Big baths around turnovers: What happens if the former CEO stays on board?

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Abstract: We examine whether retaining the former CEO as a board member has an impact on big bath accounting around CEO turnovers. Early evidence shows that when a CEO turnover occurs, the new CEO uses big bath to shift the responsibility for low earnings toward the previous management. However, the former CEO is often retained. This event may restrict the new CEO's ability to take a big bath. Using a hand-collected sample of CEO turnover events in US firms, we find that CEO turnover increases the probability of a big bath. However, retaining the CEO acts as a monitoring mechanism by reducing the probability of big baths, especially opportunistic ones. Our findings indicate that CEO retention could be a useful corporate governance mechanism that restricts new CEO's opportunistic practices.

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1. Introduction

Big bath is the accounting practice where companies incur large write-offs, which reduce their current income. Managers can use this practice to align book and economic values of assets, making accounting figures more representative of a firm's economic fundamentals. However, managers may also exploit their discretion in the timing, magnitude, and number of write-offs to maximize their personal interests (Hope & Wang, 2018). Big baths are often observed around CEO turnover events (e.g., Elliott & Shaw, 1988; Guan et al., 2005; Moore, 1973). Through big baths, the new CEO can blame the previous management for the reported low earnings, thereby shifting responsibility to the former CEO. Moreover, by lowering current earnings, the new CEOs inflate future performance bolstering their reputation.

A common assumption is that CEOs leave the firm after a turnover. However, firms often retain their former CEOs (Evans et al., 2010; Quigley & Hambrick, 2012). This event impacts the business decisions of the new CEO who may feel constrained in making strategic changes and delivering performance that varies significantly from that of the previous era. As a result, there might be negative consequences for shareholders (Quigley & Hambrick, 2012). Despite these findings, the impact of CEO retention on financial reporting has been under investigated. This study attempts to fill this gap by analyzing the impact of CEO retention on the new CEOs' decisions to engage in big baths.

We address our research question using a sample of S&P 1500 firms from 2003 to2014. We identified 1,227 CEO turnover events, comprising 440 retained CEOs. We acknowledge that CEO turnover, CEO retention, and big bath decisions are not independent and are endogenously shaped by firm characteristics, especially firm performance. Hence, in our empirical analyses we first perform univariate tests to explore the role of firm performance in these associations. Moreover, our main tests use three-stage least squares (3SLS) model to control for endogeneity in CEO turnover and retention decisions. We find that CEO retention

decreases the probability of big baths, specifically *opportunistic* ones.[1] These results indicate that retained CEOs may play a monitoring role in firms' financial reporting choices around turnover events, suggesting a positive effect of CEO retention on corporate reporting practices. Furthermore, we perform a cross-sectional analysis to examine the role of past performance in shaping the relationships among CEO turnover, CEO retention, and big baths. Our results show a negative association between CEO retention and the probability of a big bath, but only for poor performing firms.

In additional analyses, we investigate the association between opportunistic big baths and a firm's information environment around CEO turnovers. We find a negative association between opportunistic big baths and the quality of a firm's information environment, but only in cases where the fomer CEO leaves the firm. These results confirm that CEO retention can benefit the firm as the new CEO's opportunistic behavior is monitored. We also examine the impact of CEO retention on narratives around turnover events. Specifically, we consider the narratives in firms' 10-K filings using the net optimism measure (Loughran and McDonald, 2011). We find that, while the tone of financial statements is generally more optimistic in the case of CEO retention, this effect does not vary if the firm engages in a big bath. We then investigate whether the duration of CEO retention influences the probability of a big bath. We rerun the analysis, focusing on retention of up to one, two, and more than three years post-CEO turnover. Our results indicate that the longer (shorter) the duration of CEO retention, the stronger (weaker) the former CEO's monitoring effect. We also perform a battery of robustness tests to ensure the validity of the main results. Specifically, we analyze the impact of former

[1] We follow Haggard et al. (2015) in differentiating between big baths that are opportunistic (pursuing CEOs' personal incentives) and non-opportunistic (to "clear the air" and improve information environment).

CEO's retirement, an alternative specification of CEO turnover timing, and entropy balancing. These analyses confirm our main inferences.

This study contributes to the literature in two ways. First, we add to research on the consequences of CEO turnover by investigating the impact of retaining the former CEO on the board. Quigley and Hambrick (2012) document a negative impact of CEO retention on strategic choices such as resource allocation, divestitures, and executive replacements. In contrast, we find that CEO retention can benefit a firm's financial reporting practices. Specifically, our evidence shows that CEO retention restricts opportunistic financial reporting practices of the new CEOs, given their familiarity with firm-specific challenges. By documenting that CEO retention does not affect all corporate choices in the same way, our results complement the literature on board monitoring roles (e.g., Minnick, 2011; Reitenga & Tearney, 2003; Zhang, 2019). Furthermore, Boivie et al. (2016) and Hillman and Dalziel (2003) suggest that boards of directors cannot monitor effectively if they lack firm-specific knowledge. Retaining former CEOs might overcome this knowledge deficit, leading to more efficient use of resources and curbing opportunistic financial reporting choices.

Second, we contribute to the literature on big baths around CEO turnover events. Pierk (2021) and Hope and Wang (2018) analyze cross-sectional variation in new CEOs, focusing on CEO overconfidence as well as ethical behavior. By contrast, we exploit variations in former CEOs and document the potential benefit of their retention on financial reporting choices.

Our results have implications for boards, regulators, and corporate governance. CEO retention may prevent the new CEO from making decisions that could harm the firm, thus aligning managers' actions with stakeholders' interests. Hence, directors may consider retaining the former CEO to monitor the new CEO (Evans et al., 2010).

The remainder of this paper is organized as follows: Section 2 discusses the theory and develops hypotheses. Section 3 describes the data and implementation of the estimation

methods. Section 4 presents the results, additional analyses, and robustness tests. Finally, section 5 concludes the study.

2. Theory and Hypotheses

Big bath

In big bath accounting, managers charge significant write-offs that reduce current earnings. This may take the form of exceptionally large negative discretionary accruals or one-time large negative items such as restructuring charges, asset impairments, and litigation losses (Hope & Wang, 2018).

The literature cites several reasons for big baths. For instance, nonlinearity in bonus contracts may incentivize managers to decrease their earnings (Murphy, 1999; Indjejikian & Nanda, 2002). Career concerns and external reputation may also incentivize earnings manipulation (Graham et al., 2005). Big baths often occur during economic downturns when earnings are already low (Jordan & Clark, 2015) and the market is less likely to punish the firm for bad earnings. In this situation, recording heavy write-downs in the current year relieves the company of future charges, enabling it to more easily reach earnings targets in subsequent years (Jordan & Clark, 2015). Thus, the company gains a bigger upside with very little to lose. Consistent with this, Kirschenheiter and Melumad (2002) show that when cash flow levels are unusually low, managers prefer to engage in big baths and underreport earnings to report higher earnings in the future. A company can also take these one-time hits to income when current earnings are above the expected threshold and the manager is pessimistic about future earnings (the so-called cookie-jar phenomenon; Levitt,1998).[2]

[2] Big baths are prevalent in reality. For instance, General Motors took a big bath in 2008, announcing a net loss of $15.5 billion in the second quarter. This event was preceded by poor performance, and the CEO was not retained post-resignation. Similarly, General Electric took a big bath in 2018 by writing down the value of some of its business units to $22 billion. In this

Although accounting standards regulate write-offs, they still leave room for managerial discretion. Managers can use this discretion opportunistically or genuinely to benefit the firm. Consistent with this idea, prior evidence on the motivation behind big baths is mixed. Big baths can reflect management expectations of a future decline in firm performance by creating larger valuation allowances (Christensen et al., 2008). Moreover, accounting numbers are more reliable following big bath write-downs because they reflect a firm's economic fundamentals (Hope and Wang, 2018). This improvement could manifest in the form of smoother earnings, lower information asymmetry, and higher responsiveness of stock returns to unexpected earnings (Haggard et al., 2015). However, Elliott and Shaw (1988) find that big bath deteriorates a firm's information environment, consistent with an opportunistic view. Specifically, they show a negative share return on the day discretionary write-offs are disclosed, suggesting that financial markets view big baths unfavorably. Furthermore, they report that analysts reduce their earnings forecasts and bond ratings decrease for these firms. Notably, although big baths fairly common, they tend to occur more often around important corporate events, such as CEO turnover (Murphy & Zimmerman, 1993; Strong & Meyer, 1987).

CEO turnover and retention

CEO turnovers are important strategic events for firms. Quigley and Hambrick (2012) and Jenter and Kanaan (2015) highlight the different causes of CEO turnover, including the need for a new strategic direction, CEO retirement or death, the board's desire for change, and CEO

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case, despite the company's positive performance, the firm did not retain the CEO. In another recent case, Samsung Electronics was accused of engaging in big bath accounting in 2019, reporting operating profit of $5.47 trillion instead of the expected $7 trillion, due to large write-offs. After announcing 'unprecedented losses,' the CEO resigned without taking any new role in the company. These examples demonstrate that companies engage in various forms of big baths, with the common goal of influencing the current year's earnings such that future earnings look better.

dismissal after bad performance. Wiersema and Zhang (2011) suggest that in addition to the firm's internal management, external parties such as investment analysts can also play a role in CEO dismissal.

The literature has also investigated the consequences of CEO turnover. In case of a CEO change, the firm is likely to shift its strategy because of the new leadership. The new CEO shapes the strategy and future direction of the firm with important consequences for company's stakeholders (Gamache et al., 2020). These decisions vary depending on the level of discretion of the new CEOs (Quigley & Hambrick, 2012) and based on whether they are promoted internally (insider) or recruited externally (outsider). When a new CEO is an outsider, the firm experiences more extreme and volatile performance (Quigley et al., 2019) as well as weaker innovation and lower R&D productivity due to lack of firm-specific knowledge (Cummings & Knott, 2018).

