

# Passing the Mic: Career and Firm Outcomes of Executive Interactions

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May 2022

## Abstract

We exploit a unique feature of conference calls to study one type of interaction among executives — directly inviting colleagues to respond to analysts’ questions. We find that the frequency of initiating interaction is positively associated with an executive’s ability, but not associated with firm performance. When new CEOs initiate more interactions than their predecessors, interaction among the rest of the executive team also increases, suggesting a learning effect. Turning to the outcomes of this practice, we find that executives who initiate more interactions than their peers are twice as likely as the average executive to be promoted to CEO. What is more, appointing CEOs who initiate more interactions than their predecessors results in an average three-day abnormal return of 0.9% around the announcement of the appointment. Teams composed of executives who interact with each other more frequently also have greater retention. Lastly, firms in which new CEOs initiate more interactions than their predecessors experience higher growth in Tobin’s Q, a result that is concentrated among growth and R&D-intensive firms.

**JEL Classification:** D70, G14, M40, M41

**Keywords:** conference calls, executive interactions, CEO succession

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\*Corresponding Author: Harvard Business School, Morgan Hall 361, Boston, MA 02163, phone: (617) 495-3840. We thank In Gyun Baek, Daniel Bens, Dennis Campbell, Clara Chen, Carolyn Deller (discussant), Aishwaryya Deore (discussant), Amy Edmondson, Grace Fan, Fabrizio Ferri, Jonathan Glover, Weili Ge (discussant), Robin Greenwood, Paul Healy, Mingyi Hung, Robert Kaplan, Sharon Katz, Bin Ke, Zhenyu Liao, Venky Nagar (discussant), Joseph Pacelli, Stephen Penman, Lin Qiu, Shiva Rajgopal, David Reeb, Tatiana Sandino, Suraj Srinivasan, Rodrigo Verdi, Benjamin Yost, Ronghuo Zheng, and workshop participants at AAA Management Accounting Section Meeting, Boston College, Cornell University, Columbia Junior Accounting Faculty Conference, Duke University, Harvard Business School, Hawaii Accounting Research Conference, HKUST Accounting Research Symposium, INSEAD, Massachusetts Institute of Technology, National University of Singapore, SMU Accounting Symposium, University of Iowa, University of Southern California, and University of Toronto. We thank Kai Li for sharing the corporate culture data. We thank Trevor Fetter for providing institutional insights. We acknowledge the excellent research assistance of Dian Jiao, Zhuoran Dai, Anthony Le, and Mei Tercek. Cai gratefully acknowledges financial support from the Bernstein Center for Leadership and Ethics of Columbia Business School.

## 1. INTRODUCTION

Conference calls are an important disclosure channel that provide a rare opportunity to directly observe corporate executives' behaviors on a large scale (e.g., Bowen, Davis, and Matsumoto 2002; Bushee, Matsumoto, and Miller 2004). Prior literature has relied on this setting to quantify characteristics of executives, such as their knowledge and extroversion, by examining their monologues and their interactions with analysts (e.g., Frankel, Johnson, and Skinner 1999; Matsumoto, Pronk, and Roelofson 2011; Larcker and Zakolyukina 2012; Li, Minnis, Nagar, and Rajan 2014; Brochet, Naranjo, and Yu 2016; Green, Jame, and Lock 2019; Rennekamp, Sethuraman, and Steenhoven 2022). One overlooked aspect of conference calls is interactions *among* executives during the question-and-answer (Q&A) component of the calls. Questions asked by analysts often are not directed to a specific person, giving executives flexibility in who responds and in whether that person invites other executives to answer the question, too. For example, on July 24, 2015, during a call with executives from American Airlines Group Inc. (AAL), an analyst asked about the investments being made to improve operational performance. CFO Derek Kerr responded: “This is Derek, and then Robert [Isom, COO of AAL] can touch on it.”<sup>1</sup> In this paper, we examine this type of interaction — directly inviting the participation of colleagues in responses to questions — among corporate executives during conference calls.

As businesses become more complex and compete more intensely for talent and innovation, executives must not just solve problems directly but also need to include, in the problem-solving, colleagues whose perspectives can help inform the best decisions (Brickley, Smith, and Zimmerman 2009; Horngren, Datar, and Rajan 2012; Li et al. 2014). The type of communication we observe in conference calls may reflect an understanding of the need for this

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<sup>1</sup> Appendix 1 provides several additional examples of interactions among corporate executives.

kind of collaboration in a high-stakes environment (Nembhard and Edmondson 2006). These sorts of interactions with colleagues also may reflect executives' awareness of their firms' varied sources of knowledge, as well as of the value of their colleagues' voices and perspectives in achieving overall organizational goals (Li et al. 2014). When leaders value others' voices, that can foster open communication and mutual respect, which can improve collaborative decision-making and create organizational benefits through better coordination (Nembhard and Edmondson 2006; Haas and Mortensen 2016; Hambrick 1994; Carmeli and Schaubroeck 2006).<sup>2</sup> Yet interactions among corporate executives remain an understudied aspect of corporate leadership, particularly in large-scale archival research (Haas and Mortensen 2016).

In this paper, we use earnings conference calls to identify such interactions and directly measure executives' frequency to invite others to participate in discussions with analysts. Earnings conference calls provide several benefits as a setting to study this behavior. First, most publicly traded companies host the calls every quarter, allowing us to examine thousands of executives across many companies. Second, the aim of earnings calls is to discuss companies' operations and performance, through which, in a subtle and nuanced way, we can observe executives' frequency to interact. In other words, we adopt a revealed preference approach that assumes that executives' observable behavior reveals their beliefs and values. Relatedly, by focusing on the Q&A component of these calls, we employ a setting where executives have little opportunity to pick discussion topics (Lee 2016; Li, Mai, Shen, and Yan 2021).

We develop an algorithm that quantifies these interactions at the executive-year level, allowing us to identify when one executive initiates an interaction with another when answering

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<sup>2</sup> According to a survey by American Psychological Association, 93% of employees said they are motivated to do their best at work when they feel valued ([https://www.apa.org/news/press/releases/2012/03/well-being#:~:text=Almost%20all%20employees%20\(93%20percent,they%20do%20not%20feel%20valued\)](https://www.apa.org/news/press/releases/2012/03/well-being#:~:text=Almost%20all%20employees%20(93%20percent,they%20do%20not%20feel%20valued).)).

questions during quarterly earnings conference calls for a sample of 10,763 individual executives and 2,316 firms covering the years 2010 to 2019. With measurement of these interactions in hand, we pose the following three questions. Which characteristics predict an executive's frequency to initiate interactions with colleagues? Is this sort of interaction associated with career outcomes? And do executive interactions create value for the firm?

While the behavior we document might reflect executives' understanding of where knowledge resides within the organization and the tendency to value others' voices, there are several alternative explanations for why executives might choose to interact. One possibility is that asking a colleague for help answering a question reflects a lack of knowledge or ability on the part of the executive. Another is that, during periods of poor performance, executive interactions could deflect negative attention onto others. Given these alternatives, the relations among executive interactions, career outcomes, and firm outcomes represent important and unresolved empirical questions.

We begin our analysis by examining the characteristics that determine individual executive interactions, measured as the natural log of 1 plus the number of times an executive initiates an interaction with a colleague during conference calls in a given year. We find that individual interaction is positively associated with proxies for executive ability and knowledge. At the same time, we find no significant relation between interaction and accounting performance. These joint findings suggest that this behavior is not likely driven by executives with low ability or those attempting to take credit for good performance or deflect blame for bad performance. In our initial analysis, we also show a potential learning effect. When firms appoint CEOs who interact more than their predecessors, interaction among members of the entire executive team increases in the following year.

We next study the career consequences of executive interactions at the individual level. Executives who initiate more interactions with colleagues may be revealing their detailed awareness of the workings of the firm, an important trait for a CEO (Li et al. 2014). This practice could also reflect an appreciation of the value of the CEO's colleagues in achieving the organization's overall goals. When studying non-CEO executives, we find that those who initiate interactions more than do their peers in the same industry-year are significantly more likely to be promoted to CEO in the future. This finding helps fill a gap in the behavioral accounting literature related to understanding who becomes a CEO (Hanlon, Yeung, and Zuo 2021). Executives who initiate interactions with colleagues more frequently than do their peers are 5.1% more likely to be promoted than are those who initiate no interactions. Executives who interact with others more broadly (i.e., multiple colleagues) in a year are 11.6% more likely to be promoted than are those who initiate no interactions.

These results are robust to controlling for a host of firm and executive characteristics as well as various fixed effects specifications. They also endure when controlling for proxies for executive extroversion, overconfidence, and ability, suggesting that our measure of executive interactions differs from these potentially related characteristics (Malmendier and Tate 2005; Green, Jame, and Lock 2019). One alternative explanation for our findings is that executives who are identified as likely to be promoted in the next year may be more likely to control conversations during conference calls, leading to a positive association between the tendency to invite others' participation and future promotion. To mitigate this concern, we examine the association between interactions and the promotion likelihood in the next three years, as it is more difficult to predict a successor over this longer period. Our inferences remain unchanged. In addition, to address concerns that the results might be driven by the number of executives who attended the conference

calls and therefore were available to be called on, we control for the number of executives who attended the conference calls. Our results remain unchanged.

Next we examine whether the stock market reaction to the promotion announcements of executives to CEO is impacted by their frequency to interact with colleagues. To do so, we hand-collect the announcement dates of 716 CEO promotions and measure returns around those announcements. We find that, compared to firms where executives with below-median total prior-year interactions are named CEO, firms where executives with above-median interactions are appointed to CEO have three-day market-adjusted returns of 0.9%, providing economically meaningful evidence that investors value this practice. This result also shows that the CEO labor market is not frictionless and builds on the literature about the importance of executive behavior (e.g., Bertrand and Schoar 2003; Schoar and Zuo 2016).

In our last set of analyses, we document the consequences of executive interactions on the firm. First, we examine whether executive interactions enhance the cohesion of the management team, consistent with the possibility that these practices make colleagues feel valued, which can foster communication and mutual respect, and enhance collaborative decision-making (Nembhard and Edmondson 2006; Haas and Mortensen 2016; Hambrick 1994; Carmeli and Schaubroeck 2006). To do so, we measure executive interactions at the team level, defined as the natural log of 1 plus the sum of interactions by all team members, and examine its relation to the retention rate of the executive team in the following year. We find that interaction enhances cohesion: A one-standard-deviation increase in the interactions of a team is associated with a 1.96% higher likelihood of the firm retaining all of its executives. We also find the effect to be stronger for teams that interact more broadly.

Lastly, we explore the relation between executive interactions and firm value. If our measure of executive interactions does reflect that leaders value others' voices, CEOs who are more likely to interact with their colleagues, on average, may also improve firm value. This conjecture is supported by the positive market reaction to the appointment of these types of CEOs. In our final test of firm outcomes, we examine whether appointing CEOs who interact more than their predecessors leads to increased growth in Tobin's Q and find supportive evidence. The year-over-year change in Tobin's Q around CEO appointments is significantly higher when the new CEO interacted with colleagues in his or her first year more than did the previous CEO in his or her last full year in the job. Importantly, this result is driven by growth and research-intensive firms, which are likely to be more complex and face greater uncertainty, making a variety of voices and perspectives more valuable.

As noted earlier, this paper relies on a revealed preference approach that assumes that executives' observable behaviors reveal their beliefs and values. However, executives might behave differently in a public setting (i.e., earnings calls) than they do in internal meetings. The relations we document between interactions and beneficial career and firm outcomes do not support this conjecture. To further mitigate concerns about whether executive interactions during conference calls reflect a broader practice, in a robustness analysis, we examine the association between interactions among the entire executive team and a proxy for a teamwork culture: the amount of language in the conference call that reflects a teamwork-oriented culture (Li, Mai, Shen, and Yan 2021). Li et al. (2021) validates this measure by showing positive associations between *Teamwork* and employee engagement and collaboration. The paper also rules out the alternative explanation that this measure mainly reflects management's self-promotion in earnings calls. If the behavior we document during earnings calls differs from unobservable behaviors, it is unlikely

that we would find a positive association between the interaction and teamwork-oriented culture. We find a statistically significant positive relation between our measure of team interaction and this proxy, giving us confidence that our measure of executive interactions in public reflects an environment of collaboration, instead of a behavior that depends on public scrutiny.

This paper makes the following contributions. First, it documents on a large scale a type of interaction among executives that is associated with career outcomes and that relates to firm value. Conference calls provide one of the few settings where researchers can observe how executives speak when unscripted and how they interact with others. Research has relied on conference calls to understand how executives' monologues reflect their characteristics (e.g., Li et al. 2014; Green et al. 2019) and to examine the interactions between executives and analysts (e.g., Brochet, Naranjo, and Yu 2016; Francis et al. 2020; Rennekamp et al. 2022). A particularly relevant paper is by Li et al. (2014), which examines how the speech of CEOs during conference calls reflects the location of knowledge within the executive team. Unlike Li et al. (2014), which studies the amount that executives speak, we examine executives who voluntarily invite the participation of colleagues. By doing so, we advance this literature by not only examining executive interactions but also by demonstrating the consequences of these interactions. To the best of our knowledge, this is the first paper to examine interactions among executives during conference calls.

