**Communication Norms in Earnings Conference Calls: The Role of Indirect Questions** 

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the firm make use of indirect questions. If analysts ask indirect questions, they can increase the

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Furthermore, I find mixed evidence that management publicly interacts more favorably with

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**Keywords:** indirect questions; financial communication; financial analysts; conference calls

**JEL codes**: G24; M40; M41.

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# **Communication Norms in Earnings Conference Calls: The Role of Indirect Questions**

ABSTRACT: I study the determinants and consequences of indirect questions in earnings conference calls. Motivated by extensive evidence from the conversation analysis literature that documents a substantial relevance of *how* questions are phrased, I expect and find that especially analysts with lower firm-specific (general) experience and less favorable views of the firm make use of indirect questions. If analysts ask indirect questions, they can increase the managements' information provision but also raise the risk of receiving no answer. Furthermore, I find mixed evidence that management publicly interacts more favorably with analysts, who ask indirect questions. Moreover, my results indicate that analysts can increase their private access to the management by phrasing their questions in an indirect manner. Overall, my results extend current literature on analysts' questioning, which primarily focuses on the questions' content (*what* is the question about), by highlighting the relevance of *how* questions are phrased.

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#### I. INTRODUCTION

Conference calls are the most important and well-studied interactive disclosure setting within firms' information environment (Brown et al., 2015). Prior literature concluded that especially the Q&A session, as a unique part of the conference call, is of high relevance as participating analysts can influence managements' ad-hoc and future information provision by their questions. In particular, Haag et al. (2021a) find that the informativeness of the managements' answers is determined by the thematic content of the analysts' questions. Furthermore, Chapman and Green (2018) documents a positive influence of analysts' asking for guidance increases on the likelihood of management providing similar guidance in future quarters. As these examples indicate, there is already plenty of evidence that the thematic content (what is the question about) of analysts' questions influences managements' information provision. However, there is little evidence on whether the question formulation (how the question is phrased) is also of relevance. Yet, studies of social interactions show that the form of questions is of great importance (e.g., Clayman & Heritage, 2002). Thus, I address this research question by exemplarily studying the function of indirect questions during conference calls.

On a conceptual level, indirect questions signal the recognition of negative face wants of and towards the respondent (i.e., lower degree of imposition), thereby functioning as a "softening mechanism that give the [respondent] an "out", a face-saving line of escape" (Brown & Levinson, 1987, p. 70), as they feel less obliged to comply with the question (Camiciottoli, 2009). Hence, direct questions are blunt, straightforward, whereas indirect questions are typically interpreted as a ritual display of politeness, which decreases the degree of coercion and thereby reduces the risk of a face-threatening act (Brown & Levinson, 1987). Using a small sample study, Camiciottoli (2009) already shows that various forms of indirect questions also frequently occur in conference calls. In addition to providing large-scale evidence, I extend prior literature by shedding light on the determinants and consequences of such questions. In further analyses, I also investigate the capital market's reaction to the usage

of indirect questions as well as the managements' preference towards indirectness depending on the favorability of the question.

Overall, I test three main hypotheses with regard to (H1) the determinants and the consequences with regard to (H2) management's information provision in the answer as well as (H3) relationship building. With respect to the *first* hypothesis, I expect that especially analysts' firm-specific characteristics determine the usage of indirect questions in conference calls. In particular, I argue that analysts selectively make use of indirect question e.g. if they are less knowledgeable (prior forecast accuracy), less experienced (firm-specific and general), and/or have a less favorable relationship (favorability of stock recommendation). My second set of hypotheses focuses on the information provision consequences in the management answer. In particular, I expect management to be more forthcoming in providing information when they are asked an indirect question (Clark, 1979). However, social interaction theory (e.g., Brown & Levinson, 1987) also suggests that management may also be more likely to try to escape the question situation (non-answers) as the indirect questions are less forceful and offer the respondent a cheap escape opportunity. 1 My third set of hypotheses aims at testing whether indirectness may also be an effective relationship building tool. More specifically, I expect that the favorability of the managements' public as well as private interaction with the analysts, who use indirect questions, improves.

To test my expectations, I use 580,268 analysts' questions from all earnings conference calls of US-listed firms held between January 2008 and September 2020. I identify indirect questions by using a set of linguistic pattern-matching algorithms (also called *regular expressions*)<sup>2</sup>, which I develop based on predefined classification schemes from the

<sup>&</sup>lt;sup>1</sup> This hypothesis is not intended to contradict the prior expectation. This merely implies that asking indirect questions imposes a gamble. On average, management's information provision should increase, however, it also possible that management refuses to provide certain important details, which is then captured as a non-answer.

<sup>&</sup>lt;sup>2</sup> Even though regular expressions are very popular in the information retrieval literature since almost 50 years, the accounting and finance literature focusing on textual analysis only recently started using these powerful functions to extract specific pieces of information from qualitative data. So far, regular expressions are mainly used for html-parsing purposes (Blankespoor, 2019; Cohen et al., 2020a) or to identify the underlying firm and

conversation analysis literature (e.g., Clayman & Heritage, 2002; Clayman et al., 2006). As suggested by Camiciottoli (2009), my analysis solely focuses on query preparatories (e.g., "could you...?"), hedged statements (e.g., "Just wondering..."), want statements (e.g., "I wanted to ask..."), as well as if-clauses (e.g., "If you could..."), as these forms are commonly used by analysts in conference calls.<sup>3</sup> The determinants analyses are based on firm-specific analyst characteristics, that rely on the I/B/E/S detail as well as recommendation file (Mayew, 2008; Francis et al., 2020). Variables approximating the consequences are extracted from the conference call transcripts and I/B/E/S files.