Prior literature generally presumes that CEOs leave the firm after a turnover. However, Evans et al. (2010) and Quigley and Hambrick (2012) document that CEOs may remain as board members, especially when the firm performed well during their tenure, resulting in CEO retention. Retaining CEOs with good past performance can help a firm design future strategy, moving the firm in a positive direction. However, the retained CEO could explicitly or implicitly hinder the new CEO's ability to make strategic changes or improve performance (Quigley & Hambrick, 2012). Accordingly, Yi et al. (2020) show that CEO retention increases the probability of a new CEO's early dismissal. These findings have important implications for big baths around CEO turnover.

Nieken and Sliwka (2015) and Hensel and Schondube (2022) use analytical models to show that former CEOs have incentives to bring earnings forward to the period in which they leave, whereas new CEOs have explicit and implicit incentives to inflate earnings after their arrival. Thus, new CEOs often use big baths to maximize their bonus payments and

compensation, as well as to enhance their reputations while shifting responsibility for low earnings to their predecessors (Moore, 1973). This could take the form of divestitures of any previous investment (Weisbach, 1995), using abnormal and extraordinary negative items (Walsh et al., 1991; Wells, 2002), or resorting to income-reducing accruals (Pourciau, 1993). Nevertheless, CEO retention restricts the new CEOs' discretion (Quigley & Hambrick, 2012). Hence, we contend that former CEOs will exert control over the new CEOs' actions, preventing the reporting of low earnings which may hurt their reputation. Consequently, we expect that CEO retention will constrain the new CEO's ability to engage in big bath accounting. Thus, we formally state our hypotheses as follows:

H1a: The probability of a big bath around CEO turnover is lower if the former CEO is retained.

As previously discussed, empirical evidence on the motivations behind big baths is mixed. Big baths can be regarded as opportunistic (Elliott & Shaw, 1988; Murphy & Zimmerman, 1993; Strong & Meyer, 1987) or as beneficial to the firm (Haggard et al., 2015; Hope & Wang, 2018). Both opportunistic and non-opportunistic big baths can hurt the reputation of the former CEOs, so they have incentives to restrain both. However, if non-opportunistic big baths are 'expected,' opportunistic big baths fall under the discretion of the new CEO, and are hence more likely to harm the reputation of the former CEO and the firm overall. Thus, we expect the former CEO's monitoring to be stronger in the case of an opportunistic big bath. Formally:

H1b: The probability of an opportunistic big bath around CEO turnover is lower if a former CEO is retained.

3. Methods

Sample

We test our hypotheses using a sample of US-listed firms from 2003 to 2014. Our sample period begins in 2003 to avoid the impact of the Sarbanes-Oxley Act of 2002 on CEO turnover decisions and big baths. We identify CEO turnover events from Execucomp, thus our sample is limited to S&P 1500 firms. We exclude firms in the financial sector (SIC codes 6000–6999) and regulated industries (SIC codes 4400–4999) as the reasons for CEO turnover and the measurement of big baths can be different in these industries. We then merge CEO turnover data with financial information from Compustat North America and market data from CRSP. We obtain analyst information from I/B/E/S and institutional holdings data from firms' 13-F filings. Our final sample contains 12,564 annual observations, corresponding to 1,227 CEO turnovers.[3]

We then manually collect information regarding the retention of former CEOs from company websites and CEO biographies. Thus, we identify 440 cases of CEO retention, representing 35.86% of all CEO turnover events. This statistic is consistent with recent literature. For example, Quigley and Hambrick (2012) report that on average, former CEOs are retained in 35% of CEO turnover events in their sample.[4]

Analyses and Model estimations

A major empirical challenge in our setting is that CEO turnover, CEO retention, and big baths are not independent and exogenous events. Specifically, firm performance may affect both the

[3] We checked all turnover events manually to clearly identify the timing of CEO departure and the CEO responsible for the annual reports in the turnover year. We note that the Execucomp data does not always provide exact information on the year in which the turnover event occurs. Gentry et al. (2021) also identify this issue.

[4] We find that the in 87% of our cases, the former CEO is retained as the board Chairperson.

the decision to change CEOs, and their retention after the turnover (Evans et al., 2010). Performance and CEO turnover also affect the probability of a big bath. Given these interdependencies, we acknowledge that demonstrating a causal relationship between CEO retention and a big bath is challenging and that we cannot completely control for the role of performance in our setting.

We attempt to alleviate these concerns by performing univariate tests and analyzing the association between firm performance and the three decisions related to CEO turnover, CEO retention, and big bath. We account for the interdependence of the three events, using a 3SLS approach. Specifically, we first model CEO turnover, followed by CEO retention, and then estimate the joint effect of CEO turnover and CEO retention on the new CEO's decision to take a big bath. Notably, we control for firm performance in each step.[5] The models are as follows:

$$\text{Prob}(\text{CEOTURN}_{it} = 1) = F(\alpha_0 + \alpha_1 \text{LOCAL DENSITY}_{it} + \sum \text{Performance}_{it} + \sum \text{Controls}_{it}) \quad (1)$$

$$\text{Prob}(\text{RETENTION}_{it} = 1) = F(\alpha_0 + \alpha_1 \text{DELTA}_{it} + \alpha_2 \text{VEGA}_{it} + \sum \text{Performance}_{it} + \sum \text{Controls}_{it}) \quad (2)$$

$$\text{Prob}(\text{Big_Bath}_{it} = 1) = F(\alpha_0 + \alpha_1 \text{RETENTION}_{it} + \alpha_2 \text{CEOTURN}_{it} + \sum \text{Performance}_{it} + \sum \text{Controls}_{it}) \quad (3)$$

CEO turnover decision

In Eq. (1), following Mobbs (2013), we examine the likelihood of CEO turnover using *LOCAL DENSITY* as an instrument. CEO turnover is a dummy variable equal to one in the three years

[5] In the three models, we use different variables to control for the effect of performance, consistent with prior studies that have examined the three decisions independently. Our results are robust to the inclusion of different proxies.

surrounding a CEO turnover in year *t* (*t-1*, *t*, and *t+1*), and zero otherwise. *LOCAL DENSITY* is the natural logarithm of one plus the number of firms in the same year and the three-digit zip code of the firm's headquarters. We expect that when more firms are in the same location as the focal firm, the CEO will have more external job opportunities, thereby increasing the probability of CEO turnover. Further, we do not expect local density to directly influence the likelihood of big baths, thus satisfying the exclusion restriction requirement for instruments. We control for firm performance by adding *RET* and *ROA*, measured as cumulative stock returns and income before extraordinary items divided by lagged total assets, respectively.

Similar to Hazarika et al. (2012), we include other variables that impact CEO turnover, including controls for firm growth and institutional ownership. Specifically, we include *GROWTH*, *INSTOWN*, and *SIZE*. *GROWTH* is computed as sales growth over the previous year. *INSTOWN* is the percentage of shares held by institutional investors during a fiscal period according to 13-F filings. *SIZE* is the natural logarithm of total assets. We then add industry and year fixed effects and robust standard errors.

CEO retention

In Eq. (2) we model a CEO retention using *DELTA* and *VEGA* as instruments. We define *RETENTION* as a dummy variable equal to one in the three years around CEO turnover (*t-1*, *t*, and *t+1*), if the former CEO is retained, and zero otherwise.[6] *DELTA* is the expected dollar change in the former CEO's wealth for a 1% change in stock price sensitivity (using the entire portfolio of stocks and options), as computed in Core and Guay (2002). *VEGA* is the expected dollar change in the former CEO's wealth for a 1% change in stock return volatility (using the

[6] We acknowledge that the effects of CEO turnover may be realized over longer timeframes surrounding the turnover event. Thus, in line with Haggard et al. (2015) and others, we consider the three-year window. In untabulated analyses we check the robustness of the results by varying the period from three years to one and two years, and find consistent results.

entire portfolio of options), also computed following Core and Guay (2002). Thus, *DELTA* and *VEGA* capture the sensitivity of the former CEO's compensation to stock prices and stock price volatility, respectively. Both instruments proxy former CEO's equity risk incentives before the turnover event. Hence, we expect that they will not directly affect the new CEO's choice to take a big bath. We also conjecture that when the *VEGA* of the former CEO is higher, CEO engages more in risk-taking activities that negatively influence the firm's financial position. Thus, the probability of CEO retention is lower. Instead, the probability of CEO retention increases when the *DELTA* of the former CEO is higher and the CEO has a stronger incentive to inflate stock prices, benefitting shareholders. This is consistent with Evans et al.'s (2010) findings that CEOs with better pre-turnover performance are more likely to be retained.

Following Evans et al. (2010), we control for firm performance by adding *RET* and *ROA*, as defined in Eq. (1). To better account for the effect of performance, we include the square of *ROA (ROA_SQUARED)* in addition to *ROA.* We also include control variables, such as *AGE* (of the former CEO), *SIZE* and *GROWTH*. Lastly, we add industry, year, state fixed effects, and robust standard errors.

Big bath decision

In Eq. (3), we model the probability of a big bath. Our main coefficient of interest is α_1. We expect α_1 to be negative, implying that the probability of big bath is lower when the former CEO is retained. The variable *Big_Bath* is captured using two common proxies from the literature, *BB_SPI* and *BB_ACC* (Haggard et al., 2015, Hope & Wang, 2018). For *BB_SPI*, we consider whether the firm reported negative special items exceeding 1% of lagged total assets.[7]

[7] Special items are reported in Compustat as unusual and/or non-recurring items considered as special items by the firm, for example, bad debt expense when it is a non-recurring item or 'restructuring/reorganization' items, or non-recurring gains or losses from asset disposals.

For *BB_ACC*, we consider whether firms report extremely negative discretionary accruals. We identify a big bath if the firm meets two criteria: 1) the firm falls in the bottom quintile of performance-matched discretionary accruals, computed following Kothari et al. (2005) and 2) the firm is in the bottom tercile of the basic income rank. We calculate basic income as income before extraordinary items minus special items, and then rank firms' basic income into terciles at the industry-year level (with industry represented by the two-digit SIC code).