We also contribute to the limited literature on CEO succession. Examining the characteristics of executives who become CEOs is an underdeveloped area of study, and our paper adds to this literature in two ways (Hanlon et al. 2021). First, unlike prior literature, we examine a behavior that influences the likelihood of promotion to CEO (Shen and Cannella 2002; Quigley and Hambrick 2012; Schepker, Kim, Patel, Thatcher, and Campion 2017; Schepker, Nyberg,



Ulrich, and Wright 2018). Second, we show that the presence of this behavior in ascendant executives has consequences for the management team and overall firm value.

Lastly, we contribute to the literature on executive characteristics, particularly their propensity for inclusiveness. An extensive body of literature identifies consequential personality traits of corporate executives and their relation to firm outcomes (e.g., Malmendier, Tate, and Yan 2011; Schrand and Zechman 2012; Benmelech and Frydman 2015; Ham et al. 2017; Green et al. 2019). Unlike these researchers, we examine the relationships among executives, as opposed to the behavior of individuals acting alone. This approach might capture a phenomenon frequently discussed in practitioner articles: whether inclusiveness, which encompasses ensuring team members' voices are heard, is a desired characteristic (Sherbin and Rashid 2017). By showing capital market consequences, our paper bridges the gap between managerial concepts and financial implications.

## **2. BACKGROUND**

### **2.1 Executive characteristics and conference calls**

A large body of literature examines executive characteristics in various settings, which is unsurprising given the centrality of executives in their firms. Firm performance depends on strategic choices made by firm executives, and as publicly traded firms have become more complex, the importance of the executives to the firm's success has grown (Gabaix and Landier 2008). Upper Echelons Theory, originally described by Hambrick and Mason (1984), predicts that these strategic choices are, in turn, significantly influenced by executives' backgrounds and experiences. Upper Echelons Theory has inspired a substantial amount of empirical research

seeking to understand the characteristics of successful leaders and how these characteristics impact the firm. While some studies have focused on physical characteristics, like gender and age, or career characteristics, like expertise, industry experience, education, and outsider status (Barker and Mueller 2002; Becker-Blease, Elkinawy, Hoag, and Stater 2016), the studies most relevant to this one are those that have examined the behavioral characteristics of executives. Numerous papers develop proxies for personality traits and behaviors of leaders, such as narcissism, optimism, humility, materialism, agreeableness, and self-promotion, and relate these characteristics to executive career outcomes, firm performance, and reporting choices, among other things (e.g., Sen and Tumarkin 2015; Ham, Lang, Seybert, and Wang, 2017; Bushman, Davidson, Dey, and Smith 2018; Ou, Waldman, and Peterson 2018; Blankespoor and deHaan 2020; Blake et al. 2022). More broadly, executives also foster organizational culture, and their role in building a culture of cooperation can prove valuable to the firm (Chatman and Barsade 1995; O'Reilly, Caldwell, Chatman, and Doerr 2014).

Conference calls provide a unique setting to directly observe executives' behaviors and their characteristics on a large scale (e.g., Frankel et al. 1999; Matsumoto et al. 2011; Li et al. 2014; Green et al. 2019; Francis, Shohfi, and Xin 2020; Rennekamp et al. 2022). Recently, executive monologues during these calls have been used to identify where knowledge resides within the firm and to measure executive extroversion (Li et al. 2014; Green et al. 2019). Rennekamp et al. (2022) examines interactions between executives and analysts and finds that a greater level of conversational engagement during these interactions is associated with price formation. Brochet et al. (2016) suggests that language barriers between executives and analysts during conference calls affect market reactions. Still, little research has investigated interactions *among* executives during conference calls.

## 2.2 CEO succession

Identifying potential successors is an important task for CEOs, and this task's importance has increased as CEO tenure decreased in recent years (Charan 2005). Favaro, Karlsson, and Neilson (2015) estimate that, among top companies, the unexpected removal of a CEO costs the firm \$1.8 billion in shareholder value, on average. To date, the literature on CEO succession has focused almost exclusively on the relation between candidate background and the success of the chosen candidate and the firm. Evidence suggests that firms that promote CEOs from inside the company and those that have a clear succession plan have better future operating performance than those that hire outsiders and those without a plan (Zajac 1990; Shen and Cannella 2002; Giambatista, Rowe, and Riaz 2005; Quigley and Hambric 2012; Schepker et al. 2017). Still, little research has examined how successors are identified or the characteristics of successful candidates (Hanlon et al. 2021). The lack of research on this topic is surprising, given that much of the literature stresses the importance of this decision to the firm. The one exception is the work of Schepker et al. (2018), which relies on surveys and interviews to examine how successors are identified. Still, unlike us, Schepker et al. (2018) examines the role of the current CEO and the board of directors in identifying successors, not the characteristics of successors that increase their likelihood of promotion.

Relatedly, understanding executive turnover, CEO transitions, and executive team retention matters to firms and investors. Research shows that CEO transitions, particularly unexpected ones, harm shareholder value (Johnson, Magee, and Newman 1985; Worrell, Davidson, Chandy, and Garrison 1986; Salas 2010; Krigman and Rivolta 2019). In addition, there is evidence that CEO departures lead to the departures of other top executives (Hayes and Schaefer 2006; Fee and Hadlock 2004). Coyne and Coyne (2007) finds that 33% of senior leaders leave when a new

external CEO is appointed, nearly twice the turnover rate of top leaders in companies not experiencing CEO transitions. Beyond frictional costs, executive turnover also leads to high social capital costs. Executives are often central players in organizational social networks, and their departures can disrupt communications and interactions between interdependent groups (Dess and Shaw 2001).

### **2.3 Executive characteristics, management teams, and collaboration**

Building on Upper Echelon Theory, management research on the integration of top management teams (TMT) has examined, often using surveys or laboratory settings, how executive characteristics relate to the teams to which those executives belong (e.g., Ou et al. 2018; Blake et al. 2022). Related to our study, Ou et al. (2018) provides survey evidence that TMTs with more humble CEOs are more likely to collaborate. Collaborative teams have been shown to be more innovative, to work harder, and to outperform their more individualistic peers (Podsakoff et al. 1997; Eby and Dobbins 1997; Hoegl and Gemuenden 2001; Pearce 2004; Carson, Tesluk, and Marrone 2007). Other than Ou et al. (2018), though, few scholars in this area have examined executive teams, and most have focused on team outcomes, as opposed to the potential benefits for the individuals within a team. One exception is Hoegel and Gemuenden (2001), which finds that, among individuals on software development teams, those on collaborative teams report greater job satisfaction, in addition to finding that more collaborative teams are rated by team members as having higher performance. In an even broader context, Li et al. (2021) uses large-scale archival techniques to examine teamwork. The paper relies on machine learning to measure corporate culture during conference calls and find associations between firms with a teamwork-oriented culture and firm-level operational outcomes.

A theme within this literature is that leadership culture influences the outcomes of teams, and that teams with a more collaborative culture outperform those with a more individualistic culture. Consistent with this theme, we find that leadership behaviors are associated with positive firm-level outcomes. In addition, to our knowledge, little existing research uses large-scale archival data to connect the public behaviors of individual executives to their career outcomes as well as to the outcomes of the teams on which they serve and the firms for which they work.

### **3. RESEARCH DESIGN AND DATA**

#### **3.1 Measuring interactions**

Conference calls provide a rare opportunity to witness the interaction among top corporate executives. We take advantage of this phenomenon to document these interactions by obtaining earnings conference call transcripts data from the Capital IQ (CIQ)'s Transcripts Database.<sup>3</sup> These data provide rich details on the interactions among those engaging in the call.

The smallest unit of analysis within a transcript is a piece of text comprised of several sentences spoken by a person, which is the content of speech each time a person talks. This piece of data is referred to as a component of the transcript. Each component is labeled with a company ID, a fiscal year and quarter, a transcript ID used to uniquely identify a transcript, a component ID, the component's order in the transcript, a component type (i.e., presentation, question, answer, or operator's message), the speaker's type (i.e., executive, analyst, operator, shareholder, or attendee), and the person's full name. We keep only those components with "question" or "answer" types.

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<sup>3</sup> We focus only on earnings call transcripts for comparability across firms.

We define an interaction as one executive’s solicitation of a response from a colleague. To identify interactions from the Q&A section of the earnings call, we start by identifying all questions that are followed by multiple answers from company executives. We refer to this group of question and answers as a dialogue. Within each dialogue, we loop through each pair of ordered answers. For example, if there are three components after an analyst’s question denoted by “A”, “B”, and “C”, then we first consider the pair of ordered answers “A” and “B”, and then consider the pair of ordered answers “B” and “C”, and so on. When the first name of the second speaker is identified as being spoken by the first speaker, we define that paired answer as an interaction.<sup>4</sup> This strategy allows us not only to identify those who initiate and are the recipients of interactions, but also to measure the intensity of an executive’s frequency to interact by adding up the total number of interactions that he or she initiates.

## **3.2 Variable measurement**

Our main analyses in the paper focus on measures of the total number of interactions made by either an individual executive or the entire executive team. In this section, we describe the variables we use at the different levels of analysis.

### *3.2.1 Executive-level analysis*

Our main variable of interest at the individual executive level is *Interaction*, an indicator variable equal to one if the non-CEO executive initiated more interactions than non-CEO executives within the same industry and year during all earnings conference calls in a given year, and zero otherwise, where interactions are determined using the algorithm described in Section

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<sup>4</sup> However, sometimes we need to match first names with nicknames. In order to solve this problem, we leverage the American English Nickname Collection from the Linguistic Data Consortium hosted by the University of Pennsylvania for linguistic research.

3.1. In our analysis, we examine whether this variable is associated with an executive being promoted to CEO in the following year, *Promotion*. Given that involvement in conference calls and the propensity to be promoted are likely driven by individual characteristics unrelated to interactions, we control for several factors measured at the individual level.

*Female (Minority)* is an indicator equal to 1 if the executive is a woman (minority), and 0 otherwise.<sup>5</sup> We control for these two characteristics because prior literature has documented that innate characteristics impact executive mobility (Smith, Smith, and Verne 2013). We include *Pay Above Median*, an indicator equal to 1 if an executive's pay is above that of the median executive, to control for compensation effects of potential promotion and seniority, as well as to serve as a proxy for ability. *Log(#Answer)* is the natural log of 1 plus the total number of times an executive speaks during conference calls in a year, and controls for the overall prominence of the executive during these calls. *Age* is the age of the executive. *CEO* is an indicator equal to 1 if the executive is the CEO, who is most likely to be the featured executive during calls. *CFO* is an indicator equal to 1 if the executive is the CFO. We also include as controls important firm-level characteristics described in Section 3.2.2.

### 3.2.2 Firm-level analysis

In our firm-level analysis, we examine the relation between executives' interactions and three outcomes. We first examine whether the stock market reacts to the relation between *Interaction* and promotion of an executive to CEO, where *Return [-1, 1]* (*Excess Return [-1, 1]*) is the raw (market-adjusted) three-day return around the announcement of the appointment of a new CEO, and *Interaction* is defined as above, except solely for the new CEO. Second, we test

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<sup>5</sup> We measure *Minority* based on the last name of executives following Ellahie, Tahoun, and Tuna 2017.

whether interactions are associated with *Retention 100%* of the team, an indicator equal to 1 if there was no turnover among the executive team in the following year. In this analysis, our unit of analysis is the firm-year, and our variable of interest is *Team Interactions*, calculated as the natural log of 1 plus the total number of interactions by all executives in a given year. Lastly, we examine whether the appointment of a CEO with more frequent interactions is related to a change in firm value, where firm value is Tobin's Q, the ratio of market value of total assets divided by book value of total assets, and CEO interaction, *Increase CEO Interaction*, is an indicator equal to 1 if the new CEO had more interactions in his or her first year than the prior CEO had in his or her last year, and 0 otherwise.

In our firm-level analysis, we control for several additional important characteristics. We include in our regressions firm *Size*, the natural log of total assets, to control for the complexity of the business, and *Leverage* (total debt scaled by total assets) to control for capital structure. *ROA* and *Missing Analyst Forecast* are included to mitigate concerns that performance may determine when an executive is more likely to ask colleagues to answer questions. *BTM*, the book-to-market ratio, controls for the firm's growth opportunities, and *SP500*, an indicator equal to 1 if the firm is in the S&P 500, controls for firm visibility. All variables are defined in Appendix 2.

