event fund, we identify a control fund by first selecting a set of candidate funds with the same investment objective and in the same TNA quintile as the event fund. We then choose from this candidate set a control fund that has the closest manager age to that of the event fund's manager. Panel A reports the means of tracking errors of the event funds, control funds, the difference between event funds and control funds as well as the difference-in-differences between the pre-event window and the subsequent windows. Panel B reports the results of DID regressions of tracking errors on the interaction terms between event dummy and two post-event window dummies. Control variables include natural log of TNA and its squared term, portfolio turnover ratio, expense ratio, fund return over last quarter, fund flow over last quarter and natural log of fund age. TNA, portfolio turnover ratio, expense ratio, and fund age are all measured using the most recent available data before the beginning of the window. Firm fixed effects and year-month fixed effects are also included. The variables are described in Table A1 in the Appendix. The t -statistics for DID regressions are based on robust standard errors clustered by fund and month. The t -statistics are in parentheses. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively. **Bold** figures indicate difference-in-difference.

Panel A: Tracking Errors around Fund Managers' Bereavement Events			
	Pre-Event	Event	Post-Event
	$[-6, -3]$	$[-2, +1]$	$[+2, +12]$
Event Funds	5.98%	5.55%	5.26%
Control Funds	5.66%	5.63%	5.64%
Diff (Event – Control)	0.31%	-0.08%	-0.37%
Diff-in-Diff (vs. Pre-Event)		-0.40%** (-2.25)	-0.69%*** (-2.88)

Table 3: Mutual Fund Tracking Errors around Bereavement Events
(Continued)

Panel B: DID regressions of Tracking Errors		
Independent Variables	(1) Tracking Errors	(2) Tracking Errors
Post[-2, +1] × Event	-0.0040** (-2.14)	-0.0040** (-2.15)
Post[+2, +12] × Event	-0.0069** (-2.42)	-0.0065** (-2.28)
Post[-2, +1]	-0.0003 (-0.18)	0.0022 (1.32)
Post[+2, +12]	-0.0003 (-0.10)	0.0037 (1.68)
Log (TNA)		-0.0048 (-0.93)
Log (TNA) ²		0.0007 (1.02)
Turnover		0.0040 (1.30)
Expenses		0.6318 (0.74)
Return(<i>q</i> -1)		-0.0466 (-4.28)
Flow(<i>q</i> -1)		0.0001 (1.21)
Log (Fund Age)		-0.0226 (-2.37)
Fund Fixed Effects	Yes	Yes
Year-Month Fixed Effects	Yes	Yes
# Obs.	1,434	1,375
Adj. R-sq.	0.871	0.884

Table 4: Fund Active Share around Bereavement Events

This table examines the active share of mutual funds around fund managers' bereavement events. Active share is calculated as the sum of absolute differences in portfolio weights between the fund and its index and then divided by two. We use the aggregate holdings of all mutual funds in the same objective code as the index for each fund. We calculate active share over three exclusive bi-quarterly windows around fund manager's bereavement event: pre-event quarter [Q-2, Q-1], event quarter [Q, Q+1], and post-event quarter [Q+2, Q+3], where quarter Q is the bereavement event quarter. For each event fund, we identify a control fund by first selecting a set of candidate funds with the same investment objective that also belong to the same TNA quintile as the event fund within that investment objective group. We then choose from this candidate set a control fund that has the closest manager age to that of the event fund's manager. Panel A reports the means of active share of the event funds, control funds, the difference between event funds and control funds as well as the difference-in-differences between the pre-event quarter and the subsequent windows. Panel B presents the DID regressions of active share on the interaction terms between event dummy and two post-event window dummies. Control variables include natural log of TNA and its squared term, portfolio turnover ratio, expense ratio, fund return over the previous quarter, fund flow over the previous quarter and natural log of fund age. TNA, portfolio turnover ratio, expense ratio, and fund age are all measured using the most recent available data before the beginning of the window. The variables are described in Table A1 in the Appendix. Firm fixed effects and year-quarter fixed effects are also included. The t-statistics for DID regressions are based on robust standard errors clustered by fund and quarter. The t-statistics for the differences are in parentheses. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively. **Bold** figures indicate difference-in-difference.

Panel A: Active Share around Fund Managers' Bereavement Events			
	Pre-Event [Q-2, Q-1]	Event [Q, Q+1]	Post-Event [Q+2, Q+3]
Event Funds	81.52%	80.97%	80.53%
Control Funds	81.65%	81.95%	82.08%
Diff (Event – Control)	-0.12%	-0.98%	-1.55%
Diff-in-Diff (vs. Pre-Event)		-0.86%** (-2.00)	-1.43%*** (-2.63)

Table 4: Fund Active Share around Bereavement Events
(Continued)

Panel B: DID regressions of Active Share		
Independent Variables	(1) Active Share	(2) Active Share
Post [Q, Q+1] × Event	-0.0086** (-2.35)	-0.0079** (-2.06)
Post [Q+2, Q+3] × Event	-0.0143*** (-3.03)	-0.0128** (-2.58)
Post [Q, Q+1]	0.0031 (1.10)	0.0044 (1.35)
Post [Q+2, Q+3]	0.0044 (1.26)	0.0064 (1.67)
Log (TNA)		0.0020 (0.41)
Log (TNA) ²		-0.0002 (-0.26)
Turnover		0.0009 (0.15)
Expenses		1.9973 (1.88)
Return(q-1)		-0.0127 (-1.23)
Flow(q-1)		-0.0001 (-0.02)
Log (Fund Age)		-0.0201 (-1.04)
Fund Fixed Effects	Yes	Yes
Year-Quarter Fixed Effects	Yes	Yes
# Obs.	1,086	1,041
Adj. R-sq.	0.943	0.943

Table 5: Fund Portfolio Stock Sizes around Bereavement Events

This table examines the fraction of fund portfolios allocated to large-cap and small-cap stocks around fund managers' bereavement events. "Large" stocks are defined as stocks in the largest monthly quartile of market capitalizations, while "Small" stocks are stocks in the second quartile of market cap. The fractions are calculated for three separate fund holdings reports: the last in the pre-event window [Q-2, Q-1] prior to the parental death event, the last report in the event window [Q, Q+1], and the first report in the post-event window [Q+2, Q+3], where quarter Q represents the event quarter. Panel A compares the event window vs. the pre-event window, whereas Panel B compares the post-event window vs. the pre-event window. For each event fund, we identify a control fund by first selecting a set of candidate funds with the same investment objective that also belong to the same TNA quintile as the event fund in that investment objective group. We then choose from this candidate set a control fund that has the closest manager age to that of the event fund's manager. We report the means of aggregate fraction of small and large stocks in the portfolio and total portfolio weights of small and large stocks for our event funds, control funds, the difference between event funds and control funds as well as the difference-in-differences between pre-event window and the subsequent windows. Panel C presents DID regressions of portfolio stock sizes on the interaction terms between event dummy and two post-event window dummies. Control variables include natural log of TNA and its squared term, portfolio turnover ratio, expense ratio, fund return over last quarter, fund flow over last quarter and natural log of fund age. TNA, portfolio turnover ratio, expense ratio, and fund age are all measured using the most recent available data before the beginning of the window. The variables are described in Table A1 in the Appendix. Firm fixed effects and year-quarter fixed effects are also included. The t-statistics for DID regressions are based on robust standard errors clustered by fund and quarter. The *t*-statistics for the differences are in parentheses. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively. **Bold** figures indicate difference-in-difference.