My analysis indicates no statistically significant association of analysts' prior forecast accuracy and the usage of indirect questions. However, I find support for my expectations that especially analysts with less firm-specific (general) experience as well as less favorable outstanding sock recommendations ask more indirect questions (H1). With respect to consequences (H2), I find that indirectness leads to increased information provision by the management in terms of answer length, number of answers, degree of precision, proprietary information, and linguistic complexity. However, indirect questions lead to a higher likelihood of receiving no answer, implying that a deviation from direct questioning, which is assumed to be appropriate in a recurring setting such as conference calls (Camiciottoli, 2009), imposes a gamble. Moreover, I find mixed evidence regarding the association between indirectness and the favorableness of analysts' *public* treatment by the management (H3). More specifically, respective analysts are less likely to be interrupted by the management in the interrogation but not more likely to be allowed to ask a question in the next conference call. In line with expectations, my results indicate that the usage of indirect questions leads to an increase in *private* interaction between the respective analyst and management.

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fiscal year/quarter from files (e.g., Siano & Wysocki, 2021). To the best of my knowledge, Gow et al. (2021) is the first piece of work that tries to capture a linguistic phenomenon of interest, namely non-answers in conference call transcripts.

<sup>&</sup>lt;sup>3</sup> This does not imply that analysts do not use any other form of indirectness. I limit my analysis to these four forms as these are the most prominent forms and therefore already provide a sufficiently good understanding.

In additional analyses, I investigate the capital market's reaction to the usage of indirect questions in conference calls. My results indicate that indirect questions send a positive signal to the capital market and make the conference call more informative to investors. Furthermore, I also show that management prefers indirect questions when being asked questions about unfavorable topics.

This study makes three contributions to the literature. *Firstly*, I provide evidence on the determinants and consequences of analysts' usage of indirect questions in conference calls, thereby highlighting the relevance of the questions' form. Prior literature has already extensively studied the content of analysts' questions<sup>4</sup>, but there is little evidence on *how* the questions are formulated.<sup>5</sup> By using the exemplary differentiation between indirect and direct questions, this study shows that analysts also apply different question forms to achieve their goals of extracting as much information as possible while signaling an impression of a highly competent and likeable professional. Camiciottoli (2009) already documents that analysts use indirect questions, however, I extend the literature by providing large-sample evidence on determinants and consequences.

Secondly, by focusing on social interaction theory and using non-aggregated analysts' as well as managements' turns-at-talks, I contribute to our understanding of the interactive nature of the question-and-answer session within conference calls. Even though the conversation analysis literature primarily suggests focusing on single turns-at-talks to study the dynamics of social interactions, prior conference call literature frequently aggregates analysts' turns-at-talk at the analysts' speech portion level when studying analysts' questioning. Thereby,

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<sup>&</sup>lt;sup>4</sup> Literature that focuses on analysts' questioning primarily relied on predefined word lists (Amicis et al., 2020; Black et al., 2018; Bochkay et al., 2021; Brockman et al., 2015; Call et al., 2020; Chapman & Green, 2018; Chen et al., 2018a; Chen et al., 2018b; Francis et al., 2020; Haag et al., 2021b; Ji & Rozenbaum, 2018; Milian et al., 2017; Milian & Smith, 2017; Zhou, 2017) as well as other question content-related measures such as LDA (Huang et al., 2018) or cosine similarity (Haag et al., 2021a). It has frequently been documented that analysts systematically adjust the content of their questions.

<sup>&</sup>lt;sup>5</sup> This is a fundamental differentiation, that prior literature focusing on the interaction within conference calls has not explicitly considered so far.

direct evidence on the interaction between the group of analysts and managements gets excluded. This study intends to further encourage future research to focus on the non-aggregated turns-at-talk when studying the interaction in conference calls.

Thirdly, I use regular expressions to identify indirectness in analysts' questions in conference calls. Therefore, the applied methodical approach follows a call from El-Haj et al. (2019) demanding to consider contextual information to identify a phenomenon of interest in qualitative data by textual analysis methods. One advantage of this approach is the high replicability as the linguistic pattern matching algorithms are relatively short and easy to include in the paper as I demonstrate by applying the regular expressions of Gow et al. (2021) to identify non-answers in managements' turns-at-talk.

The remainder of the paper proceeds as follows. Section II reviews prior literature on social interactions to provide a brief understanding of the underlying concept and the role of analysts' questioning in conference calls. Furthermore, I develop my hypotheses. I present my sample and research design with a special focus on the identification of indirect questions in Section III. In Section IV (V), I report the main findings regarding the determinants and consequences of indirect questions (additional analyses). Section VI concludes.