### **3.3 Data and sample**

Our data come from three main sources. The data cover the years 2010-2019. We start in 2010 because coverage of conference calls is sparse prior to this year. These data, which we use to create our measures of interactions, are calculated using transcripts from Capital IQ. There are multiple versions for each transcript (Preliminary, Edited, Proofed, Audited, etc.). Following guidance in the Wharton Research Data Services database, we use the most recent version of



transcript for each call. All firm-level accounting variables are also from Capital IQ. All other executive characteristics are downloaded from Execucomp, and stock return data are from CRSP.

### **3.4 Descriptive analysis**

Table 1 reports descriptive statistics for all variables. Panel A describes the executive-level variables. There are 33,389 executive-year observations in our data. The average executive initiates interactions (*Frequency of Interactions*) 1.51 times in a year. Women (minorities) comprise 7.2 (18.3%) of the sample, and the average age of executives is 54. More than half of the sample has a graduate degree. Panel B reports firm-level data. In this analysis, there are 11,723 firm-year observations. In a given year, 32.2% (9.1%) of executives on the team interact with exactly one colleague (multiple colleagues). These firms are, on average, profitable with *ROA* of 0.05, and 27% of them are in the S&P 500.

## **4. EMPIRICAL RESULTS**

### **4.1 Determinants of interactions**

We begin our empirical analysis by examining the individual and firm characteristics that relate to interactions. Table 2 reports pairwise correlations among our variables of interest. Panel A documents these relations at the individual level. There is a strong correlation between *Frequency of Interactions* and *Promotion*, suggesting that those who initiate interactions are more likely to be promoted, something we investigate in detail in our main analysis. In addition, *Frequency on Interactions* is positively and significantly correlated with *Pay Above Median*, *Graduate*, *Industry Experience*, and *Letter%*, mitigating concerns that the decision to initiate interactions is a reflection of a lack of knowledge or ability. Turning to Panel B, which reports

correlations at the firm-year level, we see that *Team Interactions* is positively correlated with *ROA*, reducing concerns that executives call on each other more during times of bad performance to “pass the buck,” although it is also positively associated with *Missing Analyst Forecast*. Given these conflicting results, we investigate these relations further in our multivariate analysis that follows.

Next, we examine the characteristics that predict the frequency of interactions an executive initiates during conference calls. Table 3 documents which characteristics are associated with *Individual Interactions*. Specifically, we regress *Individual Interactions*, the natural log of 1 plus the number of interactions an executive initiates in a given year, on firm-level and individual-level variables.

In both columns 1 and 2, no firm characteristics are associated with *Individual Interactions*. Notably, the frequency of interactions is not associated with firm accounting performance (*ROA*) or whether the earnings per share miss the consensus analyst forecast. This non-result suggests that endogenous firm characteristics are less likely to drive our results. In other words, we find no evidence that executive interactions are driven by factors like bad performance increasing the likelihood of an executive calling on a colleague to “pass the buck.”

In terms of individual-level characteristics, we find that female and older executives initiate interaction significantly more often than their male and younger counterparts. In addition, executives who speak more during conference calls, measured as  $\text{Log}(\#Answer)$ , also initiate more interactions.

In column 2, we include four proxies for ability or knowledge, *Graduate (Undergraduate)*, an indicator equal to 1 if the executive has a graduate (undergraduate) degree, and 0 otherwise;

*Industry Experience*, number of years the executive has been working in the industry; and *Letter%*, the proportion of letters spoken by the executive in a given year, a proxy for ability as defined by Li et al. (2014). The coefficients on *Graduate*, *Industry Experience*, and *Letter%* are positive and significant, as is the coefficient on *Pay Above Median*. Taken together, the results in column 2 provide evidence that better educated and more capable executives are more likely to initiate interactions. These findings also alleviate concerns that these interactions reflect a lack of ability or knowledge on the part of the executive, or that he or she is asking for help due to ignorance.

In our main specification in this and all tables (except when we examine stock returns), we include firm and industry-year fixed effects. This specification controls for time-invariant firm characteristics and time-varying industry shocks (Gormley and Mastsa 2014). Standard errors are clustered at the firm level. The results are robust when we use various fixed effects specifications (firm, industry, year, industry-year, and firm-year) instead of the firm and industry-year specification reported in the table.

#### **4.2 The relation between individual interactions and team interactions**

We extend the analysis on the determinants of interactions by exploring how individual interactions are associated with team interactions. To do so, we examine whether the appointment of a CEO who initiates more interactions than his or her predecessor is associated with an increase in interactions among the rest of the executive team. In Table 4, we examine the change in interactions of executive teams around CEO turnover. The dependent variable,  $\Delta Team Interactions$ , is the difference of the natural log of (1 plus the total number of interactions made by all team members, excluding the CEO) between year  $t+1$  and year  $t-1$ , where  $t+1$  is the first year in which the new CEO joins the firm. We regress this variable on *Increase CEO Interactions*, an indicator equal to 1 if the number of interactions initiated by the new CEO in year  $t+1$  is greater than the

number of interactions initiated by the prior CEO in year  $t-1$ . The coefficient on this variable, 0.262, is positive and strongly significant at the 1% level, providing evidence that hiring a CEO that is more likely to initiate interactions than was the prior CEO increases the likelihood that the rest of the executive team increases interactions and suggesting that executive interactions are a practice that can be learned.

### **4.3 The relation between executive interactions and promotion to CEO**

Having documented various attributes that predict interactions, we next examine whether non-CEO executives who initiate interactions more frequently are more likely to be promoted to CEO. In this analysis, our sample includes non-CEO executives listed in Execucomp. Table 5, Panel A, reports the results of regressing *Promotion*, an indicator equal to 1 if the executive received a promotion to CEO (and 0 otherwise) in year  $t+1$  on *Interaction*, an indicator equal to 1 if the executive initiated more interactions than his or her peers (and 0 otherwise). Columns 1 and 2 report the results without and with control variables, respectively. Controlling for firm and executive characteristics, the coefficient on *Interaction*, 0.051, is positive and significant at the 1% level, meaning that executives who initiate interactions more than their peers are more likely to become CEO. Of note, executives who are paid more than their peers and those who talk more during conference calls are also more likely to be promoted, as documented by the positive and significant coefficients on *Pay Above Median* and *Log(#Answer)*. This result is complementary to Li et al. (2014), which finds that CEOs who speak more during conference calls are paid more. In terms of economic magnitude, executives who initiate interactions are 5.1% more likely to be promoted to CEO than those who do not. Given that the likelihood of promotion among the average executive in our sample is approximately 5%, the coefficient estimate suggests that initiating more interactions than peers can roughly double the likelihood of being promoted. As reported in column

2, those with greater pay are 3.5% more likely to be promoted, suggesting that the effect of interaction is of similar order of magnitude as other executive characteristics.

The results in this analysis are robust to various empirical choices. They remain unchanged when we control for the number of executives during conference calls; when we add controls for repromotion, the amount of time since the executive last spoke during a conference call; and when we use various fixed-effects specifications (firm, industry, year, industry-year, and firm-year) instead of the firm and industry-year specification reported in the table. Importantly, the result remains unchanged when we include individual fixed effects, suggesting that executive interactions are time-variant.

#### *4.3.1 Breadth of interactions and promotion*

To complement the analysis on interactions and promotion, we ask whether the breadth of interactions increases the likelihood of promotion. In other words, is promotion more likely for executives who initiate interactions with multiple colleagues than it is for those who initiate with only one colleague? Table 5, Panel B, reports the results of regressing *Promotion*, as defined above, on two indicators. *Interaction – Multiple* is equal to 1 if an executive initiated interactions with multiple colleagues in a year, and 0 otherwise. *Interaction – Single* is an indicator equal to 1 if an executive initiated interactions with only one colleague in a year, and 0 otherwise. Columns 1 and 2 report the results without and with control variables, respectively. While the coefficients on both of these indicators are positive and statistically significant, the economic magnitudes document the importance of interactions to promotion. Executives who initiate interactions with multiple colleagues in a year are three times more likely to be promoted in the following year than are executives who initiate interactions with only one colleague. The difference between the coefficients on the two indicators is also statistically significant at the 1% level, as measured by

an  $F$ -statistic of 43.65. As with prior tables, these results are insensitive to the fixed effects structure in the analysis. These results suggest that executives who interact with their colleagues more broadly (i.e., with multiple colleagues) are more likely to be promoted to CEO.

Table 5 provides robust evidence that executives who interact with their colleagues more frequently than their peers are more likely to be promoted to CEO. As we discussed in Section 2, this finding fills a gap in the literature on CEO succession. Whereas prior literature has focused largely on the outcomes of CEO succession, we are among the first to document a practice of executives that increases the likelihood of succeeding the CEO (Zajac 1990; Shen and Cannella 2002; Giambatista et al. 2005; Quigley and Hambric 2012; Schepker et al. 2017).

#### **4.4 Stock returns around CEO appointment announcements**

Prior literature has documented the costs of CEO succession and that appointing an insider CEO is associated with greater future firm performance (e.g., Zajac 1990; Schepker et al. 2017). Still, little is known about the behaviors and practices of those who are promoted, or whether these practices are recognized by investors. Given the above evidence that executives who initiate interactions are more likely to be promoted to CEO and that communication within the firm reflects the agenda of the organization, we next examine whether the stock market rewards firms that appoint CEOs who interact more than did their predecessors (Impink, Pratt, and Sadun 2020). We begin by hand collecting the dates that new CEOs are announced for the 716 CEO appointments in our sample. We then measure the three-day raw and excess stock returns (i.e., market-adjusted return) around the announcement date.

In Panel A of Table 6, we report the results of regressing three-day stock returns on *Interaction*, as defined above, except solely examining new CEOs, and the firm and individual

controls included in our prior analysis. We include industry fixed effects to control for unobservable industry events that might drive returns around the announcement, and cluster standard errors by date.<sup>6</sup> The coefficient on *Interaction* is positive and statistically significant at the 10% level when using both raw returns (column 1) and excess returns (column 2). The result is also economically significant: The appointment of an executive who initiates interactions to the CEO position results in an average three-day return of 0.8%.

Panel B examines whether the breadth of interactions of the newly named CEO is associated with three-day returns. In this panel, we replace *Interaction* with *Interaction - Multiple* and *Interaction - Single*, indicators equal to 1 if the newly named CEO initiated interactions with multiple colleagues or only one colleague, respectively, in the prior year, and 0 otherwise. While the coefficients on *Interaction - Single* is statistically insignificant, those on *Interaction - Multiple* are positive and statistically significant in both columns. The average three-day raw (excess) return around the announcement of the appointment to CEO of an executive who initiated interactions with multiple colleagues in the prior year is 1.8% (1.6%). The difference between the coefficients on the two variables is also statistically significant at the 5% level, as measured by the *F*-statistic, suggesting that firms that promote executives who initiated interactions with multiple colleagues experienced higher stock returns. The results in Table 6 provide evidence that the stock market, in part, recognizes the value of the practice of executive interactions and rewards firms when these executives are named as CEOs.

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<sup>6</sup> We do not use firm fixed effects as most firms only have one promotion event during our sample period. The results are also robust to clustering standard errors by firm.

## 4.5 Interactions and retention

Our analysis so far has provided evidence of the characteristics of executives that are associated with interactions, on the relation between executive interactions and team interactions, and that executives who initiate more interactions are more likely to be promoted to CEO, a decision that leads to positive market returns. In our last series of analyses, we examine the team- and firm-level consequences of executive interactions.

We begin by examining whether executive interactions at the team level impact the retention of that team. This analysis, conducted at the firm-year level, regresses a measure of retention on *Team Interactions*, the natural log of 1 plus the sum of all interactions by all executives of the firm in a given year. The results are reported in Table 7. In Panel A, columns 1 and 2 report the results without and with control variables, respectively. The dependent variable, *Retention 100%*, is an indicator equal to 1 if all executives stay at the firm from  $t$  to  $t+1$ , and 0 otherwise. The coefficients on *Team Interactions* in columns 1 and 2 are both positive and statistically significant at the 1% and 5% levels, respectively. Controlling firm characteristics, we find the one standard deviation increase in the team interactions is associated with a 1.96% higher likelihood that the firm retains all of its executives.

In addition, we examine whether the breadth of interactions (again at the team level) is associated with retention. To do this, in Table 7, Panel B, we include two independent variables, *%Interaction - Multiple*, which is the percent of executives in the firm who initiated interactions with multiple colleagues that year, and *%Interaction - Single*, which is the percent of executives who initiated interaction with only one colleague that year. Columns 1 and 2 report the results without and with control variables, respectively. The coefficient on *% Interaction – Multiple* is positive and significant while the coefficient on *% Interaction – Single* is insignificant.



The difference between the coefficients on the two variables is also statistically significant at the 5% level, as measured by an  $F$ -statistic of 6.33, suggesting that the effect of interaction on team retention is mainly driven by teams that interact with each other more broadly. The results in Table 8 remain unchanged when we use different fixed effects structures as described above.