Panel A: Portfolio Stock Sizes in Event Window [Q, Q+1]				
	Equal-Weighted Fractions (Number of Firms)		Value-Weighted Fractions (Portfolio Weights)	
	Small Stocks	Large Stocks	Small Stocks	Large Stocks
Event Funds:				
Pre-Event [Q-2, Q-1]	16.25%	79.53%	13.97%	83.57%
Post-Event [Q, Q+1]	15.11%	80.70%	12.88%	84.66%
Difference	-1.14%	1.17%	-1.09%	1.09%
	(-2.84)	(2.64)	(-2.93)	(2.75)
Control Funds:				
Pre-Event [Q-2, Q-1]	14.43%	80.93%	12.79%	84.03%
Post-Event [Q, Q+1]	14.50%	80.92%	12.86%	84.10%
Difference	0.07%	-0.01%	0.07%	0.07%
	(0.23)	(-0.02)	(0.23)	(0.20)
Diff-in-Diff	-1.21%***	1.17%**	-1.16%***	1.02%**
	(-2.66)	(2.33)	(-2.59)	(2.19)

Table 5: Fund Portfolio Stock Sizes around Bereavement Events

(Continued)

Panel B: Portfolio Stock Sizes in Post-Event Quarter [Q+2, Q+3]				
	Equal-Weighted Fractions (# of Portfolio Stocks)		Value-Weighted Fractions (Portfolio Weights)	
	Small Stocks	Large Stocks	Small Stocks	Large Stocks
Event Funds:				
Pre-Event [Q-2, Q-1]	16.25%	79.53%	13.97%	83.57%
Post-Event [Q+2, Q+3]	15.19%	80.62%	13.10%	84.45%
Difference	-1.07% (-2.43)	1.09% (2.27)	-0.87% (-2.18)	0.88% (2.09)
Control Funds:				
Pre-Event [Q-2, Q-1]	14.43%	80.93%	12.79%	84.03%
Post-Event [Q+2, Q+3]	14.70%	80.63%	13.16%	83.82%
Difference	0.27% (0.76)	-0.30% (-0.72)	0.37% (1.01)	-0.21% (-0.49)
Diff-in-Diff	-1.33%** (-2.47)	1.39%** (2.26)	-1.24%** (-2.40)	1.09%* (1.91)
Panel C: DID Regressions of Value-Weighted Portfolio Sizes				
	(1) Small Stocks	(2) Small Stocks	(3) Large Stocks	(4) Large Stocks
Post [Q, Q+1] × Event	-0.0116** (-2.36)	-0.0127** (-2.41)	0.0102** (2.51)	0.0113*** (2.63)
Post [Q+2, Q+3] × Event	-0.0124** (-2.19)	-0.0144** (-2.38)	0.0109** (2.07)	0.0130** (2.24)
Post [Q, Q+1]	0.0007 (0.19)	0.0003 (0.08)	0.0007 (0.24)	0.0003 (0.09)
Post [Q+2, Q+3]	0.0037 (0.86)	0.0043 (0.81)	-0.0021 (-0.51)	-0.0039 (-0.91)
Log (TNA)		-0.0102 (-0.73)		0.0077 (0.55)
Log (TNA) ²		-0.0006 (-0.38)		0.0016 (1.20)
Turnover		-0.0008 (-0.20)		0.0049 (2.16)
Expenses		1.9734 (1.29)		-0.1578 (-0.09)
Return(q-1)		0.0137 (1.09)		-0.0308 (-1.73)
Flow(q-1)		0.0003 (1.59)		-0.0003 (-1.51)
Log (Fund Age)		0.0066 (0.20)		0.0086 (0.28)
Fund Fixed Effects	Yes	Yes	Yes	Yes
Year-Quarter Fixed Effects	Yes	Yes	Yes	Yes
# Obs.	1,212	1,160	1,212	1,160
Adj. R-sq.	0.960	0.960	0.971	0.971

Table 6: Firm Capital Expenditure around and after Bereavement Events

This table examines the capital expenditure of firms around and after their CEOs' bereavement events. Capital expenditure of a firm is scaled by the lagged total asset and calculated over five years around the CEO's bereavement event: pre-event year $t-1$, event year t , and post-event years $t+1$, $t+2$, and $t+3$, where year t is the year of bereavement event. For each event firm, we identify a control firm by first selecting a set of candidate firms in the same FF-10 industry as the event firm that also belong to the same size quintile as the event firm within the industry. We then choose from this candidate set a control firm that has the closest CEO age to that of the event firm's CEO. In case there are multiple firms with the same absolute CEO age difference, we choose the control firm with the closest book-to-market ratio to that of the event firm. We report the average capital expenditure of the event firms, control firms, the difference between event firms and control firms as well as the difference-in-differences between pre-event window and the subsequent windows. Panels A, B, C, and D report capital expenditure of year t , year $t+1$, year $t+2$, and year $t+3$, respectively. Panel E presents DID regressions of capital expenditure on the interaction terms between event dummy and four post-event window dummies. Control variables include Tobin's Q, operating cash flows, book leverage, dividend, cash, ROA, sales growth rate, natural log of firm size, natural log of one plus firm age, and asset tangibility. Operating cash flows, dividend, cash are all scaled by the gross property, plant and equipment of the previous year end. Control variables are all measured at the previous year end. The variables are described in Table A1 in the Appendix. Firm fixed effects and year fixed effects are also included. The t -statistics for DID regressions are based on robust standard errors clustered by firm and year. The t -statistics are in parentheses. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively. **Bold** figures indicate difference-in-difference.

	Event Firms	Control Firms	Difference
Panel A: Capital Expenditure of Event Year [t]			
Pre-Event [t-1]	0.0667	0.0651	0.0016
Event [t]	0.0606	0.0631	-0.0025
Difference	-0.0061*	-0.0021	-0.0041
	(-1.95)	(-0.87)	(-1.19)
Panel B: Capital Expenditure of Year [t+1]			
Pre-Event [t-1]	0.0689	0.0621	0.0068
Event [t+1]	0.0588	0.0626	-0.0038
Difference	-0.0101**	0.0005	-0.0106**
	(-2.46)	(0.14)	(-2.26)
Panel C: Capital Expenditure of Year [t+2]			
Pre-Event [t-1]	0.0661	0.0554	0.0107
Event [t+2]	0.0548	0.0545	0.0003
Difference	-0.0113**	-0.0009	-0.0104**
	(-2.41)	(-0.30)	(-2.09)
Panel D: Capital Expenditure of Year [t+3]			
Pre-Event [t-1]	0.0678	0.0528	0.0151
Event [t+3]	0.0536	0.0524	0.0012
Difference	-0.0142***	-0.0004	-0.0139**
	(-2.80)	(-0.09)	(-2.46)

Table 6: Firm Capital Expenditure around and after Bereavement Events
(Continued)

Panel E: DID Regressions of Capital Expenditure		
Independent Variables	CAPX	
	(1)	(2)
Event × Post_t	-0.0041	-0.0037
	(-1.26)	(-1.00)
Event × Post_{t+1}	-0.0076*	-0.0086**
	(-1.85)	(-1.98)
Event × Post_{t+2}	-0.0079*	-0.0107**
	(-1.80)	(-2.21)
Event × Post_{t+3}	-0.0119**	-0.0114**
	(-2.37)	(-2.15)
Post _t	-0.0012	-0.0011
	(-0.68)	(-0.47)
Post _{t+1}	0.0007	0.0016
	(0.22)	(0.48)
Post _{t+2}	-0.0008	0.0007
	(-0.23)	(0.18)
Post _{t+3}	0.0010	0.0010
	(0.23)	(0.20)
Tobin's Q		0.0077
		(3.98)
Operating CF		-0.0009
		(-1.85)
Leverage		0.0006
		(0.12)
Dividend		-0.0552
		(-3.80)
Cash		0.0031
		(1.49)
ROA		-0.0000
		(-0.51)
Sales Growth		0.0538
		(2.54)
Ln(Size)		0.0038
		(0.87)
Ln(FirmAge+1)		-0.0113
		(-1.01)
Tangibility		-0.0398
		(-0.87)
Firm Fixed Effects	Yes	Yes
Year Fixed Effects	Yes	Yes
# Obs.	2,496	2,245
Adj. R-sq.	0.747	0.766

Table 7: Firm Acquisition Activities around and after Bereavement Events

This table examines the acquisition activities of firms around and after their CEOs' bereavement events. We examine two annual measures of acquisition activities for a firm-year: the number of announced acquisitions made by the firm in a year, and the natural log of total deal values of the acquisitions. We calculate these two measures over five years around firm CEO's bereavement events: pre-event year $t-1$, event year t , and post-event years $t+1$, $t+2$ and $t+3$, where year t is the year of bereavement event. For each event firm, we identify a control firm by first selecting a set of candidate firms in the same FF-10 industry as the event firm that also belong to the same size quintile as the event firm within the industry. We then choose from this candidate set a control firm that has the closest CEO age to that of the event firm's CEO. In case there are multiple firms with the same absolute CEO age difference, we choose the control firm with the closest book-to-market ratio to that of the event firm. We report the average number of acquisition deals and natural log of total deal value for the event firms, control firms, the difference between event firms and control firms as well as the difference-in-differences between the pre-event window and the subsequent windows. Panels A, B, C, and D report acquisition activities of year t , year $t+1$, year $t+2$, and year $t+3$, respectively. Panel E presents DID regressions of acquisition activities on the interaction terms between event dummy and four post-event window dummies. Control variables include Tobin's Q, operating cash flows, book leverage, dividend, cash, ROA, sales growth rate, natural log of firm size, natural log of one plus firm age, and asset tangibility. Operating cash flows, dividend, cash are all scaled by the gross property, plant and equipment of the previous year end. Control variables are all measured at the previous year end. The variables are described in Table A1 in the Appendix. Firm fixed effects and year fixed effects are also included. The t -statistics for DID regressions are based on robust standard errors clustered by firm and year. The t -statistics are in parentheses. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively. **Bold** figures indicate difference-in-difference.