To control for performance, we include *INCOME* (net income scaled by assets) and *RET*, similar to Hope and Wang (2018). Following Haggard et al. (2015), Quigley and Hambrick (2012), and Hope and Wang (2018), we include additional control variables related to firm characteristics which may be determinants of big baths. Specifically, we control for firm size *(SIZE* and *REVENUE).* Larger firms are more visible, and higher visibility influences the choice of reporting large write-downs. *REVENUE* is revenue scaled by assets. We also control for firm leverage *(LEVERAGE),* as a firm's assets are often used as collateral in debt contracts, and debt holders pressure firms to report assets that reflect firm fundamentals. *LEVERAGE* is the debt-to-equity ratio measured as the book value of debt divided by the market value of equity. We also control for firm growth (*GROWTH*). Low-growth firms have a steady earnings path and, hence, have little incentive to take a big bath which induces fluctuations in firm's earnings. Similarly, we add a control for the former CEO's age (*AGE*) to account for their risk-taking appetite, which would be reflected in earnings volatility.

Moreover, we control for the factors that reduce managers' ability to exert discretion and undertake a big bath. These include stock market liquidity (*LOG_AMH* and *TURNOVER*), presence of institutional investors (*INSTOWN)*, and analyst coverage (*LOG_COVER)*. *LOG_AMH* is the logarithm of annual mean of monthly absolute returns divided by the dollar volume (Amihud, 2002). *TURNOVER* is annual trading volume scaled by outstanding shares. *LOG_COVER* is the natural logarithm of one plus the number of analysts issuing earnings

forecasts for any horizon during the fiscal period, and zero for any period with missing data from I/B/E/S. We expect a negative coefficient for all these variables.

Further, we control for a firm's need to take a big bath, using the book-to-market ratio (*BTM*) and the level of net operating assets on the balance sheet *(BLOATED)*. *BTM* is the book value of equity divided by the market value of equity. *BLOATED* is an indicator variable equal to one if net operating assets (shareholders' equity less cash and marketable securities plus total debt scaled by lagged sales) lie in the first percentile of the sample. This control measures the presence of overstated assets to capture managerial discretion around big baths (Haggard et al., 2015). We expect the coefficients of *BTM* and *BLOATED* to be positive as the probability of large write-downs should be higher in firms with more bloated assets. All the other variables are as defined in Eqs. (1) and (2). Finally, the model includes year and industry fixed effects and robust standard errors. Table 1 provides the definitions of all variables.

[TABLE 1 HERE]

4. Results

Descriptive statistics

Table 2 provides descriptive statistics for big baths, CEO retention, CEO turnover, and control variables. Panel A presents the mean, median, standard deviation, and 25th and 75th percentiles for the whole sample. Panel B presents this information for firms with and without CEO turnovers. Panel C presents the statistics separately for firms with and without CEO retention.

In Table 2, Panel A, a big bath occurred in 31.36% and 6.79% of cases, on average, using *BB_SPI* and *BB_ACC* proxies, respectively.[8] The average CEO turnover is 27.09%, while

[8] Our *BB_SPI* and *BB_ACC* results are consistent with Hope and Wang (2018). *BB_ACC* has a lower percentage because this definition of big bath requires two criteria to be satisfied and hence is more restrictive.

CEOs were retained in 9.85% of cases for the entire sample, which corresponds to 35.86% of all CEO turnover events, consistent with Quigley and Hambrick (2012).[9] In Table 2, Panel B the percentage of average *BB_SPI* is significantly higher when CEO turnover occurs. This is in line with studies documenting that big baths are more probable following CEO turnover. Moreover, accounting-based performance (*ROA*) is significantly lower in firms with CEO turnover, on average, confirming that CEO turnover is more likely in underperforming firms.

Table 2, Panel C presents the descriptive statistics for observations with CEO turnover, distinguishing between retained (*RETENTION=1*) and non-retained CEOs (*RETENTION=0*). The probability of a big bath is significantly lower in the case of CEO retention, consistent with our hypothesis. Analyzing the control variables, we observe that several controls differ across the two subsamples. In particular, firms with CEO retention on average have lower debt-to-equity ratio (*LEVERAGE*), higher liquidity (*LOG_AMH*), higher institutional ownership (*INSTOWN*), wider analyst coverage (*LOG_COVER*), and are slightly larger (*SIZE*). Overall, we find that firms with retained CEOs show signs of better financial health (*INCOME* and *RETURN*). Thus, taken together, the descriptive statistics suggest that the firm characteristics vary with CEO retention.

[TABLE 2 HERE]

Table 3 presents the Pearson correlation matrix for the variables. In line with the descriptive statistics, we observe a positive and significant correlation between our proxies for big baths and CEO turnover. We find a negative and significant correlation between CEO retention and big baths, but only for *BB_ACC*. However, the correlation analysis does not

[9] The 9.85% statistic is not exactly the same as 9.71% (35.86% of 27.09%) because we construct the *RETENTION* variable using the three-year period surrounding the CEO turnover event.

consider the effects of control variables. *BB_ACC* and *BB_SPI*, are positively and significantly correlated with each other, with a correlation coefficient of 0.0417. The low but positive correlation coefficient indicates that the two proxies are distinct, but capture the big bath phenomenon. The main difference between the two proxies is that *BB_SPI* relates to non-recurring special items and hence to one-time large write-offs. By contrast, *BB_ACC* captures big baths undertaken through accrual-based accounting items, which tend to occur in normal day-to-day business activities. Most correlations between the control variables are significant, but generally small suggesting no multicollinearity issues. *BB_ACC*, *BB_SPI*, and *CEOTURN* are negatively correlated with firm performance, underscoring the importance of firm performance in our setting.

[TABLE 3 HERE]

The role of performance

We examine the role of performance in our setting by comparing the performance of firms with and without CEO turnover before, during, and after a turnover event. As we are interested in CEO retention, we further split CEO turnover firms into firms with and without CEO retention. We measure performance in terms of ROA and implement a propensity score matching (PSM) technique to match firms with and without CEO turnover based on their size, leverage, and industry. Thus, we obtain a similar set of firms for comparison.[10]

Figure 1 presents the past and future performance of firms: 1) without CEO turnover, 2) with CEO turnover but without CEO retention, and 3) with CEO turnover and CEO retention. Throughout this period, firms with no CEO turnover show, on average, a higher ROA

[10] Our overall results and conclusions remain the same when we use median ROA at each point in time, *t-2* to *t+2*, instead of average ROA presented in Figures 1, 2a, and 2b. We prefer ROA over *RET* as ROA is an accounting-based measure of performance and is less influenced by market dynamics.

than firms with CEO turnovers and a stable time trend. This finding is consistent with prior evidence that CEO turnover tends to occur after a decline in firm performance (Gentry et al., 2021). Focusing on firms with CEO turnovers, we find that firms retaining the former CEO, on average, exhibit a higher ROA than those without CEO retention. These results confirm that firm performance is a significant driver of CEO turnover and retention. In addition, while firms with CEO retention have a stable ROA through years *t-2* to *t+2*, firms without CEO retention experience a sharp decline in ROA in the turnover year, which reverses in subsequent years. This trend suggests that big baths take place when a former CEO leaves the firm.

[FIGURE 1 HERE]

To corroborate this insight further, we replicate our analyses by distinguishing firms where big baths did (Figure 2a) and did not (Figure 2b) occur.[11] Figure 2a shows that the average ROA has a similar trend across all three groups of firms, whereas in Figure 2b ROA exhibits the same trend as that observed in Figure 1.

[FIGURES 2a and 2b HERE]

Our t-tests reveal that, while the average values of ROA are statistically significantly different among the three groups in Figure 1 and 2b, this is not the case in Figure 2a. While these graphs provide initial evidence that CEO retention is negatively associated with the probability of a big bath, they underscore the importance of controlling for performance in our models and being cautious about interpreting causality in our findings.

[11] We report the findings for *BB_SPI* for the sake of brevity, but our inferences remain the same when we use *BB_ACC*.

Main results

Table 4 presents the results of the 3SLS model. The first three coloumns show the results when the special item approach (*BB_SPI*) is used. In the first stage of the 3SLS, we examine the association between *LOCAL_DENSITY* and *CEOTURN*. We find a positive and significant coefficient (0.010) for *LOCAL_DENSITY*, indicating that when more firms are present within the same three-digit zip code as the focal firm, the CEO has more external job opportunities, thereby increasing the probability of CEO turnover. In the second stage, we analyze the association between CEO retention and the former CEOs' equity risk incentives before the turnover event. We find a negative and statistically significant coefficient (-0.0001) for *VEGA*. Contrastringly, the coefficient of *DELTA* is positive and significant, suggesting that CEO retention is more likely when delta is higher. If *VEGA* incentivizes CEOs to pursue policies that increase stock price volatility, a higher *DELTA* motivates the CEO to raise stock prices. Thus, former CEOs with lower *VEGA* would not engage in risky activities that could harm shareholder wealth, thereby increasing the probability they are retained. Similarly, former CEOs with higher *DELTA* have stronger incentives to increase stock prices, thereby maximizing shareholder wealth and increasing the probability of a CEO retention.

We also examine whether CEO retention reduces the probability of a big bath. We find a negative and statistically significant coefficient (-0.467) for *RETENTION*, implying a lower probability of a big bath in case of CEO retention. For *CEOTURN*, we find a positive and statistically significant coefficient (0.576), indicating a higher probability of a big bath when a CEO turnover event occurs.

When *BB_ACC* is used as a proxy for big baths, the results are consistent with those for *BB_SPI*. In particular, *LOCAL_DENSITY* has a positive and statistically significant coefficient (0.012) in the first stage, *VEGA* has a negative and statistically significant coefficient (-0.0001)

in the second stage, and *RETENTION* and *CEOTURN* have statistically significant negative (-0.221) and positive (0.088) coefficients, respectively, in the final stage. Thus, consistent with *H1a*, CEO retention is associated with a lower probability of big bath accounting.

Among the control variables, we observe that for both proxies, the probability of a firm taking a big bath is lower when the firm has higher income (*INCOME*) and stock returns (*RET*). Further, the probability of a big bath is higher when the book-to-market ratio (*BTM*), leverage (*LEVERAGE*), and stock turnover (*TURNOVER*) are high. Control variables such as firm size (*SIZE*) have different signs for the two proxy variables, consistent with Hope and Wang (2018). Analyst coverage (*LOG_COVER*) and former CEO age (*AGE*) are negatively and significantly associated with big baths only for *BB_SPI*.