#### **4.6 Executive interactions and firm valuation**

We have provided evidence that executives who initiate more interactions are more likely to be promoted to CEO, and that appointing these executives results in increased stock prices and greater retention among the executive team. If our measure of executive interactions does reflect that leaders value others' voices, CEOs who are more likely to interact with their colleagues, on average, may also improve firm value. We test this conjecture in Table 8. The subsample used in this table consists of the 959 executive turnover events with available data. Our dependent variable is the change in Tobin's  $Q$ , measured as the market value of assets (market value of equity plus book value of debt) scaled by the book value of assets (Jayaraman and Wu 2018), from the year before the appointment of a new CEO to the year after. Our variable of interest, *Increase CEO Interaction*, is an indicator that is equal to 1 if the new CEO's total number of interactions in the next year is greater than those of the previous CEO in the prior year. In column 1, the coefficient on *Increase CEO Interaction* is positive and significant at the 5% level, suggesting that appointing CEOs who initiate more interactions than their predecessor is associated with higher future value.

In columns 2 and 3, we examine whether this result is driven by growth and innovative firms, where greater uncertainty might be ameliorated by collaboration and interaction. In column 2, we interact *Increase CEO Interaction* with *BTM*, the book-to-market ratio, and find that the coefficient on the interaction is negative and significant at the 10% level, providing evidence that the relation between interaction and value is stronger among growth firms. In column 3, we interact

*Increase CEO Interaction* with *R&D*, measured as the ratio of R&D expense to total assets. The coefficient on the interaction is positive and significant at the 1% level, suggesting that the relation between interaction and value is concentrated among more R&D-intensive firms. Taken together, these results suggest that CEOs who interact more with their colleagues create more value for their firms than do their counterparts who do not interact with their colleagues, but that interactions are more important in growing and innovative firms where different voices and perspectives are likely to be more important.

## **5. ADDITIONAL ANALYSES**

### **5.1 Executive interactions and promotion in the next two and three years**

One alternative explanation for our findings is that executives who are identified as likely to be promoted in the next year may be more likely to control conversations during conference calls, leading to a positive association between the tendency to invite others' participation and future promotion. To mitigate this concern, we examine the association between interactions and the promotion likelihood in the next two and three years, as it is more difficult to predict a successor over longer periods. The results are reported in Panel A of Table 9. The coefficients on *Interaction* are positive and significant at the 1% level, indicating that executives who initiate interactions more frequently than their peers are more likely to be promoted to CEO during years  $t+2$  and  $t+3$ , mitigating the concern that our results are driven by this endogenous concern.

### **5.2 Controlling for executive ability and characteristics**

One concern in our paper is that the results we document might be driven by managerial ability and attributes that have been documented in prior literature, which might be associated with

the promotion likelihood. To address this concern, we add executive ability and executive characteristics as additional control variables and examine whether our main results are robust to these additional control variables. The results are reported in Panel B of Table 9. In column 1, we control for executive ability, and in column 2, we control executive extroversion and overconfidence. Consistent with Green et al. (2019), we also document a positive association between extroversion and promotion. The coefficients on *Interaction* are still positive and significant at the 1% level, indicating that the practice that we capture — directly inviting the participation of colleagues — is not driven solely by executive ability, overconfidence, or extroversion.

### **5.3 Controlling for executive attendance on earnings calls**

Another concern is that the relation between executive interactions and promotion might be influenced by the number of executives who attended the conference calls and therefore were available to be called on. Such attendance may impact the chances of each executive participating in the calls. To address this concern, in Panel C of Table 9 we rerun our main analysis on the relation between executive *Interaction* and *Promotion* but include an additional control, the number of executives that attended the conference calls at least once during the year (*Number of Executives in Call*). While the coefficient on *Number of Executives in Call* is positive and significant, including it as a control has little effect on the relation between *Interaction* and *Promotion*, with the coefficient on *Interaction*, 0.048, still positive and significant at the 1% level. These results suggest that our findings on the relation between executive interactions and promotion are unlikely to be driven by executive attendance on the conference calls.

## 5.4 Team interactions and teamwork culture

As noted earlier, this paper relies on a revealed preference approach that assumes that executives' observable behaviors reveal their beliefs and values. However, executives might behave differently in a public setting (i.e., earnings calls) than they do in internal meetings. The relations we document between interactions and beneficial career and firm outcomes do not support this conjecture. To further mitigate concerns about whether executive interactions during conference calls reflect a broader practice, we examine the association between interactions among the entire executive team and a proxy for a teamwork culture, *Teamwork*, the amount of language in the conference call that reflects a teamwork-oriented culture, as defined by Li et al. (2021). Li et al. (2021) validate this measure by showing positive associations between *Teamwork* and employee engagement and collaboration. They also rule out the alternative explanation that this measure mainly reflects management's self-promotion in earnings calls. If the behavior we document during earnings calls differs from unobservable behaviors, it is unlikely that we would find a positive association between the interaction and teamwork-oriented culture. In Panel D of Table 9, we report the results of regressing *Team Interactions*, as defined above, on *Teamwork*. The coefficient on *Teamwork*, 0.050, is positive and significant at the 1% level, giving us confidence that our measure of executive interactions in public reflects an environment of collaboration, instead of a behavior that depends on public scrutiny.

## 6. CONCLUSION

This paper examines a previously unexplored practice of corporate executives, their frequency to initiate interactions with their colleagues when being questioned by outsiders (i.e.,

analysts). We develop a new way to exploit the rich data in earnings conference calls to document how executives interact among themselves, and develop a measure of their level of interaction. After documenting the individual characteristics associated with the frequency of initiating interaction, we show that executives who initiate more interactions are more likely to be promoted to CEO, and these promotions result in economically and statistically significant positive stock returns around their announcements. In addition, interaction has firm-level consequences. We find that executive teams that interact with each other more are more likely to remain together than are teams where this practice is uncommon, and that the appointment of CEOs who initiate more interactions than did their predecessors results in higher future firm value.

In addition to contributing to the research on conference calls, CEO succession, and executive characteristics, our study also provides insights into a phenomenon frequently discussed in practitioner articles: whether inclusiveness, which encompasses ensuring team members' voices are heard, is a desired characteristic (Sherbin and Rashid 2017). By showing the capital market consequences of executives' decisions to initiate interactions with colleagues, our paper bridges the gap between managerial concepts and financial implications.

## REFERENCES

- Barker, V., and Mueller, G. 2002. CEO characteristics and firm R&D spending. *Management Science* 48 (6), 782-801.
- Becker-Blease, J., Elkinawy, S., Hoag, C., and Stater, M. 2016. The effects of executive, firm, and board characteristics on executive exit. *The Financial Review* 51 (4), 527-557.
- Benmelech, E., and Frydman, C. 2015. Military CEOs. *Journal of Financial Economics* 117 (1), 43-59.
- Bertrand, M., and Schoar, A. 2003. Managing with style: The effect of managers on firm policies. *The Quarterly Journal of Economics* 118 (4), 1169–1208.
- Blake, A., Luu, V., Petrenko, O., Gardner, W., Moergen, K. and Ezerins, M. 2022. Let's agree about nice leaders: a literature review and meta-analysis of agreeableness and its relationship with leadership outcomes. *The Leadership Quarterly* 33.
- Blankespoor, E. and deHaan, E., 2020. Strategic disclosure and CEO media visibility. *Journal of Financial Reporting*, 5(1), pp.25-50.
- Bowen, R., Davis, A., and Matsumoto, D. 2002. Do conference calls affect analysts' forecasts? *The Accounting Review* 77 (2), 285-316.
- Brickley, J., Smith, C., and Zimmerman, J. 2009. *Managerial Economics and organizational architecture*. McGraw-Hill, New York, NY.
- Brochet, F., Naranjo, P. and Yu, G., 2016. The capital market consequences of language barriers in the conference calls of non-US firms. *The Accounting Review*, 91(4), pp.1023-1049.
- Bushee, B., Matsumoto D., and Miller, G. 2004. Managerial and investor responses to disclosure regulation: the case of Reg FD and conference calls. *The Accounting Review* 79 (3), 617-643.
- Bushman, R., Davidson, R., Dey, A., and Smith, A. 2018. Bank CEO materialism: Risk controls, culture and tail risk. *Journal of Accounting and Economics* 65 (1), 191-220.
- Carmeli, A., Schaubroeck, J., and Tishler, A. 2011. How CEO empowering leadership shapes top management team processes: Implications for firm performance. *Leadership Quarterly*, 22, 399–411.
- Carson, J., Tesluk, P., and Marrone, J. 2007. Shared leadership in teams: An investigation of antecedent conditions and performance. *The Academy of Management Journal* 50 (5), 1217-1234.
- Charan, R. 2005. Ending the CEO succession crisis. *Harvard Business Review*, February.
- Chatman, J. and Barsade, S. 1995. Personality, organizational culture, and cooperation: evidence from a business simulation. *Administrative Science Quarterly* 40, 423-443.

Coyne, K., and Coyne, E. 2007. Surviving your new CEO. *Harvard Business Review* 85(5), 62-69.

Dess, G. and Shaw, J. Voluntary turnover, social capital, and organizational performance. *Academy of Management Review* 26, 446-456.

Eby, L., and Dobbins, G. 1997. Collectivistic orientation in teams: An individual and group-level analysis. *Journal of Organizational Behavior* 18 (3), 275-295.

Ellahie, A., Tahoun, A. and Tuna, I., 2017. Do common inherited beliefs and values influence CEO pay? *Journal of Accounting and Economics*, 64(2-3), pp.346-367.

Favaro, K., Karlsson, P., and Neilson, G. 2015. The \$112 billion CEO succession problem. *Strategy + Business*, May 4. Accessed August 5, 2021 from <https://www.strategy-business.com/article/00327#succession>.

Fee, C., and Hadlock, C. 2004. Management turnover across the corporate hierarchy. *Journal of Accounting and Economics* 37, 3-38.

Francis, B., Shohfi, T., and Xin, D. 2020. Gender and earnings conference calls. *Working paper*.

Frankel, R., Johnson, M., and Skinner, D. 1999. An empirical examination of conference calls as a voluntary disclosure medium. *Journal of Accounting Research* 37 (1), 133-150.

Gabaix, X., and Landier, A. 2008. Why has CEO pay increased so much? *The Quarterly Journal of Economics* 123 (1), 49-100.

Giambatista, R., Rowe, W., and Riaz, S. 2005. Nothing succeeds like succession: A critical review of leader succession literature since 1994. *The Leadership Quarterly* 16, 963-991.

Gormley, T. and Matsa D., 2014. Common Errors: How to (and not to) control for unobserved heterogeneity. *Review of Financial Studies* 27(2), 617-61.

Green, T., Jame, R., and Lock, B. 2019. Executive extroversion: Career and firm outcomes. *The Accounting Review* 94 (3), 177-204.

Haas, M and Mortensen M. 2016. The secrets of great teamwork. *Harvard Business Review* June.

Ham, C., Lang, M., Seybert, N., and Wang, S. 2017. CFO narcissism and financial reporting quality. *Journal of Accounting Research* 55 (5), 1089-1135.

Hambrick, D., and Mason, P. 1984. Upper echelons: The organization as a reflection of its top managers. *The Academy of Management Review* 9 (2) 193–206.

Hambrick, D. C. 1994 'Top management groups: A conceptual integration and reconsideration of the "team" label. In L. L. Cummings and B. M. Staw (eds.), *Research in Organizational Behavior*, 16: 171–213. Greenwich, CT: JAI Press.

Hanlon, M., Yeung, K., and Zuo, L. 2021. Behavioral economics of accounting: A review of archival research on individual decision makers. *Contemporary Accounting Research*, forthcoming.

Hayes, R., Oyer, P., and Schaefer, S. 2006. Coworker complementarity and the stability of top-management teams. *Journal of Law Economics & Organization* 22, 184.

Hoegl, M. and Gemuenden, H. 2001. Teamwork quality and the success of innovative projects: A theoretical concept and empirical evidence. *Organization Science* 12 (4), 435-449.

Hornigren, C., Datar, S., and Rajan, M. 2013. *Cost accounting: A managerial emphasis*, 16<sup>th</sup> Ed. Prentice-Hall, NY.

Impink, S., Pratt, A., and Sadun, R. 2020. Measuring collaboration in modern organizations. *AEA Papers and Proceedings* 11, 181-186.

Jayaraman, S. and Wu, J. 2019. Is Silence Golden? Real effects of mandatory disclosure. *Review of Financial Studies* 32(6), 2225-2229.

Johnson, B., Magee, R., Nagarajan, N., and Newman, H. 1985. An analysis of the stock price reaction to sudden executive death: implications for the managerial labor market. *Journal of Accounting and Economics* 7, 151-174.

Krigman, L., and Rivolta, M. 2019. Can non-CEO inside directors add value? Evidence from unplanned CEO turnovers. *Review of Accounting and Finance* 18(3), 456-482.

Larcker, D., and Zakolyukina, A., 2012. Detecting deceptive discussions in conference calls. *Journal of Accounting Research* 50 (2), 494–540.