	# of Acquisitions			Total Deal Value		
	Event Firms	Control Firms	Difference	Event Firms	Control Firms	Difference
Panel A: Acquisitions in Event Year [t]						
Pre-Event [t-1]	0.4776	0.4269	0.0507	2.0156	1.8168	0.1988
Event [t]	0.4149	0.3731	0.0418	1.7270	1.5788	0.1483
Difference	-0.0627 (-1.20)	-0.0537 (-0.99)	-0.0090 (-0.12)	-0.2886 (-1.28)	-0.2380 (-0.98)	-0.0506 (-0.15)
Panel B: Acquisitions in Year [t+1]						
Pre-Event [t-1]	0.4881	0.4087	0.0794	2.0467	1.7428	0.3039
Event [t+1]	0.3452	0.4365	-0.0913	1.4361	2.0145	-0.5785
Difference	-0.1429** (-2.36)	0.0278 (0.44)	-0.1706* (-1.91)	-0.6106** (-2.41)	0.2717 (0.95)	-0.8824** (-2.24)
Panel C: Acquisitions in Year [t+2]						
Pre-Event [t-1]	0.4845	0.3660	0.1186	1.9886	1.5079	0.4807
Event [t+2]	0.3299	0.3866	-0.0567	1.4018	1.6052	-0.2034
Difference	-0.1546** (-2.33)	0.0206 (0.27)	-0.1753* (-1.80)	-0.5868* (-1.93)	0.0973 (0.30)	-0.6841 (-1.58)
Panel D: Acquisitions in Year [t+3]						
Pre-Event [t-1]	0.4737	0.3750	0.0987	1.9805	1.5365	0.4440
Event [t+3]	0.2434	0.4211	-0.1776	1.0533	1.8597	-0.8064
Difference	-0.2303*** (-3.20)	0.0461 (0.51)	-0.2763** (-2.44)	-0.9272*** (-2.95)	0.3232 (0.85)	-1.2504** (-2.57)

Table 7: Firm Acquisition Activities around and after Bereavement Events
(Continued)

Panel E: DID Regressions of Acquisition Activities				
Independent Variables	# of Acquisitions		Total Deal Value	
	(1)	(2)	(3)	(4)
Event × Post_t	-0.0090 (-0.14)	0.0057 (0.07)	-0.0506 (-0.19)	0.0748 (0.25)
Event × Post_{t+1}	-0.1557** (-2.01)	-0.1643** (-2.11)	-0.8826*** (-2.76)	-0.8703*** (-2.79)
Event × Post_{t+2}	-0.1240* (-1.72)	-0.1623** (-2.08)	-0.5395** (-1.99)	-0.6560** (-2.19)
Event × Post_{t+3}	-0.2182** (-2.47)	-0.2052** (-2.10)	-1.0397*** (-2.92)	-0.9401** (-2.36)
Post _t	-0.0528 (-1.41)	-0.0573 (-1.21)	-0.2500 (-1.52)	-0.3098 (-1.50)
Post _{t+1}	0.0419 (0.76)	0.0412 (0.71)	0.3038 (1.30)	0.2877 (1.13)
Post _{t+2}	0.0204 (0.28)	0.0422 (0.52)	0.0743 (0.26)	0.1058 (0.33)
Post _{t+3}	0.0675 (0.92)	0.0335 (0.37)	0.3708 (1.33)	0.1685 (0.50)
Tobin's Q		0.0592 (2.05)		0.3310 (2.39)
Operating CF		-0.0019 (-0.25)		-0.0203 (-0.73)
Leverage		-0.1209 (-2.27)		-0.5895 (-2.66)
Dividend		-0.9605 (-4.36)		-4.3218 (-4.78)
Cash		-0.0425 (-0.56)		-0.3975 (-2.06)
ROA		0.0006 (0.30)		0.0001 (0.01)
Sales Growth		0.4304 (2.07)		2.8059 (3.01)
Ln(Size)		-0.0198 (-0.55)		-0.0768 (-0.64)
Ln(FirmAge+1)		-0.0014 (-0.01)		0.6700 (0.88)
Tangibility		0.4169 (1.35)		1.9315 (1.33)
Firm Fixed Effects	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
# Obs.	2,536	2,270	2,536	2,270
Adj. R-sq.	0.231	0.244	0.200	0.215

Table 8: CEO Ownership around and after Bereavement Events

This table reports CEOs' ownerships of their firms' shares around and after the bereavement events. We construct two measures of CEO ownerships, one excluding stock options and the other including options. CEO ownerships excluding options are directly obtained from ExecuComp database. CEO ownerships including options are calculated as sum of the number of stocks held by CEO and option deltas of all stock options held by a CEO, scaled by the sum of the number of shares outstanding and the delta of all outstanding stock options. Delta of stock options is calculated following Core and Guay (2002). We calculate these two measures over five years around firm CEO's bereavement events: pre-event year $t-1$, event year t , and post-event years $t+1$, $t+2$ and $t+3$, where year t is the year of bereavement event. For each event firm, we identify a control firm by first selecting a set of candidate firms in the same FF-10 industry as the event firm that also belong to the same size quintile as the event firm within the industry. We then choose from this candidate set a control firm that has the closest CEO age to that of the event firm's CEO. In case there are multiple firms with the same absolute CEO age difference, we choose the control firm with the closest book-to-market ratio to that of the event firm. We report average CEO ownerships for the event firms, control firms, the difference between event firms and control firms as well as the difference-in-differences between the pre-event window and the subsequent windows. Panels A, B, C, and D report CEO ownership of year t , year $t+1$, year $t+2$, and year $t+3$, respectively. Panel E presents DID regressions of CEO ownership on the interaction terms between event dummy and four post-event window dummies. Control variables include Tobin's Q, operating cash flows, book leverage, dividend, cash, ROA, sales growth rate, natural log of firm size, natural log of one plus firm age, and asset tangibility. Operating cash flows, dividend, cash are all scaled by the gross property, plant and equipment of the previous year end. Control variables are all measured at the previous year end. The variables are described in Table A1 in the Appendix. Firm fixed effects and year fixed effects are also included. The t -statistics for DID regressions are based on robust standard errors clustered by firm and year. The t -statistics are in parentheses. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively. **Bold** figures indicate difference-in-difference.

	CEO Ownership (Excl. Options)			CEO Ownership (Incl. Options)		
	Event Firms	Control Firms	Difference	Event Firms	Control Firms	Difference
Panel A: CEO Ownership of Event Year [t]						
Pre-Event [t-1]	0.0297	0.0180	0.0117	0.0365	0.0250	0.0115
Event [t]	0.0294	0.0179	0.0115	0.0361	0.0248	0.0113
Difference	-0.0003	-0.0001	-0.0002	-0.0004	-0.0002	-0.0002
	(-0.10)	(-0.18)	(-0.07)	(-0.17)	(-0.43)	(-0.08)
Panel B: CEO Ownership of Year [t+1]						
Pre-Event [t-1]	0.0327	0.0197	0.0130	0.0391	0.0271	0.0120
Event [t+1]	0.0277	0.0203	0.0074	0.0343	0.0269	0.0074
Difference	-0.0050*	0.0006	-0.0056*	-0.0048*	-0.0003	-0.0045
	(-1.76)	(0.41)	(-1.76)	(-1.78)	(-0.17)	(-1.49)
Panel C: CEO Ownership of Year [t+2]						
Pre-Event [t-1]	0.0356	0.0209	0.0147	0.0418	0.0284	0.0134
Event [t+2]	0.0278	0.0224	0.0054	0.0345	0.0290	0.0055
Difference	-0.0078**	0.0015	-0.0093**	-0.0073**	0.0006	-0.0079*
	(-2.10)	(0.67)	(-2.13)	(-2.05)	(0.26)	(-1.87)
Panel D: CEO Ownership of Year [t+3]						
Pre-Event [t-1]	0.0408	0.0227	0.0181	0.0476	0.0306	0.0170
Event [t+3]	0.0277	0.0213	0.0063	0.0344	0.0278	0.0066
Difference	-0.0132**	-0.0014	-0.0118*	-0.0132**	-0.0029	-0.0103*
	(-2.45)	(-0.50)	(-1.95)	(-2.57)	(-1.02)	(-1.73)