#### II. PRIOR RESEARCH AND HYPOTHESES DEVELOPMENT

#### *Indirect questions in social interactions*

Indirect questions are of considerable interest in the conversation analysis literature that relies on politeness theory (Brown & Levinson, 1987). For example, this literature provides extensive evidence on the role of indirect questions in normal (day-to-day) interactions (e.g., Blum-Kulka, 1987; Clark, 1979), general as well as political news interviews (e.g., Blum-Kulka, 1983; Macaulay, 1996), and presidential press conferences (e.g., Clayman & Heritage, 2002; Clayman et al., 2006). According to Blum-Kulka (1987), indirectness can be divided into conventional and non-conventional indirectness. Conventional indirectness ("on-record") is

strongly linked to politeness behavior, whereas non-conventional indirectness (e.g., hints, "off-record"), as the most indirect form, is not associated with politeness due to the lack of pragmatic clarity of the message. An example for non-conventional indirectness would be a question whose literal meaning differs from its semantical meaning (e.g., "What happened last quarter?" if the firm recognized an unexpected loss). As non-conventional indirectness is difficult to identify from an outside perspective, I will explicitly focus on conventional indirectness, which is identifiable by the form of the question.

The function of indirect questions in conversational interactions relies on Goffman's (1967) theoretical concept of "Saving Face". Face is one of the central concepts in Goffman's theory and describes the public self-image every interactant wants to claim for herself. It is assumed that everyone is emotionally invested in one's own face and therefore develops an attachment, which leads to emotional pain (good feeling) if it's being lost (maintained, or enhanced). Goffman (1967) differentiates between positive face, that is "the positive consistent self-image or 'personality' (crucially including the desire that this self-image be appreciated and approved of) claimed by interactants", and negative face, that can be described as "the basic claim to territories, personal preserves, rights to non-distraction – i.e. to freedom of action and freedom from imposition" (Brown & Levinson, 1987, p. 61). One's face can be lost (also referred to as threatened) by actions that run contrary to one's face. For example, the positive face of an interactant can be threatened by negative evaluations (e.g., critic, disagreement). In the context of conference calls, analysts can use their question turn to threaten managements' positive face by raising public critic. Interactants' negative face can be threatened by actions that pressure for information or action (e.g., information-seeking questions).

The literature further assumes that questioners may seek to avoid face-threatening actions or will employ, consciously or subconsciously, certain strategies to minimize the risk of a face-threatening act to achieve their goals (Clark, 1979). With regard to negative face,

questioners can apply an avoidance-based, negative<sup>6</sup> politeness question strategy to reduce the degree of imposition within their question (Brown & Levinson, 1987).<sup>7</sup> Prior literature that studies social interactions concludes that conventional indirectness is the most famous and frequently applied strategy in this regard (e.g., Blum-Kulka, 1987). Hence, indirect (direct) questions impose a lower (higher) risk of a face-threatening act as they restrict the respondent less (more) in their answer. An illustrative example for an indirect question, that could potentially also be raised in a conference call, would be "Can you explain why you incurred a loss?", whereas the direct form could be "Why did you incur a loss?". Even though both questions are seeking for information regarding the underlying reasons for the bad firm performance in the last period, the indirect question is less forceful as it offers the management the opportunity to escape the question by simply denying the general imposition of asking a question.<sup>8</sup>

## Analysts' questioning in conference calls

Brown et al. (2015) conclude that the question-and-answer session (second part) is among the analysts' most useful sources of information to generate their earnings forecasts (stock recommendations). Prior literature further finds that the question-and-answer session is incremental informative to the management presentation (Matsumoto et al., 2011) due to the interactive format that requires the management to respond to questions (Lee, 2016) that may lead to an unintended revelation of private information (Hollander et al., 2010).

<sup>&</sup>lt;sup>6</sup> Contrary, positive politeness behavior refers to actions that reduce the threat to the respondent's positive face. An example for positive politeness behavior is a compliment that is publicly directed to the management. Analysts frequently complement the management on the result of the past quarter. According to Goffman's (1967) concept of saving face this should make the respondent feel good about themselves.

<sup>&</sup>lt;sup>7</sup> According to Brown's and Levinson's (1987) politeness theory the usage of indirectness depends on the degree of social distance between the questioner and the respondent, their relative power, and the degree of imposition. The higher each of these social factors get, the more likely the questioner uses an indirect question. For my main analyses I will not consider these social factors.

<sup>&</sup>lt;sup>8</sup> A more detailed overview about the different types of indirect questions is provided in section 3.

<sup>&</sup>lt;sup>9</sup> Consequently, management may engage in actions to avoid an unintended disclosure of private information. For example, Hollander et al. (2010) find that management sometimes refuses to take questions and ends the conference call after the presentation section. Furthermore, Lee (2016) concludes that management prepares scripts for potential questions to avoid the disclosure of bad news.

Given the just mentioned information relevance, prior literature already intensively studies the determinants and consequences of different forms of analysts' questioning in conference calls. It is generally concluded that analysts' questioning serves as an information acquisition or a relationship building function. *Firstly*, and with regard to the former, analysts' information acquisition in conference calls changes managements' ad-hoc (future) information provision. For example, Haag et al. (2021b) find that negative questions increase the information provision by management. Furthermore, Call et al. (2020) document that analysts' usage of humor also leads to longer responses from management. It is assumed that especially analysts lacking experience, institutional resources, and specific industry knowledge are more dependent on management provided information (Milian et al., 2017). In a similar vein but different direction, Haag et al. (2021a) document that analysts strategically reveal less information in their questions in conference calls with increasing relative forecast accuracy to safeguard their information advantage.

Secondly, analysts also use their question to publicly curry favor with management. <sup>10</sup> Milian et al. (2017) and Milian and Smith (2017) find that analysts can increase their access to management by using favorable language and praise during their question turn. Call et al. (2020) conclude that the usage of humor increases the analysts' chances to communicate with management later in the Q&A session (follow-up question). Hence, the literature collectively concludes that analysts' strategically phrase their questions to achieve a desired outcome (information acquisition or relationship building), which is in line with the theoretical purpose of questioning defined in the conversation analysis literature (Clark, 1979).