[TABLE 4 HERE]

Next, we investigate whether CEO retention constrains opportunistic big baths. We follow Haggard et al. (2015) in distinguishing between opportunistic and non-opportunistic big baths, depending on whether net operating assets are overstated. Specifically, we consider a big bath opportunistic when *BLOATED* is equal to zero; that is, when the firm's net operating assets are lower than the first percentile of the net operating assets for the sample. We then estimate the 3SLS model from Eqs. (1), (2), and (3) for each subsample obtained after splitting the sample using the variable *BLOATED*. Table 5 presents the results of estimating Eq. (3). The results indicate that CEO retention is associated with a reduced probability of a big bath when the CEO is more likely to be opportunistic. These findings support *H1b* and confirm that former CEOs play a monitoring role which limits the new CEO'sopportunistic behavior.

[TABLE 5 HERE]

Additional analyses

Cross-sectional tests

Empirical evidence shows that CEO retention is associated with positive past performance and the fostering of strategic continuity (Evans et al., 2010; Yi et al., 2020). To rule out this explanation, we perform further cross-sectional tests to investigate the role of firm performance. Specifically, we estimate Eqs. (1)–(3) of the three-stage least squares (3SLS) model by splitting firms below and above median firm performance. Table 6 presents the empirical evidence. Columns (1) and (2) report the findings for *BB_SPI*, while Columns (3) and (4) present the results for *BB_ACC*. Across all the columns, we find a negative coefficient for *RETENTION*. However, this coefficient is significant only for firms with performance below the median. This implies that, for poorly performing firms, the probability of a big bath is lower when the firm retains its former CEO. This echoes our findings in the main analysis for the last stage of the 3SLS (Table 4). However, when firms perform better than the median firm performance, the coefficient of *RETENTION* is not significant. These results suggest that the negative association between CEO retention and the probability of a big bath is not explained by the superior performance of firms retaining CEOs.

As Table 6 shows, for the *CEOTURN* variable, the coefficient is positive and significant for below-median-performing firms when using the *BB_ACC* proxy. However, when we use the *BB_SPI* proxy for big baths, the coefficient of *CEOTURN* is positive, irrespective of firm performance. This implies that the probability of a big bath in relation to CEO turnover is higher for poorly performing firms when using *BB_ACC* proxy, and for all firms irrespective of performance when using *BB_SPI* proxy. For the control variables, the signs of the coefficients are consistent with those in the main analysis when these coefficients are significant. The only exception is the former CEO's age (*AGE*), which is negative and significant for both proxies of big baths and not just *BB_SPI* as in Table 4.

[TABLE 6 HERE]

We estimate cross-sectional tests distinguishing between internally and externally hired new CEOs. The underlying intuition is that an internally promoted CEO will decrease the need for monitoring by the former CEO, with whom the new CEO will have closer ties. Conversely, if the new CEO is an external hire, they will be less beholden to the former CEO and will thus be more incentivized to take a big bath. To test our conjecture, we re-estimate the 3SLS by adding an interaction term between CEO retention and a dummy variable capturing whether the new CEO has been internally promoted or externally hired in Eq. (3).[12] We find that the negative association between former CEO retention and big baths is weaker for internally promoted CEOs. These results support our argument that the former CEO plays a monitoring role that constrains the new CEO's ability to take a big bath.

Big baths and the firm's information environment

So far, our results suggest that retained former CEOs play a monitoring role; their retention is associated with a decreased probability of new CEOs taking opportunistic big baths. To further corroborate our findings, we investigate the association between opportunistic big baths and firm information environment. Specifically, if the former CEO restricts the new CEO's opportunistic behavior, we should observe that the negative association between opportunistic big baths and the information environment is weaker under CEO retention.

[12] We define internally promoted versus externally hired CEO subsamples by hand-collecting this information for each CEO turnover event from the firms' annual reports and company websites. Notably, we find that new CEOs are more likely to be internally promoted when the former CEOs are retained and have performed well over their tenures.

To test this conjecture, we limit our sample to cases where assets are not overstated, and thus, a big bath is not expected (*BLOATED = 0*). We run Eq. (4) separately for two subsamples: with and without CEO retention (*RETENTION = 1* and *0*, respectively).

$$SPREAD_{it} = \beta_0 + B_1\ BIGBATH_{it} + \sum Controls_{it} + \varepsilon_{it}, \qquad (4)$$

where *SPREAD* captures the level of information asymmetry, reflecting a firm's information environment. We follow Hope and Wang (2018) and define *SPREAD* as the annual mean of the monthly bid/ask spread, calculated as 100 × (ask – bid)/[(ask + bid)/2]. We used the same two proxies for *BIGBATH*, *BB_SPI* and *BB_ACC*. As we consider only observations for which *BLOATED* is equal to zero, our big bath proxies should help capture the association between opportunistic big baths and a firm's information environment. We include controls for *SIZE, BTM, INCOME, LEVERAGE, INSTOWN, LOG_COVER, DELTA,* and *VEGA*, consistent with Hope and Wang (2018). We also include four additional controls: performance (change in ROA (*ΔROA*), lagged annual return (*RET*), and two indicator variables for whether CEO compensation *DELTA* or *VEGA* are unavailable (*DELTA_ADJ* and *VEGA_ADJ).* This estimation also includes year and industry fixed effects, and robust standard errors.[13]

Table 7 presents the results for the two big bath proxies. In Column (1), pertaining to *BB_SPI*, the coefficient of *BB_SPI* is negative and significant when the former CEO is retained, whereas in Column (2), the coefficient of *BB_SPI* is positive and significant when the former CEO is not retained. In Columns (3) and (4), we find a similar trend for *BB_ACC*, except that the coefficient is negative but not significant when *RETENTION = 1*. These results indicate

[13] We do not estimate the 3SLS for this additional analysis as this would result in a system of four equations, thus potentially overfitting the model to the data and complicating the interpretation of the results. Instead, we estimate big baths using 2SLS where the first and second stages are as in Eqs. (1) and (4), respectively

that opportunistic big baths are associated with higher information asymmetry when the former CEO is not retained. However, we do not find the same evidence when a former CEO is retained, which is consistent with the CEO's monitoring role.[14]

[TABLE 7 HERE]

CEO retention and narratives

Big baths are not the only financial reporting choices new CEOs can make to maximize their personal interests; they can use the tone in narratives to influence outsiders' perceptions of their skills and earnings expectations (Breuer et al., 2021; Clatworthy & Jones, 2003). Therefore, we investigate whether and how narratives change in the years surrounding CEO turnover when a former CEO is retained. Analyzing the potential effects of CEO retention on corporate narratives is nontrivial. Ideally, we would like to identify specific comments regarding big baths in the narratives. However, from our reading of our sample firms' 10-Ks, we observed that firms do not refer to big baths explicitly; rather, they comment on overall performance and eventually on the presence of impairments and write-downs. To overcome this limitation, we considered the net optimism within 10-K.

We compute net optimism (*NET_OPT*) as the difference between positive and negative words, following Loughran and McDonald (2011). We estimate the 3SLS Eqs. (1)-(3) with *NET_OPT* as the dependent variable, and summarize the results in Table 8. We find that when the CEO is retained, the tone of the 10-K financial statements differs; specifically, the tone is more optimistic. Similar to Breuer et al. (2021), who document that new CEOs might use tone to set a lower benchmark for their future assessments, we interpret the findings in Table 8 as further evidence that CEO retention limits the new CEO's discretion.

[14] The fact that big baths do not worsen the information environment when the CEO is retained further supports the idea that big baths undertaken in this case can be considered non-opportunistic.

We also examine whether the association between tone in narrative and CEO retention varies with the occurrence of a big bath. We regress *NET_OPT* on *CEOTURN* and *RETENTION*, and their interactions with *BB_SPI* and *BB_ACC*. As expected, *NET_OPT* is negatively associated with *BB_SPI* and *BB_ACC*, indicating that the big bath represented by accounting numbers is associated with a less optimistic tone in 10-K financial statements. However, the interaction terms between *BB_SPI* and *BB_ACC* and *RETENTION* are not significant, suggesting that the narratives change in response to big bath accounting, irrespective of CEO retention.

[TABLE 8 HERE]

Big baths and the length of CEO retention

In our main analyses, we examined the association between CEO retention and the occurrence of a big bath without considering how long the retained CEOs stayed in the firm. In this section, we exploit the cross-sectional variation in the length of CEO retention and investigate whether and how the horizon of the former CEO's retention influences the probability of a big bath. For this test, we consider only firms that retained the former CEO, as data on the length of retention are available only for this subsample. Given that our sample firms retain the former CEO for a median of three years, we focus on retention for up to one, two, and more than three years post-turnover. We perform the third stage of the 3SLS, where we regress the two big bath proxies (*BB_ACC* and *BB_SPI*) individually on *RET_1*, *RET_2*, and *RET_3* variables, which proxy CEO retention for up to one, two, and more than three years, respectively, after the CEO turnover (Table OA1 in the Online Appendix).

We find that for the *BB_SPI* big bath proxy (Column 1), the coefficient of *RET_1* is negative but not significant. However, the coefficients on *RET_2* and *RET_3* are negative and significant. This implies that retaining the CEO for only one year does not significantly

influence the probability of a big bath. However, when the former CEO is retained for up to two years post-CEO turnover, the probability of a big bath is significantly lowered (*p-value = 0.074*). This influence is even stronger when the CEO is retained for more than three years (*p-value =0.001*) after the turnover event.

When we consider the results for the *BB_ACC* proxy for the big bath, we find that none of the three variables are statistically significant (*p-value = 0.101*). This maybe because of the reduced number of observations for *BB_ACC* proxy in the CEO retention sample. For the control variables, the signs of the coefficients are consistent with those in the main analysis. Thus, the overall results of this analysis indicate that the longer (shorter) the former CEO is retained, the stronger (weaker) the monitoring effect documented in the main analysis, in line with Evans et al. (2010).