Table 8: CEO Ownership around and after Bereavement Events

(Continued)

Panel E: DID Regressions of CEO Ownership				
Independent Variables	CEO Ownership (excl. option)		CEO Ownership (incl. option)	
	(1)	(2)	(3)	(4)
Event × Post_t	-0.0002 (-0.19)	-0.0001 (-0.06)	-0.0002 (-0.21)	-0.0001 (-0.06)
Event × Post_{t+1}	-0.0042 (-1.57)	-0.0022 (-0.95)	-0.0033 (-1.26)	-0.0013 (-0.53)
Event × Post_{t+2}	-0.0069* (-1.97)	-0.0052* (-1.70)	-0.0058 (-1.64)	-0.0041 (-1.32)
Event × Post_{t+3}	-0.0082* (-1.80)	-0.0064 (-1.49)	-0.0072 (-1.62)	-0.0054 (-1.36)
Post _t	0.0002 (0.45)	0.0000 (0.06)	0.0002 (0.30)	-0.0002 (-0.22)
Post _{t+1}	0.0006 (0.35)	0.0009 (0.50)	0.0002 (0.10)	0.0001 (0.04)
Post _{t+2}	0.0015 (0.76)	0.0013 (0.57)	0.0012 (0.61)	0.0007 (0.34)
Post _{t+3}	-0.0010 (-0.51)	-0.0014 (-0.62)	-0.0014 (-0.66)	-0.0024 (-1.05)
Tobin's Q		0.0010 (2.03)		0.0015 (2.62)
Operating CF		0.0002 (1.86)		0.0002 (2.07)
Leverage		-0.0039 (-2.96)		-0.0039 (-3.26)
Dividend		-0.0091 (-2.08)		-0.0079 (-1.89)
Cash		0.0038 (1.25)		0.0045 (1.50)
ROA		-0.0000 (-1.29)		-0.0001 (-1.44)
Sales Growth		-0.0072 (-1.29)		-0.0074 (-1.01)
Ln(Size)		0.0021 (1.27)		0.0027 (1.27)
Ln(FirmAge+1)		-0.0025 (-0.39)		-0.0060 (-0.90)
Tangibility		0.0150 (1.13)		0.0218 (1.62)
Firm Fixed Effects	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
# Obs.	2,425	2,172	2,395	2,143
Adj. R-sq.	0.841	0.871	0.843	0.868

Table 9: Fund Returns around Bereavement Events

This table examines the performance of mutual funds around fund managers' bereavement events. Monthly fund returns are controlled against funds with the peer funds, after controlling for Fama-French three-factor model (in Panel A), Fama-French five-factor model (i.e., MKT, SMB, HML, RMW and CMA, in Panel B), Pastor and Stambaugh (2003) five-factor model (i.e., MKT, SMB, HML, UMD, and liquidity factor, in Panel C). For each event fund, we identify a control fund by first selecting a set of candidate funds with same investment objective as the event fund that also belong to the same TNA quintile as the event fund within that investment objective group. We then choose from this candidate set a control fund that has the closest manager age to that of the event fund's manager. The factor models are estimated using 36-month time-series rolling regressions. These adjusted returns are calculated over four exclusive windows around fund manager's bereavement event: pre-event months $[-6, -3]$, event months $[-2, +1]$, and post-event months $[+2, +12]$ and $[+13, +24]$, where month 0 is the month of the bereavement event. We then report the means of these adjusted returns, the corresponding adjusted returns of the control funds, the difference between event funds and control funds as well as the difference-in-differences between pre-event windows and the subsequent windows. Panel D report DID regressions of the Fama-French three-factor and five-factor alphas on the interaction terms between event dummy and three post-event window dummies. Control variables include natural log of TNA and its squared value, portfolio turnover ratio, expense ratio, fund return over last quarter, fund flow over last quarter and natural log of fund age. TNA, portfolio turnover ratio, expense ratio, and fund age are all measured using the most recent available data before the beginning of the window. The variables are described in Table A1 in the Appendix. Fund fixed effects and year-month fixed effects are also included. The t -statistics for DID regressions are based on robust standard errors clustered by firm and month. The t -statistics are in parentheses. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively. **Bold** figures indicate difference-in-difference.

Panel A: Fama-French 3-Factor Alphas				
	Pre-Event	Event	Post-Event	
	$[-6, -3]$	$[-2, +1]$	$[+2, +12]$	$[+13, +24]$
Event Funds	-0.03%	-0.35%	-0.19%	-0.10%
Control Funds	-0.07%	-0.05%	-0.04%	-0.06%
Diff (Event – Control)	0.04%	-0.30%	-0.15%	-0.04%
Diff-in-Diff (vs. Pre-Event)		-0.34%*** (-2.74)	-0.19%** (-2.00)	-0.08% (-0.81)
Panel B: Fama-French 5-Factor Alphas				
	Pre-Event	Event	Post-Event	
	$[-6, -3]$	$[-2, +1]$	$[+2, +12]$	$[+13, +24]$
Event Funds	-0.04%	-0.34%	-0.20%	-0.10%
Control Funds	-0.09%	-0.04%	-0.06%	-0.06%
Diff (Event – Control)	0.05%	-0.30%	-0.14%	-0.05%
Diff-in-Diff (vs. Pre-Event)		-0.35%** (-2.41)	-0.19%* (-1.77)	-0.10% (-0.87)
Panel C: Pastor-Stambaugh 5-Factor Alphas				
	Pre-Event	Event	Post-Event	
	$[-6, -3]$	$[-2, +1]$	$[+2, +12]$	$[+13, +24]$
Event Funds	0.00%	-0.31%	-0.17%	-0.10%
Control Funds	-0.04%	0.02%	-0.03%	-0.05%
Diff (Event – Control)	0.04%	-0.33%	-0.14%	-0.04%
Diff-in-Diff (vs. Pre-Event)		-0.37%*** (-3.05)	-0.18%** (-2.01)	-0.08% (-0.90)

Table 9: Fund Returns around Bereavement Events
(Continued)

Panel D: DID Regressions of Alphas				
Independent Variables	(1) FF 3-Factor Alpha	(2) FF 3-Factor Alpha	(3) FF 5-Factor Alpha	(4) FF 5-Factor Alpha
Post[-2, +1] × Event	-0.0034** (-2.53)	-0.0032** (-2.50)	-0.0035** (-2.19)	-0.0034** (-2.13)
Post[+2, +12] × Event	-0.0019* (-1.66)	-0.0023** (-1.96)	-0.0019* (-1.68)	-0.0022* (-1.81)
Post[+13, +24] × Event	-0.0008 (-0.69)	-0.0012 (-0.99)	-0.0010 (-0.75)	-0.0012 (-0.88)
Post[-2, +1]	0.0012 (1.12)	0.0011 (1.06)	0.0012 (0.96)	0.0013 (1.04)
Post[+2, +12]	0.0008 (0.96)	0.0011 (1.39)	0.0007 (0.87)	0.0012 (1.30)
Post[+13, +24]	0.0012 (1.31)	0.0013 (1.46)	0.0009 (0.97)	0.0012 (1.34)
Log (TNA)		-0.0002 (-0.10)		0.0005 (0.34)
Log (TNA) ²		-0.0003 (-1.63)		-0.0002 (-1.37)
Turnover		0.0017 (1.91)		0.0008 (1.16)
Expenses		0.1234 (0.27)		0.1583 (0.39)
Return(q-1)		-0.0292 (-2.36)		-0.0212 (-1.67)
Flow(q-1)		-0.0007 (-1.51)		-0.0007 (-1.64)
Log (Fund Age)		0.0007 (0.23)		-0.0048 (-1.64)
Fund Fixed Effects	Yes	Yes	Yes	Yes
Year-Month Fixed Effects	Yes	Yes	Yes	Yes
# Obs.	1,640	1,611	1,640	1,611
Adj. R-sq.	0.224	0.248	0.259	0.264