<sup>&</sup>lt;sup>10</sup> Prior literature also shows that analysts not only interpret their question as a mechanism to curry favor with the management but also build reputation with their clients and other listeners such as hiring brokerage houses (Abraham & Bamber, 2017). For example, analysts who are allowed to ask an early question are more successful in the labor market (Cen et al., 2021).

#### <u>Hypotheses development – Determinants $(H_1)$ </u>

Both just discussed motives are largely in line with Camiciottoli's (2009) indications stating that analysts use indirect questions to acquire the desired amount of information and likewise indicate high competence and likableness. Regarding the former, if the evidence of Blum-Kulka (1987) stating that indirect questions lead to increased (more elaborate) information provision also finds support in the conference call setting<sup>11</sup>, analysts may selectively make use of them. On the one hand, it seems reasonable to assume that more knowledgeable and experienced analysts can disproportionally benefit from indirect questions as management provides more elaborate (bigger picture) answers. On the other hand, less knowledgeable and experienced analysts are in lower need of these more elaborate answers as they already have profound understanding and may therefore prefer shorter, confirmatory answers, which are rather associated with direct questions. This is arguably in line with evidence stating that analysts with higher information endowments reduce information revelation in their questions and the managements' answers to safeguard their information advantage (Haag et al., 2021a). Consequently, it seems reasonable to assume that especially more knowledge and experienced (firm-specific and general) analysts may increasingly make use of indirect questions in conference calls. 12 As the underlying assumption that indirect questions lead to increased information provision is subject to my second set of hypotheses, I state hypothesis H1a and H1b in the null form:

H1a: Analysts' relative forecast accuracy (ex-ante) is not associated with the usage of indirect questions.

<sup>&</sup>lt;sup>11</sup> This assumption is subject to my second set of hypotheses.

<sup>&</sup>lt;sup>12</sup> Analysts' usage of indirect questions could also be influenced by idiosyncratic analyst characteristics (e.g., gender, culture), characteristics of the management (e.g., position) and the relationship between analyst and management (e.g., social distance).

H1b: Analysts' firm-specific (general) experience increasingly is not associated with the usage of indirect questions.

Furthermore, and in line with prior literature which documents that analysts' also use their questions to publicly curry favor with management, it seems reasonable to assume that analysts' form of questioning is not solely driven by information acquisition but also by relationship building considerations (Milian et al. 2017; Milian and Smith, 2017). Conversation analysis literature states that indirect questions impose a lower degree of imposition and thereby offer the respondent a cheap escape opportunity. This induces a lower risk to threat the negative face of the respondent, which is arguably preferable from the respondent's perspective. Building on Milian et al. (2017) and Milian and Smith (2017), the public recognition of managements' negative face wants may improve the relationship between analyst and management, leading to improved public as well as private interaction (Brown et al., 2015).<sup>13</sup> Even though this seems preferable for all analysts, it may have larger implications for analysts with a less favorable relationship as they may have no (less) private access to management. As prior literature approximates the analyst-firm relationship by the outstanding stock recommendation (e.g., Mayew, 2008; Cohen et al., 2020b), this suggests that particularly analysts with a lower outstanding stock recommendation make use of indirect questions. However, as the relational consequences are subject to my third set of hypotheses, I state hypothesis H1c in the null form:

*H1c:* Analysts' outstanding stock recommendation level is not associated with the usage of indirect questions.

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<sup>&</sup>lt;sup>13</sup> These assumptions are subject to my third set of hypotheses.

## <u>Hypotheses development – Consequences</u>

## <u>Information provision (H<sub>2</sub>)</u>

Prior conference call literature collectively shows that analysts' (strategic) questioning influences managements' information provision (Milian et al., 2017; Haag et al., 2021a; Haag et al., 2021b). As already discussed, indirect questions reduce the degree of imposition and thereby leave the respondent more freedom to formulate her answers, which may lead to more elaborate responses (e.g., Clark, 1979). Hence, it seems reasonable to assume that management is more forthcoming in providing information if analysts phrase their question in an indirect manner. I summarize my prediction in hypothesis H2a:

**H2a:** Management is more forthcoming in providing information when they are asked an indirect question.

Furthermore, Brown and Levinson (1987) suggest that indirect questions offer the respondents a cheap escape opportunity without losing negative face by simply denying the questioners' general imposition to ask a question ("Can you…"). <sup>14</sup> This implies that contrary to the derived expectation that indirectness leads to more elaborate responses it seems also reasonable to assume that management is more likely to escape the question situation by simply providing no answer to the analyst's question. <sup>15</sup> Hence, there may also be costs associated with indirect questions in the conference call setting. I summarize my prediction in hypothesis H2b:

**H2b:** Management is more likely to try to escape the question situation when faced with indirect questions.

<sup>14</sup> However, Brown and Levinson (1987, p. 72) further argue that the signaling of an escape by the questioner only "pretend[s] to offer an escape route without really doing so, thereby indicating that he has the other person's face wants in mind."

<sup>&</sup>lt;sup>15</sup> If management makes use of this low-cost escape alternative, this does not necessarily mean that they do not provide any information at all. They could just deny the answer regarding a specific piece of propriety information but nevertheless provide some general information that somehow relates to the analyst's question.