Additional robustness checks

In additional robustness checks, we rerun the 3SLS model in Eqs. (1)-(3) using retirement as an additional control (Table OA2 in the Online Appendix). We construct this variable using CEO dismissal data from Gentry et al. (2021). The first (next) three columns report the results for the *BB_SPI* (*BB_ACC*) big bath proxies. Across both big bath proxies for the first two stages, the coefficient of the retirement variable is positive and significant. This implies that the higher the probability of retirement, the higher the probability of CEO turnover and CEO retention. The remaining results are the same as Table 4 in terms of the probability of a big bath in the third stage of the 3SLS and the signs and significance of the main variables of interest and control variables.

Our main analysis considers the three years surrounding a CEO turnover event and CEO retention. We investigate the timing of the big bath in detail by rerunning the analysis separately for each year. In Table OA3, we observe a negative association between *RETENTION* and the

big bath proxies in both the year of the CEO turnover event and the year after, but not the year before the turnover event. This result reinforces our main conclusions: the retained CEO monitors and constrains the new CEO's behavior.[15]

To further reinforce our results, we re-estimate Eq. (1) using entropy balancing procedure, following Hainmueller (2012). Treated (*RETENTION*=1) and non-treated observations (*RETENTION*=0) are weighted on all the control variables included in Eq. (2). Entropy balancing is based on the first and second moments of the distribution of control variables (Table OA4). For both proxies of big bath - *BB_SPI*, and *BB_ACC* - we observe that CEO turnover is positively associated with the probability of a big bath, while the coefficient for CEO retention is negative and significant. This is consistent with the results in Table 4.

5. Conclusion

Evans et al. (2010) and Quigley and Hambrick (2012) document that former CEOs may remain within the firm as board members, potentially restricting the new CEO's strategic discretion, thus negatively affecting firm performance. We contribute to the literature by offering a new perspective on the monitoring role of retained CEOs. Specifically, we explore whether big baths are less probable around CEO turnovers if the former CEO is retained. Using a hand-collected sample of CEO turnover events in US firms for 2003–2014, we find that CEO turnover is associated with a higher probability of big bath accounting. Counterbalancing this, CEO retention is associated with a lower probability of a big bath accounting, and particularly opportunistic big bath.

[15] These results are consistent with the underlying descriptives concerning the percentage of big baths in the three years surrounding CEO retention and the turnover event. The frequency of big baths is steady across the three years, further validating our results.

We also examine the moderating effect of CEO retention on the association between opportunistic big baths and information asymmetry. We find that when opportunistic big baths occur, retained CEOs mitigate their impact on firm's information asymmetry. Further, we analyze the effects of CEO retention on 10-K narratives and find that, while CEO retention is associated with more optimistic narratives, it does not seem to influence narrative tone in cases of big baths. Although this is a preliminary attempt to understand the potential effects of CEO retention on corporate narratives, we believe that it provides interesting insights for future research.

This study contributes to existing literature in several ways. First, our results highlight the positive effect of CEO retention: retained CEOs can prevent new CEOs from taking opportunistic big baths. Second, it contributes to the literature on accounting choices and big baths. To the best of our knowledge, no prior studies have examined the impact of CEO retention on big baths. Furthermore, we show an additional aspect of the board's monitoring role; namely, keeping a former CEO on the board restricts potentially harmful decisions by new CEOs. Our results have implications for boards, regulators, and corporate governance mechanisms. Retaining a former CEO can help align a firm's decisions and actions with those of investors and other stakeholders. Thus, CEO retention could be a useful tool to add to existing corporate governance mechanisms, and it may require further exploration in theory and practice.

Our findings should be interpreted with caution, as our analysis involves a specific sample of publicly listed US S&P 1500 firms. Thus, our results may not apply to smaller or private firms, where CEOs' reputational concerns may differ. Future studies could implement similar analyses and investigate the role of retained CEOs in such firms. Although we tried to account for the role of firm performance in our findings, we could not completely rule out its effect, hindering the possibility of drawing causality in our findings.

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Table 1. Variable descriptions

Variable	Definition	Source
BB_SPI	Indicator variable equal to 1 if a firm reported negative special items exceeding 1% of lagged total assets, 0 otherwise.	COMPUSTAT
BB_ACC	Indicator variable equal to 1 if: (1) the firm is within the bottom quintile rank of performance-matched discretionary accruals computed as in Kothari et al. (2005) and (2) the firm belongs to the bottom tercile of the basic income rank, 0 otherwise. Basic income is income before extraordinary items minus special items. Firms are ranked on basic income into terciles at the industry-year level (two-digit industry SIC code).	COMPUSTAT
RETENTION	Indicator variable equal to 1 when the departing CEO is retained in the three years around the CEO turnover (*t-1*; *t*; *t+1*), 0 otherwise.	Hand-collected from Google searches, company filings, and press releases
CEOTURN	Indicator variable equal to 1 in the three years surrounding a CEO turnover event (*t-1*; *t*; *t+1*), 0 otherwise.	EXECUCOMP
LOCAL_DENS	Natural logarithm of 1 plus the number of firms within the same year and three-digit zip code (ADDZIP) of the headquarters of a given firm.	COMPUSTAT
VEGA	Expected dollar change in CEO wealth for a 1% change in stock return volatility (using entire portfolio of options) computed as in Core and Guay (2002) for the sample period 1992–2014.	Lalitha Naveen's website: https://sites.temple.edu/lnaveen/data/.
DELTA	Expected dollar change in CEO wealth for a 1% change in stock sensitivity (Delta) price (using entire portfolio of stocks and options) computed as in Core and Guay (2002) for the sample period 1992–2014.	Lalitha Naveen's website: https://sites.temple.edu/lnaveen/data/.
BLOATED	Indicator variable equal to 1 if net operating assets lie in the first percentile of the sample. Net operating assets are shareholders' equity less cash and marketable securities, plus total debt scaled by lagged sales.	COMPUSTAT
SPREAD	Annual mean of the monthly bid-ask spread, calculated as 100 × (ask – bid)/[(ask + bid)/2].	CRSP
AGE	Age of the outgoing CEO.	EXECUCOMP
SIZE	The natural logarithm of total assets.	COMPUSTAT
BTM	Book value of equity divided by market value of equity.	COMPUSTAT
REVENUE	Revenue scaled by total assets.	COMPUSTAT
INCOME	Net income scaled by total assets.	COMPUSTAT
LEVERAGE	Book value of debt divided by market value of equity.	COMPUSTAT
GROWTH	The percentage change in sales from the previous year.	COMPUSTAT
LOG_AMH	Annual mean of monthly absolute return divided by dollar volume: 1,000,000×|ret|÷ (prc×vol). Regressions use the log of 1 plus this ratio, calculated using monthly CRSP data (variables ret, prc, and vol).	CRSP
TURNOVER	Annual total trading volume divided by shares outstanding.	CRSP
RET	Annual cumulative stock return.	CRSP
INSTOWN	The percentage of shares held by institutional investors during the fiscal period; 0 for any period for which data is unavailable.	13-F FILINGS
LOG_COVER	Natural logarithm of 1 plus the number of analysts issuing earnings forecasts for any horizon during the fiscal period, 0 for any period for which data is unavailable.	I/B/E/S
ROA	Income before extraordinary items divided by lagged total assets.	COMPUSTAT
ROA_SQUARED	Square of ROA.	COMPUSTAT
ΔROA	Change in ROA.	COMPUSTAT

DELTA_ADJ	Indicator variable equal to 1 if data on DELTA are missing.	Lalitha Naveen's website: https://sites.temple.edu/lnaveen/data/.
VEGA_ADJ	Indicator variable equal to 1 if data on VEGA are missing.	Lalitha Naveen's website: https://sites.temple.edu/lnaveen/data/.
NET_OPT	Difference between positive and negative words computed as in Loughran and McDonald (2011). The positive (negative) words are the ratio of the positive (negative) words in the 10-K divided by the total number of words in that document.	WRDS SEC Analytics Suite
RET_1	Indicator variable equals 1 if the outgoing CEO is retained in the first year after the CEO turnover event.	BOARDEX
RET_2	Indicator variable equals 1 if the outgoing CEO is retained in the second year after the CEO turnover event.	BOARDEX
RET_3	Indicator variable equals 1 if the outgoing CEO is retained in third and subsequent years after the CEO turnover event.	BOARDEX
RETIREMENT	Indicator variable equals 1 if the outgoing CEO retired owing to the CEO turnover event.	CEO dismissal data from Gentry et al. (2021).

Table 2. Descriptive statistics

This table reports the descriptive statistics of the variables included in the model. Panel A shows the descriptive statistics for the whole sample. Panels B and C report the descriptive statistics for the firm-year observations when *CEOTURN* is equal to 0 and 1, and when *RETENTION* is equal to 0 and 1, respectively. T-tests for the differences in means are also provided. Significance levels: * p-value<10%; ** p-value <5%; *** p-value <1%. Variable descriptions and definitions are detailed in Table 1.