Table 10: Firm Performance around and after Bereavement Events

This table reports firms' ROA and abnormal returns around and after their CEOs' bereavement events. ROA is the firm's net income scaled by total asset of previous year end. Abnormal return is the firm's average DGTW characteristics-adjusted monthly return of a year. We calculate the two performance variables over the five years around the CEO's bereavement event: the pre-event year $t-1$, the event year t , and the post-event years $t+1$, $t+2$, and $t+3$, where year t is the year of bereavement event. For each event firm, we identify a control firm by first selecting a set of candidate firms in the same FF-10 industry as the event firm that also belong to the same size quintile as the event firm within the industry. We then choose from this candidate set a control firm that has the closest CEO age to that of the event firm's CEO. In case there are multiple firms with the same absolute CEO age difference, we choose the control firm with the closest book-to-market ratio to that of the event firm. We report the average performance measures of the event firms, control firms, the difference between event firms and control firms as well as the difference-in-difference between the pre-event window and the subsequent windows. Panel A reports the univariate DID test for the performance measures of year t . Panel B presents DID regressions of performance measures on the interaction terms between event dummy and four post-event window dummies. Panel C presents regressions that include triple interactions of the DID interactions and low asset growth dummy (*LowATG*). *LowATG* is a dummy variable, which takes the value of one for firms in the bottom tercile of asset growth in the year prior to the event (total assets of year $t-1$ divided by total assets of year $t-2$). All lower-order terms are included in the regressions except for the event dummy, low asset growth dummy, and the interaction between them, as they will be subsumed by the firm fixed effects. Control variables include Tobin's Q, operating cash flows, book leverage, dividend, cash, ROA, sales growth rate, natural log of firm size, natural log of firm age plus one, and asset tangibility. Control variables are all measured at the previous year end. The variables are described in Table A1 in the Appendix. Firm and year fixed effects are also controlled. The t -statistics for DID regressions are based on robust standard errors clustered by firm and year. The t -statistics are in parentheses. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively. **Bold** figures indicate difference-in-difference.

Panel A: Performance of Event Year [t]						
	ROA			DGTW Adjusted Return		
	Event Firms	Control Firms	Difference	Event Firms	Control Firms	Difference
Pre-Event [t-1]	0.0568	0.0458	0.0110	-0.0011	-0.0019	0.0008
Event [t]	0.0473	0.0494	-0.0021	-0.0046	-0.0007	-0.0039
Difference	-0.0095**	0.0036	-0.0131*	-0.0034	0.0012	-0.0047
	(-2.02)	(0.68)	(-1.91)	(-1.37)	(0.49)	(-1.35)

Table 10: Firm Performance around and after Bereavement Events
(Continued)

Panel B: DID Regressions of Performance Measures				
Independent Variables	Dep. Var.: ROA		Dep. Var.: DGTW Adj. Return	
	(1)	(2)	(3)	(4)
Event × Post_t	-0.0131*	-0.0130**	-0.0047	-0.0034
	(-1.92)	(-1.99)	(-1.26)	(-1.08)
Event × Post_{t+1}	0.0038	0.0047	-0.0001	-0.0016
	(0.37)	(0.51)	(-0.04)	(-0.48)
Event × Post_{t+2}	-0.0131	-0.0141	0.0003	0.0009
	(-1.53)	(-1.57)	(0.10)	(0.24)
Event × Post_{t+3}	-0.0040	0.0027	0.0037	0.0045
	(-0.41)	(0.22)	(0.81)	(0.92)
Post _t	0.0055	0.0079	0.0018	-0.0004
	(1.00)	(1.26)	(0.70)	(-0.19)
Post _{t+1}	0.0022	0.0047	0.0009	0.0003
	(0.23)	(0.48)	(0.33)	(0.08)
Post _{t+2}	0.0023	0.0094	-0.0008	-0.0012
	(0.27)	(1.09)	(-0.29)	(-0.32)
Post _{t+3}	-0.0052	-0.0021	-0.0047	-0.0067
	(-0.43)	(-0.19)	(-1.37)	(-1.42)
Tobin's Q		0.0310		0.0025
		(4.51)		(0.80)
Operating CF		0.0028		-0.0002
		(1.71)		(-0.72)
Leverage		-0.0027		-0.0397
		(-0.38)		(-9.03)
Dividend		0.0027		-0.0186
		(0.15)		(-1.99)
Cash		0.0030		-0.0056
		(0.59)		(-1.97)
ROA		0.0001		0.0001
		(0.32)		(0.61)
Sales Growth		-0.0470		-0.0015
		(-0.97)		(-0.07)
Ln(Size)		0.0163		-0.0003
		(2.81)		(-0.14)
Ln(FirmAge+1)		-0.0258		0.0243
		(-0.71)		(2.07)
Tangibility		0.0662		-0.0055
		(1.10)		(-0.28)
Firm Fixed Effects	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
# Obs.	2546	2280	2328	2103
Adj. R-sq.	0.457	0.526	-0.015	0.193

Table 10: Firm Performance around and after Bereavement Events
(Continued)

Panel C: DID Regressions of Performance Measures Including Interactions with Past Asset Growth				
Independent Variables	Dep. Var.: ROA		Dep. Var.: DGTW Adj. Return	
	(1)	(2)	(3)	(4)
Event × Post_t × LowATG	-0.0522*** (-3.84)	-0.0463*** (-4.11)	-0.0111** (-2.15)	-0.0179*** (-2.78)
Event × Post_{t+1} × LowATG	-0.0522*** (-2.95)	-0.0426*** (-2.80)	0.0059 (0.69)	-0.0066 (-0.89)
Event × Post_{t+2} × LowATG	-0.0242 (-1.02)	-0.0013 (-0.07)	0.0047 (0.51)	-0.0079 (-0.96)
Event × Post_{t+3} × LowATG	-0.0037 (-0.19)	0.0066 (0.29)	-0.0026 (-0.36)	-0.0157 (-1.75)
Event × Post_t	0.0044 (0.56)	0.0029 (0.46)	-0.0007 (-0.19)	0.0027 (0.69)
Event × Post_{t+1}	0.0220* (1.88)	0.0198* (1.82)	-0.0020 (-0.51)	0.0004 (0.10)
Event × Post_{t+2}	-0.0022 (-0.18)	-0.0114 (-1.05)	-0.0008 (-0.22)	0.0038 (0.77)
Event × Post_{t+3}	-0.0009 (-0.08)	0.0017 (0.15)	0.0051 (0.84)	0.0102 (1.89)
Post _t × LowATG	0.0402 (3.71)	0.0334 (4.36)	0.0150 (3.57)	0.0126 (2.80)
Post _{t+1} × LowATG	0.0448 (3.47)	0.0346 (2.65)	0.0002 (0.03)	0.0015 (0.30)
Post _{t+2} × LowATG	0.0498 (4.50)	0.0257 (2.48)	0.0050 (0.92)	0.0067 (1.19)
Post _{t+3} × LowATG	0.0312 (2.20)	0.0162 (0.94)	0.0102 (1.76)	0.0117 (1.89)
Post _t	-0.0082 (-1.51)	-0.0037 (-0.64)	-0.0033 (-1.13)	-0.0048 (-1.68)
Post _{t+1}	-0.0135 (-1.50)	-0.0080 (-0.80)	0.0010 (0.28)	-0.0001 (-0.04)
Post _{t+2}	-0.0158 (-1.85)	-0.0006 (-0.08)	-0.0023 (-0.78)	-0.0036 (-0.92)
Post _{t+3}	-0.0161 (-1.45)	-0.0081 (-0.81)	-0.0082 (-2.07)	-0.0109 (-2.51)
Controls	No	Yes	No	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
# Obs.	2546	2280	2328	2103
Adj. R-sq.	0.465	0.530	-0.010	0.196

Appendix

Table A1: Variable Descriptions

Variable	Description
Outcome Variables for the Fund Analysis	
Tracking error	Tracking error is calculated as the volatility of fund daily returns in excess of the average daily returns of all funds with the same CRSP investment objective in the specified window. This measure requires a minimum of 22 days and is annualized by multiplying the square root of 252.
Active Share	Active share is calculated as the sum of absolute differences in portfolio weights between the fund and its index and then divided by two. We use the aggregate holdings of all mutual funds in the same CRSP objective code as the index for each fund.
Portfolio Weights -Large/Small Stocks	Portfolio weights are defined as the dollar value invested in large/small stocks divided by the total dollar value of the portfolio. Large stocks refer to stocks in the largest market capitalization quartile. Small stocks refer to stocks in the 2nd largest market capitalization quartile.
# of Portfolio Stocks -Large/Small Stocks	# of portfolio stocks is defined as the number of large/small stocks in the portfolio, divided by the total number of stocks in the portfolio.
FF 3-Factor Alpha	FF 3-factor alpha is defined as the monthly risk-adjusted return over the specified period. Expected returns are calculated using the Fama-French 3-factor model in which factor loadings are estimated over the previous 36 months.
FF 5-Factor Alpha	Defined similarly as FF 3-factor alpha but using the FF 5-factor model for risk adjustment.
Pastor Stambaugh 5-Factor Alpha	Defined similarly as FF 3-factor alpha but using the Pastor Stambaugh 5-factor model for risk adjustment.