Lee, J. 2016. Can investors detect managers' lack of spontaneity? Adherence to predetermined scripts during earnings conference calls. *The Accounting Review* 91, 229–50.

Li, F., Minnis, M., Nagar, V., and Rajan, M. 2014. Knowledge, compensation, and firm value: An empirical analysis of firm communication. *Journal of Accounting and Economics* 58, 96-116.

Li, K., Mai, F., Shen, R., and Yan, X., 2021. Measuring corporate culture using machine learning. *The Review of Financial Studies*, 34 (7), 3265-3315.

Malmendier, Ulrike, and Geoffrey Tate. "CEO overconfidence and corporate investment." *The Journal of Finance* 60.6 (2005): 2661-2700.



- Malmendier, U., Tate, G., and Yan, J. 2011. Overconfidence and early-life experiences: The effect of managerial traits on corporate financial policies. *The Journal of Finance* 66 (5), 1687-1733.
- Matsumoto, D., Pronk, M., Roelofson, E., 2011. What makes conference calls useful? The information content of managers' presentations and analysts' discussion sessions. *The Accounting Review* 86 (4), 1383–1414.
- Nembhard, I. and Edmondson A., 2006. Making it safe: the effects of leader inclusiveness and professional status on psychological safety and improvement efforts in health care teams. *Journal of Organizational Behavior* 27 (7), 941-966.
- O'Reilly, C., Caldwell, D., Chatman, J., and Doerr, B. 2014. The promise and problems of organizational culture: CEO personality, culture, and firm performance. *Group and Organization Management* 39, 595-625.
- Ou, A., Waldman, D., and Peterson, S. 2018. Do humble CEOs matter? An examination of CEO humility and firm outcomes. *Journal of Management* 44 (3), 1147-1173.
- Pearce, C. 2004. The future of leadership: Combining vertical and shared leadership to transform knowledge work. *Academy of Management Perspectives* 18 (1), 47-57.
- Podsakoff, P., Ahearne, M., and MacKenzie, S. 1997. Organizational citizenship behavior and the quantity and quality of work group performance. *Journal of Applied Psychology* 82 (2), 262-270.
- Quigley, T., and Hambirck, D. 2012. When the former CEO stays on as board chair: Effects of successor discretion, strategic change, and performance. *Strategic Management Journal* 33, 834-859.
- Rennekamp, K., Sethuraman, M., and Steenhoven, B. 2022. Engagement in Earnings Conference Calls. *Journal of Accounting and Economics*, forthcoming.
- Salas, J. 2010. Entrenchment, governance and the stock price reaction to sudden executive deaths. *Journal of Business and Finance* 34, 656-666.
- Schepker, D., Kim, Y., Patel, P., Thatcher, S., and Campion, M. 2017. CEO succession, strategic change, and post-succession performance: A meta-analysis. *The Leadership Quarterly* 28, 701-710.
- Schepker, D., Nyberg, A., Ulrich, M. and Wright, P. 2018. Planning for future leadership: Procedural rationality, formalized succession processes, and CEO influence in CEO succession planning. *Academy of Management Journal* 61 (2), 523-552.
- Schoar, A., and Zuo, L. 2016. Does the market value CEO styles? *American Economic Review: Papers & Proceedings* 106 (5), 262-266.

Schrand, C., and Zechman, S. 2012. Executive overconfidence and the slippery slope to financial misreporting. *Journal of Accounting and Economics* 53 (1-2), 311-329.

Sherbin, L., and Rashid, R. 2017. Diversity doesn't stick without inclusion. *Harvard Business Review*, February 1. Accessed November 28, 2021 from <https://hbr.org/2017/02/diversity-doesnt-stick-without-inclusion>.

Sen, R., and Tumarkin, R. 2015. Stocking up: Executive optimism, option exercise, and share retention. *Journal of Financial Economics* 118 (2), 399-430.

Shen, W., and Cannella, A. 2002. Revisiting the performance consequences of CEO succession: The impacts of successor type, post succession senior executive turnover, and departing CEO tenure. *Academy of Management Journal* 45 (4), 717-733.

Smith, N., Smith, V., and Verne, M. 2013. Why are so few females promoted into CEO and vice president positions? Danish empirical evidence. *Industrial and Labor Relations Review* 66, 380-408.

Worrell, D., Davidson, W., Chandy, P., and Garrison, S. 1986. Management turnover through deaths of key executives: effects on investor wealth. *Academy of Management Journal* 29, 674-694.

Zajac, E. 1990. CEO selection, succession, compensation, and firm performance: A theoretical integration and empirical analysis. *Strategic Management Journal* 11 (3), 217-230.

## Appendix 1 – Examples of Interactions in the Conference Call

### Example 1: American Airlines Group Inc. (NASDAQ: AAL), Q2 2015 Earnings Call, Jul 24, 2015 8:30 AM ET

- Savanthi Syth (Raymond James and Associates – Analysts): Just the investments that are being made to improve operational performance, I wonder if you could provide a little bit more clarity on that. Just how much of the cost pressure is that? And is there going to be any of that continuing into 2016? And clearly, it's a good project and then time line on when you would kind of expect to see that flowing through operations and earnings?
- Derek Kerr (American Airlines Group Inc. – EVP & CFO): **This is Derek, and then Robert can touch on it.** We've looked at a lot of what we were going to do in the back half of the year to reduce headcount and do other things. But we've decided to leave that in and leave it in place so that we can get through the integration. It's about 1 point of CASM, I would say, in the fourth quarter that we've added. We've added staffing in areas like reservations and maintenance and the airports to make sure that, as we go through this in the fall and get through the operations or get through the PSS migration and other things into the fall, that we have enough staff to be able to get through all of those. I do believe most of that will come out and will come out in part in the middle of 2016. And I do think, and Robert can touch on where the operations is now, but I think our July is running really well. **So Robert, why don't you touch on ops?**
- Robert Isom (American Airlines Group Inc. – EVP & COO): Sure. Like Derek said, July operations are where we want them to be. Our completion factors are in the mid-99%-plus. Our on-time performance is 80%-plus, and we're executing day in and day out, we're near in terms of departing exactly on time. The kind of investments we've made so far have been in a number of areas: maintenance by putting personnel in places increases that, quite frankly, we didn't have them before, so increasing maintenance opportunities for ourselves. We've invested in a lot in renewal of equipment. Our capital plan had almost \$100 million -- or over \$100 million in terms of resources, additional and for replacement purposes. And then we've done in the airports, too, to ensure that we get our baggage performance where we want it and that we're meeting and taking care of aircraft like we wanted. So looking forward, though, the investments are really about making sure that when we do get into inclement weather and when we do have irregular operations, that we're ready to handle them. So a lot of investment is coming and being put in place now to make sure that we're ready for the following winter season.

## Appendix 1 (Continued)

### Example 2: Applied Materials, Inc. (NASDAQ: AMAT), Q2 2016 Earnings Call, May 19, 2016 4:30 PM ET

- Christopher Muse (Evercore – Analyst): Yes, I guess, first question is on the silicon front. So a couple of parts. So the first one is you talked about upside potential to flat WFE outlook. Would love to hear thoughts there. And then, as you think about growing share in etch, very favorable mix in terms of foundry and -- as well as China and what you're doing around 3D NAND. How should we think about your growth in calendar '16 relative to that flat to slightly up WFE outlook?
- Bob Halliday (Applied Materials, Inc. – SVP & CFO): **Yes, so I'll try, and Gary can jump in.** We agree it's flat to up a little bit this year. The year's unfolded as we hoped last November, and it's gotten better and better for us, frankly. If you all look at it, the NAND has picked up. We now think it's up about 35% year-on-year, whereas, DRAM's probably down about 25%. Foundry is not up a lot this year; up somewhat, but if you look at our position within foundry, it's really, really strong. And then DRAM, we're also gaining. So if you go look at our position with each, we're gaining share. I'll give you a factoid you may not have picked up on. Pre -- 2012, we were only over 15% share by the -- in 1 of the 4 major groups when you look at NAND, DRAM, foundry and logic. This year, we project to be over 20% in all 4. So if you look at the NAND spending at \$9.2 billion, our share's going to go probably from under 15% to north of 20% this year, and the spending is up to about \$9.2 billion, whereas in the base year of 2012 it was about \$4.2 billion. So the market's up, and our share's up significantly. And the NAND's strength goes on for a number of years. As you know, by the end of this year, we're only going to have about 375,000 wafer starts converted. There's about another 1 million wafer starts out there are planar. If you go look at foundry, we anticipate it being a reasonable year in foundry, but our position's done really well, whether it's in Taiwan or a lot of the activity going on in China. So we're gaining -- we're doing very strongly there, too. And then also, logic, we're doing well, leading into logic. So the way that the year's laid out, our positioning of our products in the markets that are fastest growing, whether it is NAND, strength in leading-edge foundry, strength in China and also strength in display, is playing very well for Applied. So we expect, within semi, we're gaining share this year.
- Gary Dickerson (Applied Materials, Inc. – President, Director & CEO): Thanks, C.J. I'll take the etch question. So as I said earlier, we think that 2016 is going to be a really strong year for us in growing our etch share. We have a very strong position, very, very strong position, in 3D NAND conductor etch. So as that business continues to grow as that wave moves forward over the next few years, we're in a really great position. And we have some of the most exciting products in this group that I've seen in my whole career. The Sym3, tremendous pull from customers in 3D NAND and also in other segments. We're winning new steps and strong pull, really, across the board for Sym3. So very, very, very strong position there. And also, in selective material removal, we have very strong pull for -- from customers. And that business is growing also for us at a strong rate. So overall, we think 2016 is going to be a great year for us in etch. And again, some of the strongest products I've seen in my career.

## Appendix 1 (Continued)

### Example 3: Amgen Inc. (NASDAQ: AMGN), Q2 2017 Earnings Call, Jul 25, 2017 5:00 PM ET

- Robyn Karnauskas (Citigroup Global Markets, Inc. – Analysts): Given the pushback so far with the payers in the cardiovascular space that you've seen with Repatha, like how are you thinking about the bar for developing your CETP inhibitor? And what threshold do you want to see with the Merck data that will make you feel more positive about the prospect of the class?
- Robert Bradway (Amgen Inc. – Chairman and CEO): I think we're focused, Robyn, on unmet medical need and trying to figure out whether that A class of agents has a role to play. **But Sean, I'll let you talk about the specifics.** And obviously, we need to believe that we can earn a return on any further investment there for our shareholders. Do you want to talk about the clinical?
- Sean Harper (Amgen Inc. – EVP): Yes -- No, I mean, I think that it's the case, that if we were to see, as we did with the PCSK9 that has been assessed in outcomes trials, a linear relationship has occurred with statins between LDL lowering and event rate risk and the agents are lowering LDL in the range of 30% to 35%, 40% that an oral agent that could do that as an add-on to statins would be a meaningful drug to have in our armamentarium. It's obviously not going to deliver the kind of LDL reductions you can achieve with a PCSK9 antibody, but because the drugs are oral, so we feel they play a role. What remains to be seen is whether that these agents, based on their LDL-lowering capacity, and the Merck drug will be the first that I think will answer this question more definitively, whether we see that relationship or whether we're seeing some fractional effect of that relationship and that the effect on cardiovascular risk is marginal. In which case, obviously, we'd be much less excited about pursuing this. So I think it much depends on the details of the reveal data.

## Appendix 1 (Continued)

### Example 4: Molson Coors Brewing Company (NYSE: TAP), Q1 2018 Earnings Call, May 02, 2018 11:00 AM ET

- Bryan Spillane (Bank of America Merrill Lynch – Analysts): I've got a question, I guess, related to in the U.S. the gap between sale for wholesalers and sale to retailers. And I guess there's kind of 2 parts to it. One is, I guess, as you've had shipment issues out at the Golden Brewery, has that at all affected service levels and affected sort of consumption at all, so they have been out of stock or any effect sort of in the commercial aspect of it? And then the second, again related to the staff, has there been any retail inventory destocking? And I ask in the context of some large retailers have begun to kind of cleanup inventory in the back room, and so just curious to the extent that that's affected your business, if it has, so that sort of be a permanent reduction in retailer support.
- Mark Hunter (Molson Coors Brewing Company – CEO): **Let me just give you a headline, and then Gavin, if you want to pick up the specific.** I mean, I think the important thing is, if you take a half step back here and just look at our market share performance. So, really look at the demand in the marketplace at consumer level. Our market share performance has remained very consistent from a trend perspective. So I think at a high level, you can see that it hasn't really had impact on our underlying market competitiveness. But clearly behind that, there are always puts and takes. **So Gavin, do you want to talk just a little bit about some of the puts and takes on STWs versus STRs?**
- Gavin Hattersley (MillerCoors – President & CEO): Look, I mean it's clear that we have had some out of stocks because of the Golden Brewery rollout of our new system. It has been relatively more significant in Central and Pacific Northwest regions and to a limited degree in the Great Lakes, while the rest of the country wasn't impacted. From a retail point of view, Bryan, I would say no. The retailers have for some time been taking SKU levels down. That has actually resulted in increased velocity for some of our faster-moving SKUs. So I would say no to the second part of your question. And then if you look more broadly at STRs and STWs, with STWs being down about 6.7%, if you took into account the change in the inventory levels and the impact on shipments, our trend would be much closer to the STR level of down 3.8%.