Panel A: Whole sample

Variable	***N***	***Mean***	***25th***	***Med.***	***75th***	***SD.***
BB_SPI	12564	0.314	0	0	1	0.464
BB_ACC	11792	0.068	0	0	0	0.252
RETENTION	12564	0.099	0	0	0	0.298
CEOTURN	12564	0.271	0	0	1	0.444
LOCAL_DENS	12564	2.289	1.609	2.303	3.091	0.939
VEGA	12564	134.659	7.670	47.230	149.793	286.894
DELTA	12564	824.375	56.615	179.898	520.919	8831.607
BLOATED	12564	0.075	0	0	0	0.264
AGE	12374	55.897	51	56	60	7.307
SIZE	12564	7.348	6.255	7.238	8.347	1.552
BTM	12563	0.487	0.262	0.421	0.643	0.700
REVENUE	12564	1.159	0.653	0.973	1.453	0.771
INCOME	12564	0.041	0.020	0.056	0.094	0.138
LEVERAGE	12532	0.371	0.014	0.142	0.347	1.663
GROWTH	12561	0.101	-0.005	0.074	0.166	0.343
LOG_AMH	12543	0.019	0.000	0.001	0.005	0.127
TURNOVER	12564	0.222	0.116	0.176	0.272	0.174
RET	12564	0.074	-0.160	0.016	0.227	0.469
INSTOWN	12564	0.365	0.281	0.390	0.482	0.174
LOG_COVER	12564	1.988	1.386	2.303	2.890	1.147
ROA	12564	0.054	0.022	0.060	0.103	0.127

Panel B: By CEO turnover

	CEOTURN = 0						*CEOTURN = 1*						*Means Diff*
Variable	***N***	***Mean***	***25th***	***Med.***	***75th***	***SD.***	***N***	***Mean***	***25th***	***Med.***	***75th***	***SD.***	
BB_SPI	9160	0.289	0	0	1	0.453	3404	0.380	0	0	1	0.485	**-0.091*** **
BB_ACC	8598	0.065	0	0	0	0.246	3194	0.077	0	0	0	0.267	-0.013
RETENTION	9160	0	0	0	0	0	3404	0.364	0	0	1	0.481	-
LOCAL_DENS	9160	2.275	1.609	2.303	3.045	0.940	3404	2.325	1.609	2.303	3.135	0.933	**-0.05*** **
VEGA	9160	143.857	8.995	52.423	160.702	294.900	3404	109.908	4.907	34.975	115.045	262.596	**33.949*** **
DELTA	9160	945.124	74.288	217.953	607.691	8972.491	3404	499.446	28.718	102.159	295.664	8433.528	**445.678*** **
BLOATED	9160	0.083	0	0	0	0.275	3404	0.055	0	0	0	0.228	**.0280*** **
AGE	9143	56.059	51	56	60	7.211	3231	55.440	50	55	60	7.555	**0.619*** **
SIZE	9160	7.321	6.234	7.191	8.327	1.536	3404	7.421	6.321	7.351	8.403	1.592	**-0.1*** **
BTM	9160	0.477	0.259	0.413	0.626	0.696	3403	0.512	0.267	0.448	0.693	0.710	**-0.035*** **
REVENUE	9160	1.139	0.651	0.955	1.443	0.748	3404	1.212	0.659	1.016	1.502	0.829	**-0.073*** **
INCOME	9160	0.048	0.025	0.058	0.095	0.123	3404	0.022	0.005	0.050	0.091	0.172	**0.026*** **
LEVERAGE	9139	0.362	0.011	0.136	0.339	1.800	3393	0.394	0.023	0.159	0.375	1.217	-0.032
GROWTH	9157	0.112	0.004	0.081	0.176	0.349	3404	0.072	-0.029	0.055	0.137	0.325	**0.072*** **
LOG_AMH	9145	0.017	0.000	0.001	0.005	0.112	3398	0.026	0.000	0.001	0.005	0.161	**-0.009*** **
TURNOVER	9160	0.221	0.116	0.175	0.268	0.174	3404	0.225	0.115	0.180	0.279	0.172	-0.005
RET	9160	0.081	-0.150	0.024	0.228	0.473	3404	0.055	-0.188	-0.006	0.220	0.457	**0.026*** **
INSTOWN	9160	0.372	0.289	0.393	0.484	0.170	3404	0.347	0.250	0.379	0.475	0.183	**0.025*** **
LOG_COVER	9160	1.997	1.386	2.303	2.890	1.135	3404	1.966	1.386	2.303	2.890	1.180	**0.031**
ROA	9160	0.061	0.027	0.063	0.106	0.114	3404	0.035	0.005	0.052	0.097	0.154	**0.026*** **

Panel C: By former CEO non-retention vs. CEO retention

	RETENTION = 0						*RETENTION = 1*						*Means Diff*
Variable	***N***	***Mean***	***25th***	***Med.***	***75th***	***SD.***	***N***	***Mean***	***25th***	***Med.***	***75th***	***SD.***	
BB_SPI	2166	0.410	0	0	1	0.492	1238	0.328	0	0	1	0.470	**0.082*** **
BB_ACC	2027	0.090	0	0	0	0.286	1167	0.055	0	0	0	0.228	**0.035*** **
LOCAL_DENS	2166	2.336	1.609	2.398	3.135	0.924	1238	2.307	1.609	2.303	3.135	0.948	0.029
VEGA	2166	104.699	3.753	31.589	107.621	220.648	1238	119.020	8.501	40.573	136.358	323.049	-14.321
DELTA	2166	270.920	20.316	82.097	251.187	613.800	1238	899.275	47.862	141.665	403.052	13955.400	**-628.356** **
BLOATED	2166	0.053	0	0	0	0.223	1238	0.060	0	0	0	0.237	-0.007
AGE	2030	55.405	50	55	60	7.555	1201	55.500	50	55	61	7.559	-.095
SIZE	2166	7.352	6.176	7.246	8.325	1.637	1238	7.541	6.475	7.539	8.506	1.502	**-0.19*** **
BTM	2165	0.532	0.274	0.467	0.729	0.831	1238	0.478	0.262	0.416	0.641	0.420	**0.054** **
REVENUE	2166	1.212	0.669	1.021	1.505	0.813	1238	1.213	0.642	1.008	1.495	0.856	-0.001
INCOME	2166	0.010	-0.007	0.045	0.084	0.169	1238	0.042	0.023	0.059	0.100	0.175	**-.032*** **
LEVERAGE	2162	0.445	0.028	0.174	0.394	1.452	1231	0.306	0.018	0.130	0.338	0.605	**0.139*** **
GROWTH	2166	0.062	-0.041	0.047	0.134	0.255	1238	0.088	-0.005	0.066	0.142	0.420	**-0.026** **
LOG_AMH	2161	0.031	0.000	0.001	0.006	0.186	1237	0.017	0.000	0.001	0.003	0.103	**0.015** **
TURNOVER	2166	0.227	0.113	0.179	0.279	0.179	1238	0.222	0.120	0.180	0.281	0.158	0.005
RET	2166	0.048	-0.205	-0.011	0.219	0.476	1238	0.066	-0.164	-0.003	0.221	0.420	-0.018
INSTOWN	2166	0.339	0.237	0.370	0.468	0.187	1238	0.362	0.278	0.392	0.483	0.177	**-0.024*** **
LOG_COVER	2166	1.906	1.099	2.197	2.833	1.175	1238	2.071	1.386	2.398	2.944	1.183	**-0.166*** **
ROA	2166	0.024	-0.006	0.047	0.089	0.147	1238	0.054	0.022	0.063	0.108	0.165	**-0.03*** **

Table 3. Pearson correlation matrix

This table presents the pairwise Pearson correlation matrix for the variables in the model. Significance level: * p-value<10%. Variable descriptions and definitions are detailed in Table 1

Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
(1) BB_SPI	1.000																				
(2) BB_ACC	0.042*	1.000																			
(3) RETENTION	0.010	-0.017*	1.000																		
(4) CEOTURN	0.087*	0.022*	0.542*	1.000																	
(5) LOCAL_DENS	0.012	0.002	0.006	0.024*	1.000																
(6) VEGA	-0.002	-0.085*	-0.018*	-0.053*	0.064*	1.000															
(7) DELTA	-0.007	-0.017*	0.003	-0.022*	0.036*	0.550*	1.000														
(8) BLOATED	0.033*	-0.020*	-0.019*	-0.046*	-0.021*	-0.034*	-0.011	1.000													
(9) AGE	-0.039*	-0.042*	-0.018*	-0.037*	-0.007	0.045*	0.051*	-0.005	1.000												
(10) SIZE	-0.010	-0.220*	0.041*	0.028*	0.044*	0.442*	0.106*	-0.011	0.068*	1.000											
(11) BTM	0.047*	0.043*	-0.004	0.022*	0.009	-0.077*	-0.022*	0.014	0.038*	-0.054*	1.000										
(12) REVENUE	-0.078*	0.025*	0.023*	0.042*	-0.084*	-0.086*	-0.028*	-0.116*	0.016*	-0.091*	-0.007	1.000									
(13) INCOME	-0.268*	-0.170*	0.003	-0.083*	-0.043*	0.115*	0.036*	0.040*	0.022*	0.196*	-0.099*	0.065*	1.000								
(14) LEVERAGE	0.082*	0.021*	-0.013	0.009	-0.031*	-0.039*	-0.011	0.000	0.012	0.050*	-0.309*	0.009	-0.147*	1.000							
(15) GROWTH	-0.052*	0.027*	-0.012	-0.052*	-0.006	-0.005	0.009	0.134*	-0.017*	-0.029*	-0.063*	-0.043*	0.114*	-0.038*	1.000						
(16) LOG_AMH	0.034*	0.103*	-0.006	0.032*	0.008	-0.065*	-0.013	-0.008	-0.018*	-0.237*	0.092*	0.058*	-0.188*	0.063*	-0.069*	1.000					
(17) TURNOVER	0.019*	-0.006	0.000	0.011	0.055*	-0.041*	-0.016*	0.019*	-0.075*	0.096*	-0.005	-0.032*	-0.043*	0.105*	0.082*	-0.111*	1.000				
(18) RET	0.000	-0.014	-0.006	-0.025*	-0.009	-0.021*	-0.002	0.004	-0.017*	-0.019*	0.027*	0.033*	0.003	0.239*	-0.017*	0.055*	0.035*	1.000			
(19) INSTOWN	-0.030*	-0.082*	-0.005	-0.062*	0.012	0.001	-0.018*	0.012	-0.017*	0.056*	0.004	-0.036*	0.153*	-0.076*	0.028*	-0.188*	0.146*	-0.018*	1.000		
(20) LOG_COVER	-0.057*	-0.096*	0.024*	-0.012	0.024*	0.190*	0.066*	-0.008	-0.021*	0.238*	-0.067*	-0.057*	0.121*	-0.058*	0.038*	-0.148*	0.119*	-0.022*	0.174*	1.000	
(21) ROA	-0.268*	-0.184*	0.000	-0.091*	-0.040*	0.110*	0.041*	0.077*	0.010	0.160*	-0.119*	0.075*	0.887*	-0.140*	0.143*	-0.168*	0.003	0.013	0.143*	0.126*	1.000

Table 4. Probability of a big bath around CEO turnover

This table presents the results of the 3SLS model estimation regressing big baths on CEO turnover and retention. The first (next) three columns report the results for the first, second, and third stages of the 3SLS for the *BB_SPI* (*BB_ACC*) big baths proxies. Columns (1), (2), and (3) present the results for the first, second, and third stages of the 3SLS estimation, respectively in both *BB_SPI* and *BB_ACC*. All regressions include industry and year fixed effects, whereas Eq. (2) also includes state fixed effects. Standard errors are reported in parentheses**.** Significance levels: * p <10%, ** p <5%, *** p <1%. Variable descriptions and definitions are detailed in Table 1.