Table A1: Variable Descriptions
(Continued)

Variable	Description
Control Variables for the Fund Analysis	
Log (TNA)	Natural logarithm of fund total net assets (in million dollars).
Turnover	Turnover ratio obtained directly from CRSP.
Expenses	Expense ratio obtained directly from CRSP.
Return	Fund holding period returns.
Flow	Mutual fund flow is inferred from fund returns and TNA as reported by CRSP. Let TNA(q) be the total net asset of a fund in quarter q and Ret(q) be its return between quarter q-1 and quarter q. Flow(q) = $TNA(q) / TNA(q-1) - (Ret(q) + 1)$
Log (Fund Age)	Natural logarithm of the number of years from the fund inception.
# Classes	Number of fund classes.
Outcome Variables for the Firm Analysis	
Capital Expenditure	Capital expenditure (item CAPX), normalized by beginning-of-year total assets (item AT)
# of Acquisitions	Number of acquisitions made by a firm over a fiscal year. We start with all unique deals from SDC platinum and exclude deals for which: the deal value is missing; the deal is classified by SDC as rumors, recapitalizations, repurchases, or spinoffs; the bidder holds more than 50% of the target's shares at the announcement date of the bid; or the bidder is seeking to acquire less than 50% of the target shares.
Total Deal Value	Natural log of total deal value (in million dollars) of all acquisitions made by a firm in a fiscal year.
Debt Issuance	Long-term debt issuance (item DLTIS) minus long-term debt reduction (item DLTR), normalized by beginning-of-year total assets (item AT).
CEO Ownership (Excl. Options)	The percentage stock ownership held by a CEO out of total shares outstanding, obtained directly from ExecuComp database.
CEO Ownership (Incl. Options)	The fraction of stock and option deltas held by a CEO, equal to (the number of stocks and the delta of all stock options held by a CEO) / (the number of all outstanding stocks plus the delta of all outstanding stock options). Delta of stock options follow the Black-Scholes (1973) formula, which equals to $e^{-dT} N\left(\left[\log\left(\frac{S}{X}\right) + T(r - d + \sigma^2/2)\right]/(\sigma\sqrt{T})\right)$, where N is the cumulative probability function for the normal distribution, S is the price of stock, X is the exercise price, σ is the expected stock return volatility, r is the risk-free rate, T is the time-to-maturity of the option in years, and d is the expected

dividend rate. The option holdings are divided into three categories: new grants, existing unexercisable grants, and existing exercisable grants. For new grants, the six parameters for the Black-Scholes formula are readily available. For existing grants, parameters X and T are estimated following the methodology in Core and Guay (2002). For more details, please refer to Appendix A.2 in Core and Guay (1999) and Appendix B in Edmans, Gabaix and Landier (2008)..

ROA

Net income (item IB), normalized by beginning-of-year total assets (item AT).

**Table A1: Variable Descriptions
(Continued)**

Variable	Description
Control Variables for the Firm Analysis	
TobinQ	(Book total assets - book value of equity + market value of equity), scaled by book total assets. Book value of equity is defined as common equity (item CEQ) if available or total assets (item AT) minus liability (item LT), plus balance sheet deferred taxes (item TXDB) if available and investment tax credits (item ITCI) if available, minus preferred stock liquidation value (item PSTKL) if available, or redemption value (item PSTKRV) if available, or carrying value (item PSTK) if available. Market value of equity is defined as shares outstanding (CSHO) times share price at the fiscal year end (item PRCC_F).
OperatingCashflows	Income before extraordinary items (item IB) plus depreciation (item DP), scaled by beginning-of-year net property, plant and equipment (item PPENT).
Leverage	Sum of long-term debt (item DLT ^T) and short-term debt (item DLC), divided by the sum of long-term debt, short-term debt and book value of equity.
Dividend	Dividends (item DVC), scaled by beginning-of-year net property, plant and equipment (item PPENT).
Cash	Cash holdings (item CHE), scaled by beginning-of-year net property, plant and equipment (item PPENT).
SalesGrowth	Sales (item SALE) of year t divided by sales of year t-1, then minus one.
Ln(Size)	Natural logarithm of market capitalization of equity (item CSHO times item PRCC_F).
Ln(FirmAge+1)	The natural logarithm of one plus the number of years a stock has appeared in the CRSP database.
Tangibility	Net property, plant and equipment (item PPENT), normalized by assets (item AT)
ATG	Asset growth rate, defined as assets (item AT) of year t divided by assets of year t-1

Table A2: Parallel Trends Analysis

This table tests the parallel trends assumption by repeating the DID analysis for a pre-event window. We conduct the following regression $Y_{i,t} = \alpha + \beta \times \text{Pre} \times \text{Event} + \gamma \times \text{Pre} + \text{Firm Fixed Effects} + \text{Time Fixed Effects} + \text{Controls} + \epsilon$. In Panel A, Y takes each of the outcome measures for bereaved funds. For the three fund-returns based variables, i.e., Tracking Errors, FF 3-Factor and FF 5-Factor Alphas, Pre is a dummy variable that equals one for the window [-10, -7] and zero otherwise. For the three fund-holdings based variables, i.e., Active Share, Portfolio Weights for Small or Large Stocks, Pre is a dummy variable that equals one for the window [Q-4, Q-3] and zero otherwise. In Panel B, Y takes each of the outcome measures for bereaved firms. Pre is a dummy variable that equals one for year t-2 and zero otherwise. Event is a dummy variable that equals one for bereaved firms (funds). Time refers to year-month in the regressions for Tracking Errors, FF 3-Factor Alpha and FF 5-Factor Alpha; refers to year-quarter in the regressions for Active Share and Portfolio Weights; and refers to year in the bereaved firm sample regressions. The table below reports the coefficient estimates of β and associated t-stats in parenthesis based on robust standard errors clustered by firm and time.

Panel A. Bereaved Fund Sample

	Tracking Errors	Active Share	Portfolio Weights- Small Stocks	Portfolio Weights- Large Stocks	FF 3-Factor Alpha	FF 5-Factor Alpha
Pre \times Event	-0.0015 (-1.00)	-0.0018 (-0.41)	-0.0040 (-0.82)	0.0026 (0.56)	-0.0009 (-0.65)	-0.0005 (-0.38)

Panel B. Bereaved Firm Sample

	Capital Expenditure	# of Acquisitions	Total Deal Value	CEO Ownership (Excl. Options)	CEO Ownership (Incl. Options)	ROA
Pre \times Event	0.0016 (0.34)	-0.1372 (-1.27)	0.0516 (0.65)	0.0013 (0.75)	0.0003 (0.16)	-0.0003 (-0.03)

Table A3: DID Regressions of Equal-Weighted Portfolio Stock Sizes

This table reports DID regressions of fraction of fund portfolios allocated to large-cap and small-cap stocks on the interaction terms between event dummy and two post window dummies. The table is similar to Table 5 panel C, but replace value weighted portfolio weights with equally weighted weights, i.e. the fraction of stocks in each category. Control variables include natural log of TNA and its squared value, portfolio turnover ratio, expense ratio, fund return over last quarter, fund flow over last quarter and natural log of fund age. TNA, portfolio turnover ratio, expense ratio, and fund age are all measured using the most recent available data before the beginning of the window. Fund and year-quarter fixed effects are also controlled. The t-statistics based on robust standard errors clustered by fund and quarter are reported in parentheses. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively. **Bold** figures indicate difference-in-difference.