#### Relationship building (H<sub>3</sub>)

As already discussed, analysts may also use their question to not only acquire relevant information but also as a relationship building mechanism to curry favor with the management. Due to the fact that the management needs to carefully listen to the analysts' questions it can be assumed that they recognize the analysts' tactful behavior of reducing the degree of imposition. Subsequently, the management may, consciously or subconsciously, reward this behavior and treat the questioning analyst more favorable. Hence, the usage of indirectness may lead to improved favorability of managements' public interaction with analysts. I summarize my prediction in hypothesis H3a:

*H3a:* Managements' public interaction with analysts that ask more indirect questions is more favorable.

Lastly, it is a well-known fact that analysts also privately interact with management via phone calls or meetings. These private interactions mainly serve the purpose of acquiring further firm-specific information as well as developing even closer relationships with management (e.g., Brown et al., 2015). By relying on a set of proprietary records regarding private interactions between management and sell-side analysts, Soltes (2014) shows that especially more favorable analysts privately interact with the management. In a similar direction, Milian et al. (2017) find that analysts can increase their private access to management by using more favorable language in their questions. Hence, the usage of indirect questions may not only affect the *public* interaction in conference calls (H3a) but also improve the analysts' *private* access to management. I summarize my prediction in hypothesis H3b:

H3b: Analysts can increase their access to private communication with management by asking indirect questions.

#### III. SAMPLE AND RESEARCH DESIGN

## Data sources and sample

Contrary to prior conference call literature that aggregates analysts' turns-at-talk on a speech portion level (e.g., Call et al., 2020), I define analysts' turns-at-talk as my main unit of analysis. An analyst's turn-at-talk can be defined as each respective speech unit of one analyst within her conversation with management. This design choice is motivated by prior conversation analysis literature (Wilson & Zimmerman, 1986) that also studies the linguistic form of questions in interactions (e.g., Clayman & Heritage, 2002).

My sample contains the conference call transcripts of all US-listed firms held between 01/01/2008 and 09/11/2020. I download all 156,468 transcripts from *Thompson Reuters EIKON* database. I obtain firm fundamentals from *COMPUSTAT*, whereas the analyst data is from *I/B/E/S*. As already indicated by Hollander et al. (2010), some conference calls do not contain a Q&A session and therefore I excluded them from the analyses (5,116). Furthermore, I also exclude all transcripts with missing or incorrect firm and time identifiers (5,049) as well as missing *COMPUSTAT* data (33,197). The resulting 113,106 transcripts stem from 4,475 distinct firms and contain 3,107,907 separate analysts' turns-at-talk with accompanied management answers. Finally, I also drop all very short, concluding analysts' turns-at-talk with no information content such as "*Thanks*" or "*Okay*" (326,594), which leads to a total of 2,781,313 analysts' turns-at-talk.

Subsequently, I perform a fuzzy-name-matching approach<sup>17</sup> to match the respective analysts' turns-at-talk to the analyst data from the *I/B/E/S* detail and recommendation file. This step leads to an exclusion of 1,239,244 analysts' turns-at-talk. Prior literature already frequently addresses this matching issue (e.g., Ljungqvist et al., 2009), however, the applied matching

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<sup>&</sup>lt;sup>16</sup> An aggregation at an analysts' speech portion would lead to an exclusion of the information content conveyed by the interaction between analyst and management which is a central element of this study.

<sup>&</sup>lt;sup>17</sup> In line with Mayew et al. (2020) and Call et al. (2020), I use a combination of analysts' initial of their first name and their full last name, implying that every analyst who neither initiated an anonymization nor joined a research team is part of the matched sample.

process of analysts' turns-at-talk to the *I/B/E/S* data is a mandatory research design choice.<sup>18</sup> Overall, the final, matched sample contains 580,268 analysts' turns-at-talk from 52,509 different conference call transcripts, 2,670 unique firms, 2,871 individual analysts, as well as 256 separate brokerage houses. This implies that my sample contains, on average, 11.05 turns-at-talk per conference call. Table 1 provides a detailed description of my sample selection process.

### [Please insert Table 1 here]

## <u>Identification of indirect questions</u>

## Classification algorithms

Following prior conversation analysis literature (e.g., Clayman & Heritage, 2002), my identification of indirect questions is based on the linguistic form of analysts' questions. I develop a set of regular expressions that analyzes the linguistic form of all turns-at-talk and thereby identifies whether each respective turn-at-talk contains any notion of indirectness or not. In contrast to naïve word list approaches (e.g., Loughran & McDonald, 2011), regular expressions allow a certain degree of variability in the linguistic pattern, which is searched for within a certain text. This variability implies that regular expressions also consider contextual information and therefore follow the recommendation of El-Haj et al. (2019) to apply textual analysis methods that consider contextual information to identify a qualitative phenomenon of interest in textual data. This methodical approach is already used in prior accounting literature to identify non-answers in managements' responses to analysts' questions during conference calls (Gow et al., 2021).

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<sup>&</sup>lt;sup>18</sup> In October 2018, *I/B/E/S* announced that a significant portion of analyst IDs "have been and will continue to be subject to reshuffle without warning (see https://wrds-www.wharton.upenn.edu/pages/about/data-vendors/vendor-partner-ibes/). However, Law (2021) provides evidence stating that only 0.57% of all quarterly earnings forecasts were reshuffled from 2015 to 2021. To ensure that my analyses are not substantially affected by this change in the *I/B/E/S* database, I additionally checked the variation in the analyst ID (*AMASKCD*) conditional on a combination of firm identifier and analysts' name in the recommendation file. Similar to Law's (2021); I find no substantial variation.