Big Bath Proxy	***BB_SPI***			***BB ACC***		
Variable	***(1) CEOTURN***	***(2) RETENTION***	***(3) BB_SPI***	***(1) CEOTURN***	***(2) RETENTION***	***(3) BB_SPI***
RETENTION	-	-	**-0.467***	-	-	**-0.221***
			(0.141)			**(0.081)**
CEOTURN	-	-	**0.576***	-	-	**0.088***
			(0.098)			**(0.052)**
LOCAL_DENS	**0.01***	-	-	**0.012***	-	-
	(0.004)			**(0.004)**		
INSTOWN	-0.117***	-	0.029	-0.12***	-	-0.054***
	(0.02)		(0.028)	(0.02)		(0.015)
GROWTH	-0.008	-0.001	-0.001	-0.007	-0.0001	0.002
	(0.005)	(0.003)	(0.006)	(0.005)	(0.003)	(0.003)
RET	-0.043***	-0.002	-0.069***	-0.046***	-0.0005	-0.016***
	(0.008)	(0.005)	(0.01)	(0.009)	(0.006)	(0.006)
SIZE	0.016***	0.009***	0.009***	0.017***	0.009***	-0.036***
	(0.003)	(0.002)	(0.003)	(0.003)	(0.002)	(0.002)
ROA	-0.264***	-0.029	-	-0.259***	-0.025	-
	(0.031)	(0.021)		(0.031)	(0.021)	
ROA_SQUARED	-	0.032**	-	-	0.029*	-
		(0.016)			(0.016)	
VEGA	-	**-0.0001***	-	-	**-0.0001****	-
		(0.0001)			**(0.0001)**	
DELTA	-	**0.0001*****	-	-	**0.0001*****	-
		(0.0001)			**(0.0001)**	
AGE	-	0.002***	-0.003***	-	0.002***	-0.001
		(0.0003)	(0.001)		(0.0003)	(0.0004)
BLOATED	-	-	0.002	-	-	-0.002
			(0.017)			(0.009)
BTM	-	-	0.04***	-	-	0.024***
			(0.007)			(0.004)
REVENUE	-	-	-0.012*	-	-	0.001
			(0.007)			(0.004)
INCOME	-	-	-0.174***	-	-	-0.146***
			(0.036)			(0.02)
LEVERAGE	-	-	0.015***	-	-	0.012***
			(0.003)			(0.002)
LOG_AMH	-	-	-0.033	-	-	0.015
			(0.032)			(0.018)
TURNOVER	-	-	0.12***	-	-	0.039**
			(0.028)			(0.016)
LOG_COVER	-	-	-0.014***	-	-	-0.001
			(0.004)			(0.002)
Intercept	0.158**	-0.037	0.523***	0.234***	-0.037	0.308***
	(0.072)	(0.06)	(0.086)	(0.078)	(0.066)	(0.049)
Observations	*12,540*	*12,540*	*12,540*	*11,768*	*11,768*	*11,768*
Year F.E.	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
Industry F.E.	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
State F.E.	*No*	*Yes*	*No*	*No*	*Yes*	*No*
Pseudo R-squared	*0.0259*	*0.0312*	*-0.0509*	*0.0243*	*0.0283*	*0.0468*

Table 5. Opportunistic and non-opportunistic big baths

This table presents the results of the 3SLS model estimation by regressing opportunistic and non-opportunistic big baths for CEO turnover and retention. Columns 1 and 2 report the results for *BB_SPI* for non-opportunistic and opportunistic big baths, respectively. Columns 3 and 4 report the results for *BB_ACC* for non-opportunistic and opportunistic big baths, respectively. All regressions include industry and year fixed effects. Standard errors are reported in parentheses**.** Significance levels: * p <10%, ** p <5%, *** p <1%. Variable descriptions and definitions are detailed in Table 1.

Variable	***(1) BB_SPI***	***(2) BB_SPI***	***(3) BB_ACC***	***(4) BB_ACC***
Nature of big bath	***NON-OPPORTUNISTIC (BLOATED=1)***	***OPPORTUNISTIC (BLOATED=0)***	***NON-OPPORTUNISTIC (BLOATED=1)***	***OPPORTUNISTIC (BLOATED=0)***
RETENTION	**-0.152**	**-0.411*** **	**-0.08**	**-0.194** **
	(0.282)	**(0.143)**	**(0.15)**	**(0.084)**
CEOTURN	**-0.275***	**0.551*** **	**0.019**	**0.087***
	(0.151)	**(0.098)**	**(0.084)**	**(0.051)**
AGE	-0.005**	-0.003***	-0.002*	-0.001
	(0.002)	(0.001)	(0.001)	(0.0005)
SIZE	0.019	0.008**	-0.035***	-0.036***
	(0.014)	(0.004)	(0.008)	(0.002)
BTM	0.071	0.040***	-0.036	0.025***
	(0.057)	(0.007)	(0.031)	(0.004)
REVENUE	-0.01	-0.009	0.005	0.001
	(0.043)	(0.007)	(0.023)	(0.004)
INCOME	-0.703***	-0.162***	-0.574***	-0.141***
	(0.24)	(0.037)	(0.134)	(0.020)
LEVERAGE	0.088**	0.015***	0.0002	0.012***
	(0.04)	(0.003)	(0.022)	(0.002)
GROWTH	-0.008	-0.001	0.021	0.001
	(0.036)	(0.006)	(0.019)	(0.003)
LOG_AMH	-0.050	-0.032	0.046	0.012
	(0.174)	(0.033)	(0.103)	(0.018)
TURNOVER	0.11	0.125***	0.019	0.037**
	(0.097)	(0.029)	(0.053)	(0.017)
RET	-0.139***	-0.068***	-0.009	-0.017***
	(0.036)	(0.01)	(0.02)	(0.006)
INSTOWN	0.083	0.017	-0.115**	-0.046***
	(0.095)	(0.029)	(0.0529	(0.016)
LOG_COVER	0.002	-0.015***	0.014*	-0.002
	(0.015)	(0.004)	(0.008)	(0.002)
Intercept	0.649***	0.523***	0.392***	0.304***
	(0.212)	(0.087)	(0.116)	(0.049)
Observations	*845*	11,695	816	10,952
Year F.E.	*Yes*	*Yes*	Yes	Yes
Industry F.E.	*Yes*	*Yes*	Yes	Yes
Pseudo R-squared	*0.091*	*-0.035*	*0.159*	0.056

Table 6. Performance-based cross-sectional tests

This table presents the results of the cross-sectional tests for the 3SLS model estimation by splitting firms into below- and above-median performance. Performance is defined as return on assets (*ROA*). The first (next) two columns in the table present the results for the below- and above-median performances given by *BB_SPI* (*BB_ACC*). All regressions include industry and year fixed effects. Standard errors are reported in parentheses**.** Significance levels: * p <10%, ** p <5%, *** p <1%. Variable descriptions and definitions are detailed in Table 1.

Variable	***(1)***	***(2)***	***(3)***	***(4)***
	BB SPI	***BB SPI***	***BB ACC***	***BB ACC***
Performance	***BELOW MEDIAN***	***ABOVE MEDIAN***	***BELOW MEDIAN***	***ABOVE MEDIAN***
RETENTION	-0.515***	-0.0234	-0.250***	-0.0175
	(0.139)	(0.159)	(0.0883)	(0.0699)
CEOTURN	0.480***	0.525***	0.328***	-0.0404
	(0.103)	(0.112)	(0.0610)	(0.0480)
INSTOWN	0.00539	0.0459	-0.00111	-0.0583***
	(0.0385)	(0.0361)	(0.0244)	(0.0158)
GROWTH	0.00203	-0.0394*	0.00248	0.00894
	(0.00589)	(0.0218)	(0.00367)	(0.00919)
RET	-0.0670***	-0.0685***	-0.0162**	-0.00458
	(0.0118)	(0.0169)	(0.00769)	(0.00724)
SIZE	0.00540	0.00208	-0.0539***	-0.0262***
	(0.00525)	(0.00458)	(0.00342)	(0.00196)
AGE	-0.00169	-0.00498***	-0.000948	-0.000921**
	(0.00113)	(0.000982)	(0.000691)	(0.000421)
BLOATED	0.0138	-0.0142	0.0110	0.00212
	(0.0270)	(0.0206)	(0.0172)	(0.00891)
BTM	0.0271***	0.0848***	0.0202***	0.00754
	(0.00765)	(0.0258)	(0.00499)	(0.0112)
REVENUE	-0.00430	-0.0170	0.000484	0.00527
	(0.00972)	(0.0104)	(0.00612)	(0.00447)
INCOME	-0.0528	-0.177*	-0.0296	0.0240
	(0.0467)	(0.0905)	(0.0290)	(0.0388)
LEVERAGE	0.0101***	0.122***	0.0102***	0.0279***
	(0.00341)	(0.0243)	(0.00300)	(0.0107)
LOG_AMH	-0.0553	0.162*	-0.00682	-0.0606
	(0.0362)	(0.0934)	(0.0232)	(0.0487)
TURNOVER	0.135***	0.115***	0.0686***	0.0242
	(0.0394)	(0.0395)	(0.0257)	(0.0180)
LOG_COVER	-0.00881	-0.00911*	-0.00356	0.00218
	(0.00579)	(0.00510)	(0.00369)	(0.00228)
Intercept	0.410***	0.786***	0.351***	0.258***
	(0.116)	(0.136)	(0.0758)	(0.0587)
Observations	6,270	6,270	5,884	5,884
Year F.E.	*Yes*	*Yes*	*Yes*	*Yes*
Industry F.E.	*Yes*	*Yes*	*Yes*	*Yes*
Pseudo R-squared	-0.008	-0.116	-0.069	0.057