## Appendix 1 (Continued)

### Example 5: Air Products & Chemicals Inc., Q1 2012 Earnings Call, Jan 24, 2012 10:00 AM ET

- P.J. Juvekar (Citigroup Inc – Analyst, Research Division): Okay. And then if you look at the commentary from semiconductor companies in January, it does materially improve and they're seeing some at the bottom. So when should you begin to see that improvement in your numbers? And what are your expectations for square inches of silicon this year?
- Paul Huck (Air Products & Chemicals Inc. – CFO & SVP): So as far as that's concerned, and **I'll let Simon chime in here too**, what we would expect is really to have a much stronger second half than the first half period. So it's probably a few months' lag on that. **Simon, you are close to the business?**
- Simon Moore (Air Products & Chemicals Inc. – Former Director of Investor Relations): Yes. Thanks, P.J. And I mean, we would still say for the year, we expect square inches of silicon to grow in that 0% to 5% range, probably right in the middle of that, which is what we've talked about last quarter. And as you pointed out, I think generally speaking, Intel talked about a stronger second half. TSMC actually talked about having a better first calendar quarter than seasonality would expect. And just one statement that we talked about a few times is our strength with Samsung, Intel and TSMC. They're expected to be almost half of the industry CapEx in 2012. So we continue to benefit from our strong position with them.

## Appendix 1 (Continued)

### Example 6: Becton, Dickinson and Company (BDX), Q1 2011 Earnings Call, Feb 08, 2011 10:00 AM ET

- Michael Weinstein (JP Morgan Chase & Co – Analyst): One of the questions that I get from investors is, is not so much the BD, the new products pipeline, but more this macro question of whether your end markets can support sustainable 6+ %, 6%, 7% revenue growth. So it's not too much the question of what's in BD's pipeline but the strength of your underlying end markets, be it U.S., Europe, the varying emerging markets in there. Can you just help us with that a little bit in terms of the comfort level not with what you're doing internally, but that there is a growth in your external markets. In this quarter, obviously, is a one-quarter data point. But help us with the comfort on long-term sustainable growth in your markets?
- Vincent Forlenza (COO – Becton, Dickinson and Company): Well, if we look at the U.S. and we say maybe GDP is growing 3%. If we then also expect in international markets the growth that we have in emerging markets, the 6% does not look like such a stretch to us. Remember, when we grow 6%, it's a combination of added extra value plus volume growth. And while you told me to move away from our pipeline but that is a big portion of how we get to the 6% growth. So we started out the call by talking about stabilization in the markets that we're seeing from a macro standpoint. So we do think it is sustainable. Let me go back to the example that Bill Rhodes was talking about from a bioscience standpoint. So it's not just in our current core-served markets that we see growth opportunities, but it's also in moving into near adjacencies. And that, in addition to the other factors that I've talked about, is how we get there. So, the personal flow cytometer market really didn't exist. A couple of years ago, as Bill said, we started to see that trend, so we expand the segments that we're moving into. Give you another example, in the Medical business in Diabetes Care, where we've been so successful with pen needles, and we see a worldwide epidemic in diabetes in addition to the core product line, we've talked about moving into the infusion space, just particularly on the disposables and working with the JDRF [Juvenile Diabetes Research Foundation]. So, there are a number of things that we're doing that enable us to leverage kind of core growth into higher growth. **Gary, would you like to make a comment?**
- Gary Cohen (EVP – Becton, Dickinson and Company): The only other thing I would add to that is that there are number of things in the first quarter that don't really make a reliable indicator. The flu pandemic certainly is one of them, it's very strong Pharmaceutical Systems performance in the prior year, which particularly hit Western Europe, by the way. A big part of that was in Western Europe. And then there were series of other things. There were timing on orders, going into the developing world through PEPFAR and through UNICEF that didn't fall into the first quarter as we had anticipated. There was a change in an India immunization order that was fairly sizable on a year-to-year basis. So there's a number of things that tend to mask what the underlying performance actually was. And as we look out for the full year, growth in the emerging markets we're anticipating will remain strong. Western Europe is not as bad as it looked in the first quarter for the reasons I had mentioned. We had good growth in some key areas like United Kingdom, which is one of the largest countries. They actually doing pretty well. So I think we'll get a better sense of all this as the year rolls out.



## Appendix 2 – Variable Definitions

Variable	Date Source	Variable Definition
<b>Panel A: Executive-level Data</b>		
<i>Frequency of Interactions</i>	Capital IQ	The total number of times an executive initiates interactions during conference calls in a year.
<i>Individual Interactions</i>	Capital IQ	The natural log of one plus <i>Frequency of Interactions</i> .
<i>Increase CEO Interaction</i>	Capital IQ	An indicator that is equal to 1 if the new CEO's total number of interactions in the next year's conference call after his or her promotion is greater than the old CEO's total number of interactions in the previous year.
<i>Interaction</i>	Capital IQ	An indicator that is equal to 1 if the non-CEO executive initiates more interactions than the median of non-CEO executives in the same industry-year and 0 otherwise. In the promotion analysis, the sample only includes non-CEO executives listed in Execucomp.
<i>Interaction - Multiple</i>	Capital IQ	An indicator that is equal to 1 if the executive initiates interactions with multiple colleagues in the conference calls in a year and 0 otherwise.
<i>Interaction - Single</i>	Capital IQ	An indicator that is equal to 1 if the executive initiates interactions with exactly one colleague in a year.
<i>Promotion</i>	Execucomp	An indicator that is equal to 1 if the executive gets promoted in the next year and 0 otherwise.
<i>Female</i>	Execucomp	An indicator that is equal to 1 if the executive is female and 0 otherwise.
<i>Minority</i>	Capital IQ	An indicator that is equal to 1 if the executive is non-white and 0 otherwise. We measure <i>Minority</i> based on the last name of executives following Ellahie, Tahoun, and Tuna 2017.
<i>Age</i>	Execucomp	The age of the executive.
<i>Pay Above Median</i>	Execucomp	An indicator that is equal to 1 if the executive's total compensation is more than the median of other executives in the same company in that year and 0 otherwise.
<i>Log(#Answer)</i>	Capital IQ	The total number that the executive speaks in the conference call of that year, adding 1 and taking logarithm.
<i>CEO</i>	Execucomp	An indicator that is equal to 1 if the executive is the CEO of the firm in the current year and 0 otherwise.
<i>CFO</i>	Execucomp	An indicator that is equal to 1 if the executive is the CFO of the firm in the current year and 0 otherwise.
<i>Graduate</i>	Execucomp	An indicator equal to 1 if the executive holds a graduate degree, and 0 otherwise.
<i>Undergraduate</i>	Execucomp	An indicator equal to 1 if the executive holds an undergraduate degree, and 0 otherwise.
<i>Industry Experience</i>	Capital IQ	Total number of years an executive works in an industry, which is classified by the first two digits of SIC code.

<i>Letter%</i>	Capital IQ	The proportion of letters spoken by the executive during the Q&A sessions of conference calls in a given year.
<i>Extroversion</i>	Russell Jame's website	A measure of the executive's propensity to be extroverted. This measure is only available for CEOs and CFOs.
<i>Overconfidence</i>	Execucomp	An indicator that is equal to 1 if the executive's stock holdings (excluding options) increases compared the previous year, i.e., the executive is a net buyer of his/her employer's stock.
<b>Panel B: Firm-level Data</b>		
<i>Return [-1, 1]</i>	CRSP	The total stock return around the announcement of CEO appointment from day -1 to day 1.
<i>Excess Return [-1, 1]</i>	CRSP	The total excess stock return around the announcement of CEO appointment from day -1 to day 1.
<i>Retention 100%</i>	Execucomp	An indicator that is equal to 1 if the firm's retention rate is 100% and 0 otherwise.
<i>Team Interactions</i>	Capital IQ	The natural logarithm of 1 plus the total number of interactions during the conference call within the firm.
<i>%Interaction - Multiple</i>	Capital IQ	The percentage of executives within the firm that initiate interactions with multiple colleagues in a year.
<i>%Interaction - Single</i>	Capital IQ	The percentage of executives within the firm that initiate interactions with one colleague in a year.
<i><math>\Delta</math>Team Interactions</i>	Capital IQ	The change in the total number of interactions among the team (excluding the CEO) from the last year of the prior CEO's tenure to the first full year of the current CEO's tenure.
<i>ROA</i>	Compustat	The net income of the firm divided by its total assets.
<i>Missing Analyst Forecast</i>	I/B/E/S	An indicator that is equal to 1 if the annual earnings per share is lower than the median of analysts' forecasts.
<i>Log(#Answer)</i>	Capital IQ	The total number of speaking during the conference call within the firm, adding 1 and taking logarithm.
<i>Size</i>	Compustat	The logarithm of the firm's total assets.
<i>BTM</i>	Compustat	The book value of the firm divided by its market value.
<i>Leverage</i>	Compustat	The total debts of the firm divided by its total assets.
<i>SP500</i>	CRSP	An indicator that is equal to 1 if the firm is an S&P 500 constituent.
<i>R&amp;D</i>	Compustat	Total R&D expense scaled by total assets.
<i>Teamwork</i>	Provided by Kai Li	From conference calls, the weighted-frequency count of words related to teamwork.
<i><math>\Delta</math>(Tobin's Q)</i>	Compustat	The change in Tobin's Q, measured as the market value of total assets (market value of equity plus book value of debt) divided by the book value of total assets, from the year before to the year after a new CEO is appointed.

**Table 1 Descriptive Statistics**

This table presents descriptive information for the sample and variables of interest. Panel A shows the descriptive statistics at the individual level, and Panel B shows the descriptive statistics at the firm level. Details of variable definition are contained in Appendix 2.

**Panel A: The Individual-level Data**

	N	Mean	Std. Dev.	p25	Median	p75
<i>Frequency of Interactions</i>	33,389	1.510	2.870	0.000	0.000	2.000
<i>Individual Interactions</i>	33,389	0.569	0.740	0.000	0.000	1.099
<i>Interaction - Multiple</i>	33,389	0.139	0.346	0.000	0.000	0.000
<i>Interaction - Single</i>	33,389	0.322	0.467	0.000	0.000	1.000
<i>Promotion</i>	15,602	0.049	0.216	0.000	0.000	0.000
<i>Female</i>	33,389	0.072	0.258	0.000	0.000	0.000
<i>Minority</i>	33,389	0.183	0.387	0.000	0.000	0.000
<i>Age</i>	33,389	53.659	6.936	49.000	54.000	58.000
<i>Pay Above Median</i>	33,389	0.595	0.491	0.000	1.000	1.000
<i>Log(#Answer)</i>	33,389	3.514	1.091	2.833	3.664	4.277
<i>CEO</i>	33,389	0.362	0.481	0.000	0.000	1.000
<i>CFO</i>	33,389	0.307	0.461	0.000	0.000	1.000
<i>Graduate</i>	21,171	0.521	0.500	0.000	1.000	1.000
<i>Undergraduate</i>	21,171	0.801	0.399	1.000	1.000	1.000
<i>Industry Experience</i>	21,171	6.027	3.814	3.000	5.000	8.000
<i>Letter%</i>	33,389	0.367	0.288	0.111	0.298	0.604
<i>Extroversion</i>	16,965	3.878	0.451	3.559	3.883	4.186
<i>Overconfidence</i>	33,366	0.546	0.498	0.000	1.000	1.000

**Panel B: The Firm-level Data**

	N	Mean	Std. Dev.	p25	Median	p75
<i>Team Interactions</i>	11,723	1.181	0.891	0.693	1.099	1.792
<i>%Interaction - Multiple</i>	11,723	0.091	0.142	0.000	0.000	0.200
<i>%Interaction - Single</i>	11,723	0.318	0.288	0.000	0.333	0.500
<i>Retention 100%</i>	11,723	0.860	0.237	0.714	1.000	1.000
<i>ROA</i>	11,723	0.047	0.092	0.016	0.051	0.090
<i>Missing Analyst Forecast</i>	11,723	0.596	0.491	0.000	1.000	1.000
<i>Log(#Answer)</i>	11,723	4.627	0.838	4.159	4.700	5.198
<i>Size</i>	11,723	7.864	1.612	6.715	7.762	8.915
<i>BTM</i>	11,723	0.468	0.411	0.224	0.390	0.630
<i>Leverage</i>	11,723	0.247	0.205	0.074	0.225	0.369
<i>SP500</i>	11,723	0.274	0.446	0.000	0.000	1.000
<i>R&amp;D</i>	11,723	0.030	0.054	0.000	0.000	0.035
<i>Teamwork</i>	11,142	0.800	0.574	0.401	0.655	1.041

**Table 2 Correlation Matrix**

This table presents the correlation matrix of variables of interest. Panel A shows the correlation matrix at the individual level, and Panel B shows the correlation matrix at the firm level. Details of variable definition are contained in Appendix 2. Significance levels are indicated by \*, \*\*, \*\*\* for 10%, 5%, and 1% respectively.