The derivation of the used regular expressions is based on a translation of the qualitative, manual identification schemes used in the conversation analysis literature that studies indirect questions in various other settings as well as conference calls. Regarding the latter, Camiciottoli (2009) provides evidence that analysts' usage of indirect questions is mainly limited to query preparatories (e.g., "could you...?"), hedged statements (e.g., "Just wondering..."), want statements (e.g., "I wanted to ask..."), as well as if-clauses (e.g., "If you could..."). I extend this ready-to-use classification scheme by Camiciottoli (2009) by adding elements from the literature that focuses on the interaction in presidential press conferences (e.g., Clayman & Heritage, 2002; Clayman et al., 2006) to get more comprehensive as well as broader regular expressions. Finally, based on a set of 1,000 selected analysts' turns-at-talk (training sample), I adjust the regular expressions to the conference call setting and especially identify the used speech act phrases, which are context specific. The Appendix B contains the full set of regular expressions that I apply in my analyses. Furthermore, Appendix C provides illustrative examples including the highlighted (matched) linguistic patterns for each of the different types of indirect questions.

## Performance testing

After developing the regular expression based on the discussed training sample of 1,000 turns-at-talk and reaching an *in-sample* classification accuracy score of 98.3% <sup>19</sup>, I also test the algorithms performance based on an (unseen) hold-out sample of 500 turns-at-talk. As expected, the *out-of-sample* is with a value of 97.4% (only slightly) below the *in-sample* accuracy. The *out-of-sample* precision<sup>20</sup> is 95.6% whereas the recall<sup>21</sup> is 96.4%. However, it is notable that the performance decrease is only marginal<sup>22</sup>, suggesting that the adaption of the

<sup>&</sup>lt;sup>19</sup> Accuracy is defined as the ratio of how many questions are correctly identified as indirect questions. Prior literature does not recommend a certain threshold which needs to be archived to consider classification algorithms sufficiently accurate. However, in contrast to prior literature, an *in-sample* classification accuracy of 98,3% is arguably sufficient.

<sup>&</sup>lt;sup>20</sup> Precision is defined as the percentage of classified indirect questions which are actually indirect.

<sup>&</sup>lt;sup>21</sup> Recall indicates which ratio of actually indirect questions are classified as indirect questions.

<sup>&</sup>lt;sup>22</sup> In contrast, Gow et al. (2021) deemed an out-of-sample accuracy of 89.2% as sufficiently accurate.

regular expressions to the training sample did not result in overfitting. Hence, I conclude that the developed regular expressions capture indirect questions sufficiently well.

#### Regression models and variable measurement

## Determinants – Analyst characteristics (H<sub>1</sub>)

My first set of hypotheses (H1a-c) focuses on the determinants of indirect questions to test whether the usage of indirectness is a function of observable analyst characteristics. To test these hypotheses, I run the following Logistic regression model (1):

Indirectness<sub>p,a,i,t</sub> =  $\gamma W_{a,i,t} + \beta X_{p,a,i,t} + \delta Y_{i,t} + \varphi Z_{i,t} + \mu_i + \pi_q + \sigma_k + \varepsilon_{q,a,i,t}$  (1) where p is an index for the question, a is an index for the analyst, i an index for the firm, t an index for the quarter, and k for the year.  $\mu_i$  captures firm fixed effects and therefore arguably controls for any firm-specific tendencies in analysts' questioning (e.g., Abraham and Bamber, 2017).  $\pi_q$  refers to quarter whereas  $\sigma_k$  indicates year fixed effects. I cluster standard errors at firm-level to consider that analysts' questioning may be serially correlated for the same firm. In line with prior literature, I control for analyst-  $(W_{a,i,t})$ , question-  $(X_{p,a,i,t})$ , conference call-  $(Z_{i,t})$ , as well as firm-specific  $(Y_{i,t})$  characteristics. All variables are defined in Appendix A.

**Indirectness.** As described, my identification of indirect questions is based on a set of regular expressions that indicate whether an analyst's turn-at-talk contains any notion of indirectness or not. Consequently,  $Indirectness_{p,a,i,t}$  is a binary variable that turns 1 in case of an indirect question, and 0 otherwise.

Analyst characteristics ( $W_{a,i,t}$ ). As indicated, I primarily focus on analysts' prior forecast accuracy (H1a), firm-specific (general) experience (H1b), as well as outstanding stock recommendation (H1c) in my determinants analyses. Prior literature collectively uses analysts' prior forecast accuracy to approximate the analysts' knowledge (e.g., Mayew, 2008; Haag et al., 2021a). This conclusion is based on the theoretical assumption that more knowledgeable analysts provide more accurate forecasts than less knowledgeable analysts. In line with Mayew

et al. (2013b), I use the analysts' last forecast before the conference call to approximate their knowledge. I measure analysts' forecast accuracy in abnormal terms based on each respective conference call as their knowledge is arguably firm-specific as well as transitory. Mayew (2008) suggests to calculate analysts abnormal forecast accuracy (AccuracyPre) by subtracting analyst a's forecast error ( $ErrorPre_{a,i,t}$ ) from the largest forecast error of any analyst that provides a forecast for firm i in the respective quarter t and scaling this difference by the range in  $ErrorPre_{a,i,t}$  for all analysts providing a forecast for firm i in quarter t (equation 2).<sup>23</sup> The most accurate analyst who issues a forecast for firm i in quarter t receives the value of 1 whereas the least accuracy analyst receives a value of 0.