Independent Variables	(1) Small Stocks	(2) Small Stocks	(3) Large Stocks	(4) Large Stocks
Post [Q, Q+1] × Event	-0.0121** (-2.42)	-0.0127** (-2.37)	0.0117** (2.20)	0.0124** (2.14)
Post [Q+2, Q+3] × Event	-0.0133** (-2.20)	-0.0145** (-2.23)	0.0139** (2.25)	0.0141** (2.10)
Post [Q, Q+1]	0.0007 (0.20)	-0.0003 (-0.09)	0.0003 (0.08)	0.0012 (0.29)
Post [Q+2, Q+3]	0.0027 (0.65)	0.0021 (0.42)	0.0002 (0.03)	0.0018 (0.29)
Log (TNA)		-0.0081 (-0.61)		0.0027 (0.28)
Log (TNA) ²		0.0001 (0.03)		0.0014 (1.31)
Turnover		0.0029 (0.67)		-0.0047 (-1.02)
Expenses		3.1749 (2.11)		-3.3641 (-2.37)
Return(q-1)		-0.0002 (-0.02)		0.0679 (1.43)
Flow(q-1)		0.0003 (1.77)		-0.0002 (-1.28)
Log (Fund Age)		0.0164 (0.57)		-0.0059 (-0.25)
Fund Fixed Effects	Yes	Yes	Yes	Yes
Year-Quarter Fixed Effects	Yes	Yes	Yes	Yes
# Obs.	1,212	1,160	1,212	1,160
Adj. R-sq.	0.960	0.960	0.973	0.973

**Table A4: DID Regression of Average Monthly Abnormal Fund Returns:
Pastor and Stambaugh (2003) Five-Factor Alphas**

This table reports DID regressions of performance of mutual funds on the interaction terms between event dummy and three post window dummies. The table is similar to Table 9 panel D, but replace the dependent variable with the Pastor-Stambaugh (2003) five-factor alphas. Control variables include natural log of TNA and its squared value, portfolio turnover ratio, expense ratio, fund return over last quarter, fund flow over last quarter and natural log of fund age. TNA, portfolio turnover ratio, expense ratio, and fund age are all measured using the most recent available data before the beginning of the window. Fund and year-month fixed effects are also controlled. The t-statistics based on robust standard errors clustered by fund and month are reported in parentheses. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively. **Bold** figures indicate difference-in-difference.

Independent Variables	(1) PS 5-Factor Alpha	(2) PS 5-Factor Alpha
Post[-2, +1] × Event	-0.0037*** (-2.85)	-0.0034*** (-2.79)
Post[+2, +12] × Event	-0.0018* (-1.73)	-0.0020* (-1.94)
Post[+13, +24] × Event	-0.0008 (-0.75)	-0.0012 (-1.09)
Post[-2, +1]	0.0017 (1.70)	0.0014 (1.44)
Post[+2, +12]	0.0008 (0.87)	0.0009 (1.07)
Post[+13, +24]	0.0007 (0.82)	0.0008 (0.98)
Log (TNA)		0.0000 (0.02)
Log (TNA) ²		-0.0002 (-1.99)
Turnover		0.0014 (1.54)
Expenses		1.0149 (2.86)
Return(q-1)		-0.0204 (-2.46)
Flow(q-1)		-0.0008 (-1.48)
Log (Fund Age)		-0.0007 (-0.26)
Fund Fixed Effects	Yes	Yes
Year-Month Fixed Effects	Yes	Yes
# Obs.	1,640	1,611
Adj. R-sq.	0.192	0.224

**Table A5: DID Regression of Average Monthly Abnormal Fund Returns:
In-Sample Alphas**

This table reports DID regressions of performance of mutual funds on the interaction terms between event dummy and three post window dummies. The table is similar to Table 9 panel D, but replace the dependent variable with in-sample monthly fund alphas by regressing daily fund returns on contemporaneous daily Fama-French three factor returns. Control variables include natural log of TNA and its squared value, portfolio turnover ratio, expense ratio, fund return over last quarter, fund flow over last quarter and natural log of fund age. TNA, portfolio turnover ratio, expense ratio, and fund age are all measured using the most recent available data before the beginning of the window. Fund and year-month fixed effects are also controlled. The t-statistics based on robust standard errors clustered by fund and month are reported in parentheses. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively. **Bold** figures indicate difference-in-difference.

Independent Variables	(1) In-Sample 3-Factor Alpha	(2) In-Sample 3-Factor Alpha
Post[-2, +1] × Event	-0.0031** (-2.44)	-0.0029** (-2.50)
Post[+2, +12] × Event	-0.0020* (-1.76)	-0.0022** (-1.97)
Post[+13, +24] × Event	-0.0008 (-0.65)	-0.0010 (-0.83)
Post[-2, +1]	0.0015 (1.71)	0.0016 (1.87)
Post[+2, +12]	0.0006 (0.74)	0.0010 (1.23)
Post[+13, +24]	0.0007 (0.78)	0.0010 (1.04)
Log (TNA)		0.0012 (0.82)
Log (TNA) ²		-0.0004 (-2.26)
Turnover		0.0011 (1.29)
Expenses		0.4447 (1.41)
Return(q-1)		-0.0307 (-2.09)
Flow(q-1)		-0.0001 (-0.16)
Log (Fund Age)		-0.0043 (-0.96)
Fund Fixed Effects	Yes	Yes
Year-Month Fixed Effects	Yes	Yes
# Obs.	1,640	1,611
Adj. R-sq.	0.257	0.285

Table A6: Mutual Fund Analysis: Alternative Matched Funds

This table conducts robustness checks using alternative matched funds. For each event fund, we identify a control fund with the same investment objective whose TNA is the closest to the event fund's TNA. Panels A, B, C, and D report DID regressions of tracking errors, active share, portfolio stock sizes and Fama-French three-factor and five-factor alphas on the interaction terms between event dummy and post-event window dummies, respectively. Control variables include natural log of TNA and its squared term, portfolio turnover ratio, expense ratio, fund return over last quarter, fund flow over last quarter and natural log of fund age. TNA, portfolio turnover ratio, expense ratio, and fund age are all measured using the most recent available data before the beginning of the window. Firm fixed effects and time fixed effects are also included. Time fixed effects refer to year-month for panels A and D and year-quarter for panels B and C. All variables are described in Table A1 in the Appendix. The t-statistics for DID regressions are based on robust standard errors clustered by fund and time. The t -statistics are in parentheses. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively. **Bold** figures indicate difference-in-difference.

Panel A: DID regressions of Tracking Errors		
Independent Variables	(1) Tracking Errors	(2) Tracking Errors
Post[-2, +1] × Event	-0.0037** (-2.25)	-0.0027** (-2.47)
Post[+2, +12] × Event	-0.0078*** (-3.22)	-0.0056*** (-3.10)
Controls	No	Yes
# Obs	1,476	1,396
Adj. R-sq	0.887	0.901
Panel B: DID regressions of Active Share		
Independent Variables	(1) Active Share	(2) Active Share
Post [Q, Q+1] × Event	-0.0095*** (-2.80)	-0.0105*** (-2.59)
Post [Q+2, Q+3] × Event	-0.0131*** (-2.80)	-0.0129*** (-2.65)
Controls	No	Yes
# Obs.	1,038	993
Adj. R-sq.	0.947	0.946

Panel C: DID regressions of Value-Weighted Portfolio Sizes				
	(1)	(2)	(3)	(4)
	Small Stocks	Small Stocks	Large Stocks	Large Stocks
Post [Q, Q+1] × Event	-0.0139***	-0.0141***	0.0112***	0.0115***
	(-3.64)	(-3.55)	(2.97)	(2.92)
Post [Q+2, Q+3] × Event	-0.0105**	-0.0082**	0.0092**	0.0075*
	(-2.46)	(-2.01)	(2.14)	(1.71)
Controls	No	Yes	No	Yes
# Obs.	1,128	1,074	1,128	1,074
Adj. R-sq.	0.967	0.968	0.978	0.978

Panel D: DID Regressions of Alphas				
	(1)	(2)	(3)	(4)
Independent Variables	FF 3-Factor Alpha	FF 3-Factor Alpha	FF 5-Factor Alpha	FF 5-Factor Alpha
Post[-2, +1] × Event	-0.0021***	-0.0023***	-0.0027***	-0.0027***
	(-2.69)	(-2.95)	(-2.81)	(-2.74)
Post[+2, +12] × Event	-0.0020***	-0.0023***	-0.0020***	-0.0022***
	(-3.29)	(-3.26)	(-3.27)	(-3.01)
Post[+13, +24] × Event	-0.0005	-0.0008	-0.0008	-0.0010
	(-0.73)	(-1.17)	(-1.13)	(-1.34)
Controls	No	Yes	No	Yes
# Obs.	1,704	1,652	1,704	1,652
Adj. R-sq.	0.181	0.219	0.178	0.210