**Panel A: The Individual-Level Data**

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
(1) Frequency of Interactions	1.000											
(2) Promotion	0.138***	1.000										
(3) Female	-0.016	-0.008	1.000									
(4) Minority	-0.014	0.002	-0.014	1.000								
(5) Age	0.062***	0.031**	-0.036***	-0.025**	1.000							
(6) Pay Above Median	0.064***	0.137***	-0.025*	-0.030**	0.098***	1.000						
(7) Log(#Answer)	0.374***	0.079***	-0.017	-0.026**	0.029**	0.090***	1.000					
(8) CFO	-0.005	-0.213***	0.070***	0.035***	-0.082***	-0.143***	0.087***	1.000				
(9) Graduate	0.028**	0.023*	0.004	0.054***	-0.021*	0.001	-0.001	0.058***	1.000			
(10) Undergraduate	0.031**	0.006	0.037***	-0.005	-0.089***	-0.000	0.033***	0.095***	0.326***	1.000		
(11) Industry Experience	0.049***	0.018	-0.039***	-0.019*	0.332***	0.166***	0.095***	-0.061***	-0.083***	-0.089***	1.000	
(12) Letter%	0.293***	0.164***	-0.060***	-0.008	-0.003	0.125***	0.583***	0.059***	0.036***	0.022*	0.144***	1.000

**Panel B: The Firm-Level Data**

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1) Retention 100%	1.000										
(2) Team Interactions	0.010	1.000									
(3) ROA	0.076***	0.021*	1.000								
(4) Missing Analyst Forecast	0.053***	0.041***	0.216***	1.000							
(5) Log(#Answer)	0.069***	0.593***	0.093***	0.022*	1.000						
(6) Size	-0.025*	0.260***	0.129***	0.060***	0.305***	1.000					
(7) BTM	-0.027*	-0.069***	-0.263***	-0.116***	-0.067***	-0.033**	1.000				
(8) Leverage	-0.013	0.105***	-0.156***	-0.056***	0.095***	0.326***	-0.179***	1.000			
(9) SP500	-0.022*	0.204***	0.164***	0.053***	0.229***	0.690***	-0.148***	0.103***	1.000		
(10) R&D	-0.013	-0.030**	-0.172***	0.069***	-0.118***	-0.277***	-0.156***	-0.228***	-0.061***	1.000	
(11) Teamwork	-0.033**	0.063***	-0.123***	0.062***	-0.094***	-0.076***	-0.086***	-0.042***	-0.009	0.275***	1.000

**Table 3 Determinants of Interactions**

This table reports the results of examining the characteristics that predict an executive's frequency to initiate interactions. All numeric variables are winsorized at the top and bottom 1% of the cross-sectional distribution. *Individual Interactions* is the natural log of 1 plus the number of interactions an executive initiates in a given year. All the variables are defined in Appendix 2. The *t*-statistics are reported in parentheses and are calculated based on standard errors clustered by firm. Significance levels are indicated by \*, \*\*, \*\*\* for 10%, 5%, and 1% respectively.

VARIABLES	(1) <i>Individual Interactions</i>	(2) <i>Individual Interactions</i>
<i>ROA</i>	-0.052 (-1.03)	-0.102 (-1.46)
<i>Missing Analyst Forecast</i>	0.007 (1.12)	0.005 (0.55)
<i>Size</i>	-0.000 (-0.04)	0.003 (0.17)
<i>BTM</i>	0.014 (1.03)	0.013 (0.59)
<i>Leverage</i>	-0.039 (-0.94)	-0.037 (-0.69)
<i>SP500</i>	0.009 (0.41)	0.023 (0.76)
<i>Female</i>	0.046** (2.17)	0.066** (2.50)
<i>Minority</i>	-0.015 (-0.96)	-0.011 (-0.60)
<i>Age</i>	0.006*** (6.36)	0.006*** (4.88)
<i>Pay Above Median</i>	0.040*** (5.00)	0.032*** (3.24)
<i>Log(#Answer)</i>	0.301*** (56.19)	0.269*** (36.19)
<i>CEO</i>	0.459*** (29.16)	0.427*** (20.40)
<i>CFO</i>	0.037*** (3.10)	0.057*** (4.19)
<i>Graduate</i>		0.039** (2.49)
<i>Undergraduate</i>		0.010 (0.46)
<i>Industry Experience</i>		0.004** (2.01)
<i>%(#Letters)</i>		0.177*** (4.72)
Constant	-0.998*** (-8.77)	-1.040*** (-6.60)
Observations	33,389	21,120
Fixed Effects	Firm, Industry-Year	Firm, Industry-Year
Cluster	Firm	Firm
Adj. R-squared	0.492	0.344

**Table 4 Individual Interactions and Team Interactions**

This table reports the results of examining the change in interactions of executive teams around CEO turnover.  $\Delta Team Interactions$  is the difference of the natural log of (1 plus the total number of interactions made by all team members, excluding the CEO) between year  $t+1$  and year  $t-1$ , where  $t+1$  is the first year in which the new CEO joins the firm. *Increase CEO Interactions* is an indicator equal to 1 if the new CEOs initiate more interactions than did their predecessors. All continuous variables are winsorized at the top and bottom 1% of the cross-sectional distribution. All the variables are defined in Appendix 2. The  $t$ -statistics are reported in parentheses and are calculated based on standard errors clustered by firm. Significance levels are indicated by \*, \*\*, \*\*\* for 10%, 5%, and 1% respectively.

VARIABLES	(1) $\Delta Team Interactions$
<i>Increase CEO interactions</i>	0.262*** (4.13)
<i>ROA</i>	-0.301 (-0.88)
<i>Missing Analyst Forecast</i>	0.017 (0.26)
<i>Size</i>	-0.019 (-0.63)
<i>BTM</i>	-0.038 (-0.47)
<i>Leverage</i>	-0.233 (-1.31)
<i>SP500</i>	-0.133 (-1.34)
<i>Female</i>	0.041 (0.32)
<i>Minority</i>	0.068 (0.90)
<i>Age</i>	0.004 (0.81)
<i>Pay Above Median</i>	-0.195* (-1.86)
<i>CFO</i>	0.077 (0.26)
Constant	-0.310 (-0.91)
Observations	1,100
Fixed Effects	Industry
Cluster	Firm
Adj. R-squared	0.0463

**Table 5 Executive Interactions and Promotion**

This table reports the results of examining the relation between executive interactions and promotion. *Promotion* is an indicator equal to 1 if the non-CEO executive gets promoted in the following year and 0 otherwise. In Panel A, *Interaction* is an indicator equal to 1 if the non-CEO executive's total number of interactions is more than the median of non-CEO executives in the same industry in the current year and 0 otherwise. In Panel B, *Interaction – Multiple* is equal to 1 if an executive initiated interactions with multiple colleagues in a year, and 0 otherwise. *Interaction – Single* is an indicator equal to 1 if an executive initiated interactions with only one colleague in a year, and 0 otherwise. All continuous variables are winsorized at the top and bottom 1% of the cross-sectional distribution. All the variables are defined in Appendix 2. The *t*-statistics are reported in parentheses and are calculated based on standard errors clustered by firm. Significance levels are indicated by \*, \*\*, \*\*\* for 10%, 5%, and 1% respectively.

**Panel A: Main effects**

VARIABLES	(1) <i>Promotion</i>	(2) <i>Promotion</i>
<i>Interaction</i>	0.058*** (12.87)	0.051*** (10.00)
<i>ROA</i>		-0.145*** (-4.28)
<i>Missing Analyst Forecast</i>		0.000 (0.02)
<i>Size</i>		-0.008 (-1.10)
<i>BTM</i>		0.007 (0.86)
<i>Leverage</i>		0.010 (0.43)
<i>SP500</i>		0.012 (1.01)
<i>Log(#Answer)</i>		0.022*** (9.07)
<i>Female</i>		0.001 (0.08)
<i>Minority</i>		0.010 (1.28)
<i>Age</i>		-0.000 (-0.58)
<i>Pay Above Median</i>		0.035*** (8.02)
<i>CFO</i>		-0.141*** (-24.28)
Constant	0.029*** (20.63)	0.088 (1.55)
Observations	20,045	15,602
Fixed Effects	Firm, Industry-Year	Firm, Industry-Year
Cluster	Firm	Firm
Adj. R-squared	0.003	0.086



**Panel B: Breadth of interactions and promotion**

VARIABLES	(1) <i>Promotion</i>	(2) <i>Promotion</i>
<i>Interaction – Multiple</i>	0.126*** (11.37)	0.116*** (9.93)
<i>Interaction – Single</i>	0.041*** (9.14)	0.038*** (7.31)
<i>ROA</i>		-0.143*** (-4.25)
<i>Missing Analyst Forecast</i>		-0.000 (-0.03)
<i>Size</i>		-0.007 (-1.00)
<i>BTM</i>		0.006 (0.75)
<i>Leverage</i>		0.012 (0.50)
<i>SP500</i>		0.010 (0.79)
<i>Log(#Answer)</i>		0.018*** (7.72)
<i>Female</i>		0.000 (0.04)
<i>Minority</i>		0.011 (1.41)
<i>Age</i>		-0.000 (-0.73)
<i>CFO</i>		0.034*** (7.85)
<i>Pay Above Median</i>		-0.142*** (-24.33)
Constant	0.028*** (19.73)	0.098* (1.74)
$H_0: \beta$ ( <i>Interaction – Multiple</i> ) $= \beta$ ( <i>Interaction – Single</i> )	<i>F</i> -statistic=56.51 <i>p</i> -value = 0.0000	<i>F</i> -statistic=43.65 <i>p</i> -value = 0.0000
Observations	20,045	15,602
Fixed Effects	Firm, Industry-Year	Firm, Industry-Year
Cluster	Firm	Firm
Adj. R-squared	0.011	0.092

**Table 6 Stock Returns around CEO Appointment Announcements**

This table reports the results of examining firms' stock returns around the dates of CEO appointment announcement. (*Excess*) *Return* [-1, 1] is the total (market-adjusted) stock return three days around the announcement of CEO appointment. In Panel A, *Interaction* is an indicator equal to 1 if the non-CEO executive's total number of interactions is more than the median of non-CEO executives in the same industry in the current year and 0 otherwise. *Promotion* is an indicator equal to 1 if the non-CEO executive gets promoted in the following year and 0 otherwise. In Panel B, *Interaction – Multiple* is equal to 1 if an executive initiated interactions with multiple colleagues in a year, and 0 otherwise. *Interaction – Single* is an indicator equal to 1 if an executive initiated interactions with only one colleague in a year, and 0 otherwise. All continuous variables are winsorized at the top and bottom 1% of the cross-sectional distribution. All the variables are defined in Appendix 2. The *t*-statistics are reported in parentheses and are calculated based on standard errors clustered by date. Significance levels are indicated by \*, \*\*, \*\*\* for 10%, 5%, and 1% respectively.