$$AccuracyPre_{a,i,t} = \frac{\max(ErrorPre_{i,t}) - ErrorPre_{a,i,t}}{\max(ErrorPre_{i,t}) - \min(ErrorPre_{i,t})}$$
(2)

Prior literature measures analysts' firm-specific (general) experience (H1b) as the difference between the conference call date for firm *i* in quarter *t* and analyst *a*'s first appearance in the firm-specific (general) *I/B/E/S* detail file scaled by 365 days to obtain yearly values (Mayew, 2008). Hence, the date of their first (firm-specific or general) forecast serves as the main indicator for measuring analysts' experience. The transformation to abnormal values implies that the most experienced analyst maintains a value of 1, and a value of 0 the least experienced.

The outstanding stock recommendation (Recomm) approximates analyst a's favorability towards the firm i in quarter t (H1c). <sup>24</sup> In particular, a more positive recommendation implies that analyst a views the firm as more favorable and therefore maintains a more positive relationship with management (e.g., Mayew, 2008; Cohen et al., 2020b). Again, I apply the transformation to abnormal values implying that a value of 1 indicates that analyst a is the most

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<sup>&</sup>lt;sup>23</sup> This transformation (relativization) implies that I also include the forecasts of analysts who do not participate in the conference call or cannot get matched.

<sup>&</sup>lt;sup>24</sup> Analysts' stock recommendations are provided on a 5-point scale where a value of 5 indicates "strong buy" (most favorable) and a value of 1 indicates "strong sell" (least favorable).

favorable of all analysts that maintain an outstanding stock recommendation, and a value of 0 the least favorable.

Furthermore,  $W_{a,i,t}$  also includes additional analyst characteristics (ForcFreq, FirmCoverage, IndCoverage, RecHorizon, SizeBrokerage, PastCall) that may also influence analysts' questioning (Call et al., 2020). ForcFreq approximates analyst's abnormal forecast frequency for any firm within the last year. FirmCoverage (IndCoverage) measures the number of different companies (industries) an analyst covered in the last year. RecHorizon captures the horizon of the outstanding stock recommendation. SizeBrokerage approximates the analyst's brokerage house size. PastCall indicates whether the analyst also participated in firm's last conference call. We control for these variables, as they influence analysts' questions. A comprehensive overview of all variables is depicted in Appendix A.

Controls. Prior literature also indicates that analysts' questioning may also be influenced by question-  $(X_{p,a,i,t})$  and conference call-specific characteristics  $(Y_{i,t}; e.g., Chen et al., 2018b)$ , as well as firm fundamentals  $(Z_{i,t}; e.g., Salzedo et al., 2016)$ .  $X_{p,a,i,t}$  includes the question characteristics such as the analyst position within the conference call  $(CallPosition)^{26}$  as well as the question position within an analyst's speech portion  $(QuestionPosition)^{27}$ ,  $Y_{i,t}$  contains controls for conference call characteristics such as the number of participants (Participants) as well as the tone of the management presentation  $(ToneMP)^{28}$ , whereas  $Z_{i,t}$ 

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<sup>&</sup>lt;sup>25</sup> According to the best of my knowledge, prior literature does not provide any indications that would allow a compelling hypotheses development for these other analyst characteristics. However, an inclusion in the regression model seems reasonable to control for any unexpected correlations.

<sup>&</sup>lt;sup>26</sup> Cohen et al. (2020b) show that bullish analysts get called significantly earlier to ask their question in the conference call. Brown et al. (2019) provide survey evidence indicating that firms' prioritize analysts' with specific characteristics more than others. Hence, controlling for the analysts' question position within the call does not only serve the purpose to control for mechanically arising effects due to the position itself but also for unobservable, temporary characteristics of the analyst-firm relationship that may not be captured by the time-invariant fixed effects scheme.

<sup>&</sup>lt;sup>27</sup> Prior conference call literature does not distinguish between the different analysts' turns-at-talk. Based on extensive reading of conference call transcripts, it seems reasonable to control for the question position as questions may differ with respect to the position within a specific analyst-manager conversation. Anecdotal evidence indicates that follow-up questions differ with respect to prominent characteristics (e.g., length) and frequently serve a verification or clarification purpose.

<sup>&</sup>lt;sup>28</sup> In line with prior literature, I measure tone by the Loughran and McDonald (2011) sentiment word list. For a detailed description on how tone gets calculated, please refer to Appendix A.

includes controls related to firms' information environment (Hope & Wang, 2018) such as firms' size (Size), book-to-market ratio (BTM), loss indicator (Loss), leverage ratio (Leverage), profitability ( $\Delta ROA$ ), analyst following (Coverage), analysts' consensus forecast error (Surprise), and an indicator illustrating whether the firm has beaten analysts' expectations (Beat).  $X_{p,a,i,t}$  ( $Y_{i,t}$  as well as  $Z_{i,t}$ ) is measured at analyst-question (firm) level.