Table A7: Bereavement Effect and Mutual Fund Manager Age

This table examines whether the bereavement effect depends on mutual fund manager age by adding triple interactions of DID interaction terms and young manager dummy (*YoungMgr*). *YoungMgr* dummy is defined to be one for event fund managers in the bottom age tertile (whose age is below or equal to 43 at the event time). All lower-order terms are included in the regressions except for the event dummy, young manager dummy, and the interaction between them, as they will be subsumed by the fund fixed effects. Panels A, B, C, and D report triple interaction regressions of tracking errors, active share, portfolio stock sizes and Fama-French three-factor and five-factor alphas. Control variables include natural log of TNA and its squared term, portfolio turnover ratio, expense ratio, fund return over last quarter, fund flow over last quarter and natural log of fund age. TNA, portfolio turnover ratio, expense ratio, and fund age are all measured using the most recent available data before the beginning of the window. Fund fixed effects and time fixed effects are also included. Time fixed effects refer to year-month for panels A and D and year-quarter for panels B and C. All variables are described in Table A1 in the Appendix. For brevity, this table only reports the coefficient estimates of triple interaction terms and associated t-statistics in parenthesis based on robust standard errors clustered by fund and time. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively.

Panel A: Triple Interaction Regressions of Tracking Errors		
Independent Variables	Tracking Errors	
	(1)	(2)
Post[-2, +1] × Event × YoungMgr	-0.0049*** (-3.03)	-0.0037** (-2.48)
Post[+2, +12] × Event × YoungMgr	-0.0083*** (-2.79)	-0.0065** (-2.25)
Controls	No	Yes
# Obs	1,434	1,375
Adj. R-sq	0.872	0.884

Panel B: Triple Interaction Regressions of Active Share		
Independent Variables	Active Share	
	(1)	(2)
Post [Q, Q+1] × Event × YoungMgr	-0.0167*** (-2.62)	-0.0167** (-2.27)
Post [Q+2, Q+3] × Event × YoungMgr	-0.0063 (-0.62)	-0.0051 (-0.48)
Controls	No	Yes
# Obs.	1,086	1,041
Adj. R-sq.	0.944	0.943

Panel C: Triple Interaction Regressions of Value-Weighted Portfolio Sizes				
Independent Variables	Small Stocks		Large Stocks	
	(1)	(2)	(3)	(4)
Post [Q, Q+1] × Event × YoungMgr	-0.0103	-0.0138	0.0218**	0.0267**
	(-1.07)	(-1.29)	(2.09)	(2.29)
Post [Q+2, Q+3] × Event × YoungMgr	-0.0090	-0.0131	0.0247*	0.0285*
	(-0.75)	(-0.97)	(1.85)	(1.90)
Controls	No	Yes	No	Yes
# Obs.	1,212	1,160	1,212	1,160
Adj. R-sq.	0.960	0.960	0.971	0.971

Panel D: Triple Interaction Regressions of Alphas				
Independent Variables	FF 3-Factor Alpha		FF 5-Factor Alpha	
	(1)	(2)	(3)	(4)
Post[-2, +1] × Event × YoungMgr	-0.0004	0.0001	0.0008	0.0013
	(-0.24)	(0.05)	(0.45)	(0.67)
Post[+2, +12] × Event × YoungMgr	0.0002	0.0008	0.0012	0.0017
	(0.19)	(0.50)	(1.11)	(1.38)
Post[+13,+24] × Event × YoungMgr	-0.0053***	-0.0041**	-0.0045***	-0.0037***
	(-3.57)	(-2.33)	(-3.42)	(-2.70)
Controls	No	Yes	No	Yes
# Obs.	1,640	1,611	1,640	1,611
Adj. R-sq.	0.228	0.251	0.263	0.267

Table A8: Bereavement Effect and Corporate CEO Age

This table examines whether the bereavement effect depends on corporate CEO age by adding triple interactions of DID interaction terms and young CEO dummy (*YoungCEO*). *YoungCEO* dummy is defined to be one for event CEOs in the bottom age tertile (whose age is below or equal to 51 at the event time). All lower-order terms are included in the regressions except for the event dummy, young CEO dummy, and the interaction between them, as they will be subsumed by the firm fixed effects. Panels A, B, C, and D report triple interaction regressions of capital expenditure, two acquisition activity measures including the number of acquisitions and natural log of total deal value, two CEO ownership measures including one excluding stock options and the other including options, and ROA. Control variables include Tobin's Q, operating cash flows, book leverage, dividend, cash, ROA, sales growth rate, natural log of firm size, natural log of one plus firm age, and asset tangibility. Operating cash flows, dividend, cash are all scaled by the gross property, plant and equipment of the previous year end. Control variables are all measured at the previous year end. Firm fixed effects and year fixed effects are also included. All variables are described in Table A1 in the Appendix. For brevity, this table only reports the coefficient estimates of triple interaction terms and associated t-statistics in parenthesis based on robust standard errors clustered by firm and year. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively.

Panel A: Triple Interaction Regressions of Capital Expenditure		
Independent Variables	CAPX	
	(1)	(2)
Event × Post_t × YoungCEO	-0.0146** (-2.45)	-0.0166** (-2.29)
Event × Post_{t+1} × YoungCEO	-0.0159* (-1.74)	-0.0196* (-1.84)
Event × Post_{t+2} × YoungCEO	-0.0132 (-1.31)	-0.0177* (-1.71)
Event × Post_{t+3} × YoungCEO	-0.0182* (-1.80)	-0.0224** (-2.19)
Controls	No	Yes
# Obs	2,496	2,245
Adj. R-sq	0.749	0.768

Panel B: Triple Interaction Regressions of Acquisition Activities				
Independent Variables	# of Acquisitions		Total Deal Value	
	(1)	(2)	(3)	(4)
Event × Post_t × YoungCEO	-0.1839 (-1.62)	-0.2292* (-1.67)	-1.0244** (-2.13)	-1.0977** (-1.98)
Event × Post_{t+1} × YoungCEO	-0.2412* (-1.77)	-0.2679* (-1.73)	-1.3452*** (-2.59)	-1.4473** (-2.24)
Event × Post_{t+2} × YoungCEO	-0.1709 (-1.05)	-0.1052 (-0.69)	-0.6977 (-1.02)	-0.3109 (-0.47)
Event × Post_{t+3} × YoungCEO	0.1400 (0.63)	0.1718 (0.73)	-0.0913 (-0.10)	0.0582 (0.07)
Controls	No	Yes	No	Yes
# Obs.	2,536	2,270	2,536	2,270
Adj. R-sq.	0.230	0.244	0.199	0.216

Panel C: Triple Interaction Regressions of CEO Ownership				
Independent Variables	CEO Ownership (excl. option)		CEO Ownership (incl. option)	
	(1)	(2)	(3)	(4)
Event × Post_t × YoungCEO	-0.0091 (-0.85)	-0.0052 (-0.50)	-0.0104 (-1.03)	-0.0058 (-0.62)
Event × Post_{t+1} × YoungCEO	-0.0188* (-1.73)	-0.0176* (-1.77)	-0.0204** (-1.98)	-0.0188** (-2.02)
Event × Post_{t+2} × YoungCEO	-0.0150 (-1.09)	-0.0098 (-0.68)	-0.0151 (-1.17)	-0.0094 (-0.69)
Event × Post_{t+3} × YoungCEO	-0.0171 (-1.13)	-0.0140 (-1.09)	-0.0181 (-1.22)	-0.0159 (-1.25)
Controls	No	Yes	No	Yes
# Obs.	2,425	2,172	2,395	2,143
Adj. R-sq.	0.841	0.872	0.844	0.869

Panel D: Triple Interaction Regressions of ROA

Independent Variables	ROA	
	(1)	(2)
Event × Post_t × YoungCEO	-0.0254* (-1.69)	-0.0223* (-1.87)
Event × Post_{t+1} × YoungCEO	-0.0051 (-0.27)	0.0097 (0.78)
Event × Post_{t+2} × YoungCEO	0.0054 (0.24)	0.0030 (0.19)
Event × Post_{t+3} × YoungCEO	0.0113 (0.49)	0.0035 (0.22)
Controls	No	Yes
# Obs	2,546	2,280
Adj. R-sq	0.456	0.525