**Panel A: Main effects**

VARIABLES	(1) <i>Return</i> [-1, 1]	(2) <i>Excess Return</i> [-1, 1]
<i>Interaction</i>	0.008* (1.73)	0.009* (1.89)
<i>ROA</i>	-0.016 (-0.54)	-0.022 (-0.76)
<i>Missing Analyst Forecast</i>	0.003 (0.79)	0.004 (1.01)
<i>Size</i>	0.000 (0.09)	0.001 (0.23)
<i>BTM</i>	-0.010 (-1.34)	-0.009 (-1.24)
<i>Leverage</i>	-0.002 (-0.13)	0.001 (0.10)
<i>SP500</i>	-0.003 (-0.49)	-0.004 (-0.66)
<i>Female</i>	-0.002 (-0.27)	-0.001 (-0.10)
<i>Minority</i>	-0.003 (-0.57)	-0.002 (-0.50)
<i>Age</i>	-0.001 (-1.63)	-0.001 (-1.57)
<i>Pay Above Median</i>	0.003 (0.43)	0.001 (0.09)
<i>CFO</i>	-0.002 (-0.16)	-0.001 (-0.10)
Constant	0.031 (1.22)	0.023 (0.99)
Observations	716	716
Fixed Effects	Industry	Industry
Cluster	Date	Date
Adj. R-squared	0.017	0.027

**Panel B: Breadth of interactions and CEO announcement returns**

VARIABLES	(1) <i>Return [-1, 1]</i>	(2) <i>Excess Return [-1, 1]</i>
<i>Interaction – Multiple</i>	0.018*** (2.78)	0.016** (2.53)
<i>Interaction – Single</i>	0.006 (1.14)	0.005 (0.90)
<i>ROA</i>	-0.011 (-0.36)	-0.018 (-0.61)
<i>Missing Analyst Forecast</i>	0.003 (0.73)	0.004 (0.97)
<i>Size</i>	0.000 (0.08)	0.001 (0.26)
<i>BTM</i>	-0.010 (-1.35)	-0.009 (-1.26)
<i>Leverage</i>	-0.000 (-0.03)	0.003 (0.21)
<i>SP500</i>	-0.005 (-0.66)	-0.006 (-0.82)
<i>Female</i>	-0.001 (-0.10)	0.000 (0.06)
<i>Minority</i>	-0.002 (-0.51)	-0.002 (-0.45)
<i>Age</i>	-0.001* (-1.66)	-0.001 (-1.58)
<i>Pay Above Median</i>	0.003 (0.50)	0.001 (0.15)
<i>CFO</i>	0.001 (0.06)	0.000 (0.05)
Constant	0.026 (1.07)	0.019 (0.83)
$H_0: \beta$ ( <i>Interaction – Multiple</i> ) = $\beta$ ( <i>Interaction – Single</i> )	$F$ -statistic=4.13 $p$ -value = 0.0426	$F$ -statistic=4.02 $p$ -value = 0.0453
Observations	716	716
Fixed Effects	Industry	Industry
Cluster	Date	Date
Adj. R-squared	0.023	0.030

**Table 7 Executive Team Interactions and Retention**

This table reports the results of examining the relation between executive team interactions and retention. *Retention 100%* is an indicator equal to 1 if there is not turnover among the leader team in the following year and 0 otherwise. In Panel A, *Team Interactions*, the natural log of 1 plus the sum of all interactions by all executives of the firm in a given year. In Panel B, *%Interaction – Multiple* is the percent of executives in the firm who initiated interactions with multiple colleagues that year. *%Interaction – Single* is the percent of executives who initiated interaction with only one colleague that year. All continuous variables are winsorized at the top and bottom 1% of the cross-sectional distribution. All the variables are defined in Appendix 2. The *t*-statistics are reported in parentheses and are calculated based on standard errors clustered by firm. Significance levels are indicated by \*, \*\*, \*\*\* for 10%, 5%, and 1% respectively.

**Panel A: Main effects**

VARIABLES	(1) <i>Retention 100%</i>	(2) <i>Retention 100%</i>
<i>Team Interactions</i>	0.035*** (5.11)	0.022** (2.50)
<i>ROA</i>		0.202** (2.53)
<i>Missing Analyst Forecast</i>		0.039*** (3.74)
<i>Size</i>		-0.044** (-2.42)
<i>BTM</i>		-0.031 (-1.39)
<i>Leverage</i>		-0.001 (-0.01)
<i>SP500</i>		0.030 (1.04)
<i>Log(#Answer)</i>		0.031*** (3.01)
Constant	0.657*** (83.21)	0.851*** (6.08)
Observations	14,956	11,723
Fixed Effects	Firm, Industry-Year	Firm, Industry-Year
Cluster	Firm	Firm
Adj. R-squared	0.037	0.040

**Panel B: Breadth of interactions and retention**

VARIABLES	(1) <i>Retention 100%</i>	(2) <i>Retention 100%</i>
<i>%Team Interactions – Multiple</i>	0.116*** (2.98)	0.089** (1.96)
<i>%Team Interactions – Single</i>	-0.017 (-0.95)	-0.018 (-0.90)
<i>ROA</i>		0.205** (2.58)
<i>Missing Analyst Forecast</i>		0.039*** (3.75)
<i>Size</i>		-0.045** (-2.43)
<i>BTM</i>		-0.032 (-1.40)
<i>Leverage</i>		0.000 (0.00)
<i>SP500</i>		0.028 (0.99)
<i>Log(#Answer)</i>		0.039*** (4.08)
Constant	0.691*** (94.45)	0.838*** (6.01)
$H_0: \beta (\%Team\ Interaction - Multiple)$ $= \beta (\%Team\ Interaction - Single)$	$F$ -statistic=12.98 $p$ -value = 0.0003	$F$ -statistic=6.33 $p$ -value = 0.0120
Observations	14,992	11,723
Fixed Effects	Firm, Industry-Year	Firm, Industry-Year
Cluster	Firm	Firm
Adj. R-squared	0.035	0.040

**Table 8 Executive Interactions and Firm Valuation**

This table reports the results of examining the relation between CEO interaction and firm valuation.  $\Delta(\text{Tobin's } Q)$  is the change in Tobin's Q from the year before the appointment of a new CEO to the year after. *Increase CEO Interaction* is an indicator equal to 1 if the new CEOs initiate more interactions than did their predecessors. All the variables are defined in Appendix 2. The *t*-statistics are reported in parentheses and are calculated based on standard errors clustered by firm. Significance levels are indicated by \*, \*\*, \*\*\* for 10%, 5%, and 1% respectively.

VARIABLES	(1) $\Delta(\text{Tobin's } Q)$	(2) $\Delta(\text{Tobin's } Q)$	(3) $\Delta(\text{Tobin's } Q)$
<i>Increase CEO Interaction</i>	0.083** (1.99)	0.156*** (2.61)	-0.023 (-0.49)
<i>BTM*Increase CEO Interaction</i>		-0.159* (-1.70)	
<i>R&amp;D*Increase CEO Interaction</i>			3.508*** (4.34)
<i>ROA</i>	-1.099*** (-4.90)	-1.089*** (-4.86)	-1.043*** (-4.61)
<i>Missing Analyst Forecast</i>	-0.019 (-0.44)	-0.017 (-0.40)	-0.028 (-0.66)
<i>Size</i>	0.027 (1.32)	0.029 (1.45)	0.031 (1.54)
<i>BTM</i>	0.078 (1.44)	0.139** (2.14)	0.085 (1.57)
<i>Leverage</i>	-0.072 (-0.60)	-0.076 (-0.64)	-0.078 (-0.65)
<i>SP500</i>	-0.029 (-0.45)	-0.037 (-0.56)	-0.046 (-0.70)
<i>Female</i>	0.046 (0.54)	0.049 (0.58)	0.055 (0.65)
<i>Minority</i>	0.002 (0.04)	0.005 (0.10)	0.004 (0.08)
<i>Age</i>	-0.002 (-0.58)	-0.002 (-0.67)	-0.002 (-0.54)
<i>Pay Above Median</i>	-0.013 (-0.18)	-0.009 (-0.13)	-0.005 (-0.07)
<i>CFO</i>	0.027 (0.13)	0.027 (0.13)	0.032 (0.15)
<i>R&amp;D</i>			-0.926 (-1.47)
Constant	-0.042 (-0.19)	-0.079 (-0.35)	-0.058 (-0.26)
Observations	959	959	959
Fixed Effects	Industry	Industry	Industry
Cluster	Firm	Firm	Firm
Adj. R-squared	0.021	0.023	0.042

**Table 9 Additional Analyses**

This table reports results of additional tests. Panel A reports the results of examining the relation between executive interactions and promotion in year  $t+2$  ( $Promotion_{t+2}$ ) and year  $t+3$  ( $Promotion_{t+3}$ ). *Interaction* is an indicator equal to 1 if the non-CEO executive's total number of interactions is more than the median of non-CEO executives in the same industry in the current year and 0 otherwise. Panel B reports the results of examining the relation between executive interactions and promotion after controlling for executive ability and characteristics. Panel C reports the results of examining the relation between executive interactions and promotion after controlling for the number of executives on the call. Panel D reports the results of examining the relation between team interactions and teamwork-oriented culture. *Teamwork* is the amount of language in the conference call that reflects a teamwork-oriented culture, as defined by Li et al. (2021). All numeric variables are winsorized at the top and bottom 1% of the cross-sectional distribution. All the variables are defined in Appendix 2. The  $t$ -statistics are reported in parentheses and are calculated based on standard errors clustered by firm. Significance levels are indicated by \*, \*\*, \*\*\* for 10%, 5%, and 1% respectively.

**Panel A: Executive interactions and promotion in the next two and three years**

VARIABLES	(1) $Promotion_{t+2}$	(2) $Promotion_{t+3}$
<i>Interaction</i>	0.043*** (6.65)	0.044*** (4.80)
<i>ROA</i>	-0.151*** (-2.97)	-0.123* (-1.93)
<i>Missing Analyst Forecast</i>	0.001 (0.21)	0.000 (0.05)
<i>Size</i>	-0.006 (-0.61)	0.003 (0.18)
<i>BTM</i>	-0.011 (-0.97)	-0.017 (-0.93)
<i>Leverage</i>	-0.039 (-1.08)	-0.072 (-1.48)
<i>SP500</i>	0.017 (0.93)	0.025 (1.03)
<i>Log(#Answer)</i>	0.023*** (6.53)	0.025*** (5.31)
<i>Female</i>	0.007 (0.49)	0.021 (0.93)
<i>Minority</i>	0.009 (0.82)	0.016 (0.96)
<i>Age</i>	-0.001* (-1.67)	-0.002* (-1.94)
<i>Pay Above Median</i>	0.047*** (7.44)	0.062*** (7.23)
<i>CFO</i>	-0.172*** (-22.53)	-0.229*** (-21.14)
Constant	0.202** (2.33)	0.232* (1.88)
Observations	15,225	10,878
Fixed Effects	Firm, Industry-Year	Firm, Industry-Year
Cluster	Firm	Firm
Adj. R-squared	0.111	0.185

**Panel B: Controlling for executive ability and characteristics**

VARIABLES	(1) <i>Promotion</i>	(2) <i>Promotion</i>
<i>Interaction</i>	0.040*** (6.45)	0.025*** (3.42)
<i>ROA</i>	-0.160*** (-3.92)	-0.084* (-1.67)
<i>Missing Analyst Forecast</i>	0.004 (0.92)	0.005 (1.00)
<i>Size</i>	0.004 (0.44)	-0.017 (-1.24)
<i>BTM</i>	-0.002 (-0.15)	0.020 (1.30)
<i>Leverage</i>	-0.013 (-0.45)	0.056 (1.58)
<i>SP500</i>	0.009 (0.65)	-0.007 (-0.38)
<i>Log(#Answer)</i>	-0.003 (-0.82)	0.012** (2.50)
<i>Female</i>	0.009 (0.73)	0.101*** (3.14)
<i>Minority</i>	0.004 (0.43)	-0.001 (-0.04)
<i>Age</i>	0.000 (0.47)	-0.001 (-0.68)
<i>Pay Above Median</i>	0.030*** (5.90)	0.019*** (2.74)
<i>CFO</i>	-0.131*** (-17.87)	-0.262*** (-13.30)
<i>Undergraduate</i>	0.008 (0.82)	
<i>Graduate</i>	0.016** (2.02)	
<i>Industry Experience</i>	-0.003** (-2.27)	
<i>Letter%</i>	0.221*** (7.67)	
<i>Extroversion</i>		0.182*** (6.76)
<i>Overconfident</i>		-0.015** (-2.50)
Constant	0.005 (0.07)	-0.321* (-1.83)
Observations	10,484	6,878
Fixed Effects	Firm, Industry-Year	Firm, Industry-Year
Cluster	Firm	Firm
Adj. R-squared	0.0971	0.190



**Panel C: Controlling for executive participants**

VARIABLES	(1) <i>Promotion</i>
<i>Interaction</i>	0.048*** (9.58)
<i>ROA</i>	-0.132*** (-3.91)
<i>Missing Analyst Forecast</i>	0.000 (0.09)
<i>Size</i>	-0.012* (-1.74)
<i>BTM</i>	0.007 (0.95)
<i>Leverage</i>	0.010 (0.44)
<i>SP500</i>	0.013 (1.05)
<i>Log(#Answer)</i>	0.024*** (9.71)
<i>Female</i>	0.000 (0.02)
<i>Minority</i>	0.010 (1.21)
<i>Age</i>	-0.000 (-0.50)
<i>Pay Above Median</i>	0.036*** (8.32)
<i>CFO</i>	-0.137*** (-24.21)
<i>Number of Executives in Call</i>	0.018*** (9.01)
Constant	0.043 (0.76)
Observations	15,602
Fixed Effects	Firm, Industry-Year
Cluster	Firm
Adj. R-squared	0.092

**Panel D: Team interactions and teamwork culture**

VARIABLES	(1) <i>Team Interactions</i>
<i>Teamwork</i>	0.050*** (3.22)
<i>ROA</i>	-0.023 (-0.22)
<i>Missing Analyst Forecast</i>	0.023* (1.91)
<i>Size</i>	-0.013 (-0.51)
<i>BTM</i>	0.023 (0.82)
<i>Leverage</i>	-0.001 (-0.02)
<i>SP500</i>	-0.020 (-0.45)
<i>Log(#Answer)</i>	0.547*** (40.43)
Constant	-1.305*** (-6.39)
Observations	11,577
Fixed Effects	Firm, Industry-Year
Cluster	Firm
Adj. R-squared	0.656