Table 7. Effect of big baths on information asymmetry

This table presents the 3SLS model estimation results by regressing *SPREAD* on opportunistic big baths (*BLOATED* = 0). Columns 1 and 2 report the results for *BB_SPI* when the CEO is and is not retained, respectively. Columns 3 and 4 report the results for *BB_ACC* when the CEO is and is not retained, respectively. All regressions include industry and year fixed effects. Standard errors are reported in parentheses**.** Significance levels: * p <10%, ** p <5%, *** p <1%. Variable descriptions and definitions are detailed in Table 1

	(1)	***(2)***	***(3)***	***(4)***
Variable	***SPREAD***	***SPREAD***	***SPREAD***	***SPREAD***
CEO Retention (RETENTION = 1)	***YES***	***NO***	***YES***	***NO***
BB_SPI	**-0.003*** **	**0.002** **	-	-
	(0.001)	**(0.001)**		
BB_ACC	-	-	**-0.005**	**0.006*** **
			(0.003)	**(0.002)**
SIZE	-0.001***	-0.001***	-0.001***	-0.0004***
	(0.0001)	(0.0001)	(0.0002)	(0.0001)
BTM	0.001***	0.001***	0.001***	0.001***
	(0.0003)	(0.0001)	(0.0003)	(0.0001)
INCOME	-0.003***	-0.003***	-0.002***	-0.003***
	(0.001)	(0.001)	(0.001)	(0.0005)
LEVERAGE	0.001***	0.0001***	0.001***	0.0002***
	(0.0002)	(0.0001)	(0.0003)	(0.0001)
RET	-0.0003*	-0.0002**	-0.0004**	-0.0004***
	(0.0002)	(0.0001)	(0.0002)	(0.0001)
ΔROA	0.0001	-0.0001	0.0001	-0.0001
	(0.0001)	(0.0001)	(0.0001)	(0.0001)
INSTOWN	-0.004***	-0.003***	-0.004***	-0.003***
	(0.0007)	(0.0002)	(0.001)	(0.0002)
LOG_COVER	-0.0003***	-0.0001***	-0.0003**	-0.0001***
	(0.0001)	(0.0001)	(0.0001)	(0.0001)
VEGA	0.0001**	0.0001***	0.0001**	0.0001***
	(0.0001)	(0.0001)	(0.0001)	(0.0001)
DELTA	-0.0001	-0.0001*	-0.0001	-0.0001*
	(0.0001)	(0.0001)	(0.0001)	(0.0001)
VEGA_ADJ	0.0002	0.0002	0.0001	0.0001
	(0.002)	(0.0004)	(0.002)	(0.0004)
DELTA_ADJ	-0.0003	-0.0001	-0.0002	-0.0001
	(0.002)	(0.0004)	(0.002)	(0.0004)
Intercept	0.022***	0.009***	0.022***	0.008***
	(0.002)	(0.001)	(0.002)	(0.001)
Observations	*1,068*	*8,985*	1,004	8,404
Year F.E.	*Yes*	*Yes*	Yes	Yes
Industry F.E.	*Yes*	*Yes*	Yes	Yes
Pseudo R-squared	*0.224*	*0.149*	*0.203*	0.068

Table 8. Narratives

This table presents the results of the 3SLS model regressing narratives on CEO turnover and retention (Column 1) and of a linear model with multiple levels of fixed effects regressing narratives on big bath (Column 2 for *BB_SPI* and Column 3 for *BB_ACC*). All regressions include industry and year fixed effects. Standard errors are reported in parentheses**.** Significance levels: * p <10%, ** p <5%, *** p <1%. Variable descriptions and definitions are detailed in Table 1

	(1)	***(2)***	***(3)***
Variable	***NET_OPT***	***NET_OPT***	***NET_OPT***
BB_SPI	-	**-0.001*** **	-
		(0.0001)	
BB_ACC	-	-	**-0.001*** **
			(0.0002)
RETENTION	**0.007*** **	**0.0002**	**0.0004** **
	(0.001)	**(0.0002)**	**(0.0002)**
CEOTURN	**0.004*** **	**-0.0002**	**-0.001*** **
	(0.001)	**(0.0001)**	**(0.0001)**
BLOATED	0.001***	0.001***	0.001***
	(0.0002)	(0.0001)	(0.0002)
AGE	-0.0001*	0.0001**	0.0001*
	(0.0001)	(0.0001)	(0.0001)
SIZE	-0.0001***	0.0001	-0.0001
	(0.0001)	(0.0001)	(0.0001)
BTM	-0.001***	-0.0004***	-0.0005***
	(0.0001)	(0.0001)	(0.0002)
REVENUE	-0.0002***	-0.0001**	-0.0002***
	(0.0001)	(0.0001)	(0.0001)
INCOME	0.005***	0.003***	0.003***
	(0.0004)	(0.0004)	(0.0004)
LEVERAGE	-0.0001***	-0.0001***	-0.0001**
	(0.0001)	(0.0001)	(0.0001)
GROWTH	0.0003***	0.0002***	0.0002**
	(0.0001)	(0.0001)	(0.0001)
LOG_AMH	0.0001	0.0001	0.0001
	(0.0003)	(0.0003)	(0.0003)
TURNOVER	-0.005***	-0.005***	-0.005***
	(0.0003)	(0.0003)	(0.0003)
RET	0.001***	0.0005***	0.001***
	(0.0001)	(0.0001)	(0.0001)
INSTOWN	0.001***	0.001**	0.001**
	(0.0003)	(0.0002)	(0.0002)
LOG_COVER	0.0001***	0.0001	0.0001
	(0.0001)	(0.0001)	(0.0001)
BB_SPI*RETENTION	-	**0.0005**	-
		(0.0003)	
BB_SPI*CEOTURN	-	**-0.001*** **	-
		(0.0002)	
BB_ACC*RETENTION	-	-	**-0.0002**
			(0.001)
BB_ACC*CEOTURN	-	-	**-0.0002**
			(0.0004)
Intercept	-0.009***	-0.008***	-0.008***
	(0.001)	(0.0004)	(0.0004)
Observations	*12,390*	12,244	11,508
Year F.E.	*Yes*	*Yes*	Yes
Industry F.E.	*Yes*	*Yes*	Yes
Pseudo R-squared	*-0.284*	*0.267*	*0.2033*

Figure 1: Past and future performance by CEO turnover event and CEO retention.

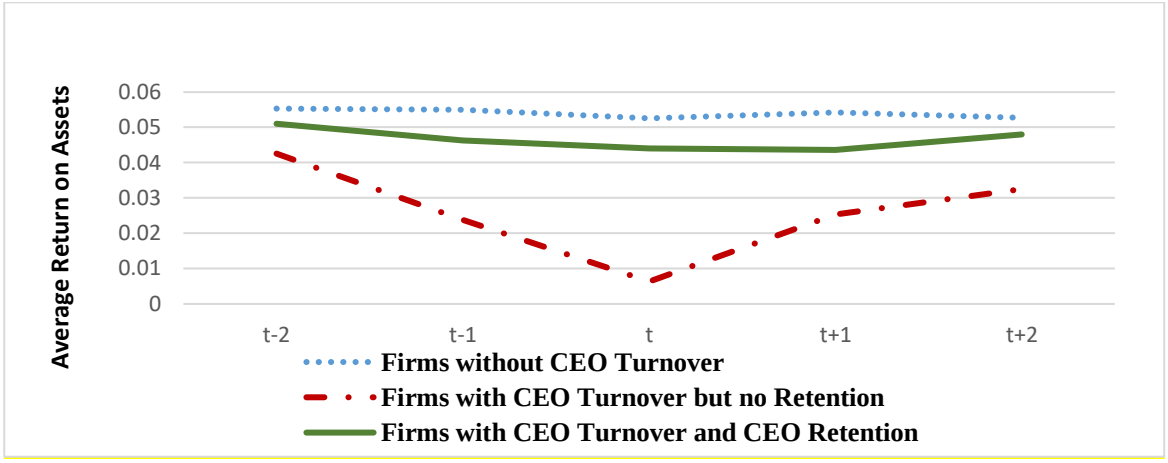

Figure 2a: Past and future performance by CEO turnover event and CEO retention for firms without big bath accounting (*BB_SPI*)

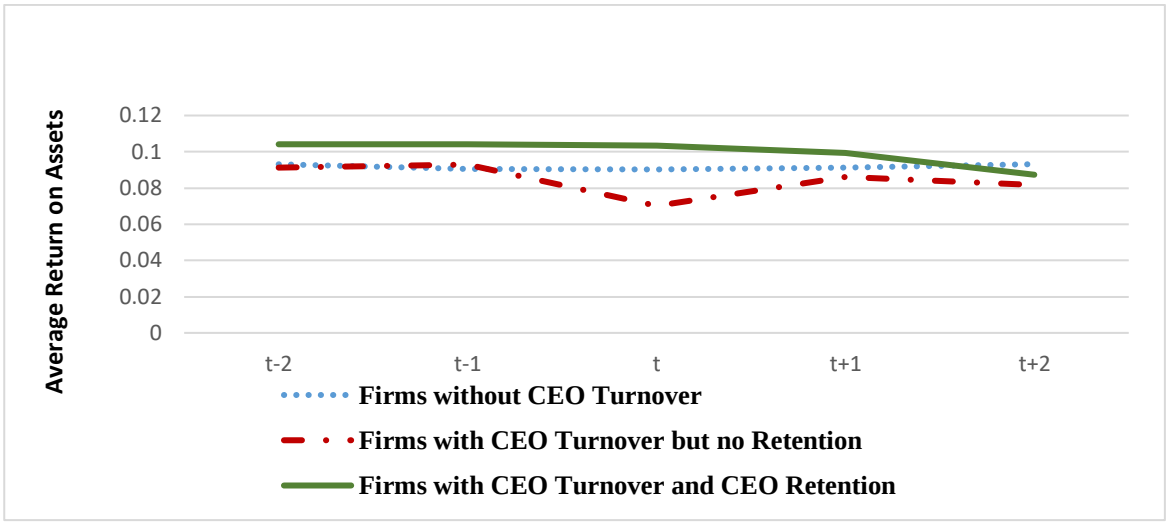

Figure 2b: Past and future performance by CEO turnover event and CEO retention for firms with big bath accounting (*BB_SPI*)