## <u>Consequences – Information provision (H<sub>2</sub>)</u>

The second set of hypotheses investigates the consequences of indirect questions with regard to managements' information provision in their responses. To test these hypotheses, I run the following OLS regression model (3): <sup>29</sup>

$$Information Answer_{p,a,i,t} = \gamma Indirectness_{p,a,i,t} + \beta \boldsymbol{W}_{a,i,t} + \delta \boldsymbol{X}_{p,a,i,t} + \varphi \boldsymbol{Y}_{i,t} + \rho \boldsymbol{Z}_{i,t} \\ + \mu_{ai} + \theta_{am} + \pi_q + \sigma_k + \varepsilon_{(p),a,i,t}$$
 (3)

where p is an index for the question, a an index for the analyst, m an index for the manager, i an index for the firm, t an index for the quarter, and k for the year. Contrary to equation 1, I include analyst-firm (analyst-manager) fixed effects ( $\mu_{ai}$ ) to control for any non-observable, time-invariant characteristics of the analyst-firm (analyst-manager) relationship.  $\pi_q$  refers to quarter whereas  $\sigma_k$  indicates year fixed effects. I cluster standard errors at firm-level (Call et al., 2020). I control for analyst- ( $\mathbf{W}_{a,i,t}$ ), question- ( $\mathbf{X}_{p,a,i,t}$ ), conference call- ( $\mathbf{Z}_{i,t}$ ), as well as firm-specific ( $\mathbf{Y}_{i,t}$ ) characteristics. All variables are defined in Appendix A.

Information provision in the answer (InformationAnswer<sub>p,a,i,t</sub>). I measure managements' information provision in the answer by multiple different dimensions (H1a: LengthAnswer, Answers, NumbersAnswer, NERAnswer, FogAnswer; H1b: NoAnswer) to provide a comprehensive understanding of the consequences of indirect questions. Prior literature on the information content of qualitative disclosures measures the managements'

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<sup>&</sup>lt;sup>29</sup> Hypotheses 3a and 3b are partly estimated on an analyst level, implying an aggregation of the question characteristics on analyst level. Hence, the analyses are using the percentage of analyst a's indirect questions during firm i's conference call in quarter t (Analyst Indirect) to test the association with interactional consequences.

information provision by the disclosures' length (e.g., Dyer et al., 2017), precision (e.g., Campbell et al., 2020), degree of proprietary information (e.g., Hope et al., 2016), and linguistic complexity (e.g., Bushee et al. 2018). Translated to the conference call setting, I approximate managements information provision by the abnormal length of the collective management answer (*LengthAnswer*; Call et al. 2020), number of distinct turns-at-talk within the collective management answer (*Answers*)<sup>30</sup>, number of quantitative information in the answer (*NumbersAnswer*; Gow et al., 2021), degree of proprietary information by the number of named-entity-recognition (NER) tags (*NERAnswer*; Gow et al., 2021)<sup>31</sup>, Fog-index (*FogAnswer*; Bushee at al. 2018).

My analysis of managements' effort to escape the question situation (H2b; *NoAnswer*) is based on the regular expression scheme of Gow et al. (2021) that identifies non-answers in managements' responses to analysts' questions during conference calls.<sup>32</sup> Comparably to the identification of indirect questions, Gow et al.'s (2021) regular expressions constitute a binary classification scheme where a value of 1 indicates that the management answer contains an explicit non-answer, and 0 otherwise.

Question characteristics  $(X_{p,a,i,t})$ . I also control for the question's length (LengthQuestion) as it seems reasonable to assume that the length of the questions also increases the managements information provision in the answer. Furthermore, and to better

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<sup>&</sup>lt;sup>30</sup> Frequently, a question is not only answered by one manager as another manager may want to add some further/clarifying pieces of information to the answer of the first speaker. Even though current literature does not consider this interaction in managements' answer, I interpret this behavior as increased information provision in response to an analyst question as the second manager provided the additional information on a voluntary basis. I recognize that one could also argue that an additional answer may not always meet the definition of a voluntary decision from a litigation risk perspective. If the first manager unintendedly provides misleading or even wrong information, the other participating managers may feel obliged to correct the given answer of the first manager. However, as the conference call setting is a very professional setting and the management teams get extensively trained, it seems unreasonable to assume that managers provide false information that needs to be corrected by the other participating managers.

<sup>&</sup>lt;sup>31</sup> As suggested by Gow et al. (2021), I apply the 7-class model of the Stanford Named Entity Recognizer. For detailed information on the tagger, please refer to https://nlp.stanford.edu/software/CRF-NER.html. Hence, I include NER tags of the categories *Location*, *Person*, *Organization*, *Money*, *Percent*, *Date*, *Time*.

<sup>&</sup>lt;sup>32</sup> Gow et al. (2021) further differentiate between different types of non-answers. Similar to their main analyses, I do not differentiate between the different types as I am solely interested in whether or not the management provides an answer to the question.

isolate the effect of indirectness, I also extend the regression to control for the targeted information provision indicators in the question (*NumbersAnswerQ*, *NERQuestion*, *FogQuestion*).

## <u>Consequences – Relationship building (H3)</u>

The third set of hypotheses tests whether indirect questions can serve as effective means to curry favor with the management. To test these hypotheses, I run the following OLS regression model (4):

Favorability<sub>(p),a,i,t</sub> = 
$$\gamma Indirectness_{(p),a,i,t} + \beta W_{a,i,t} + \delta X_{(p),a,i,t} + \varphi Y_{i,t} + \rho Z_{i,t} + \mu_{ai}(+\theta_{am}) + \pi_q + \sigma_k + \varepsilon_{(p),a,i,t}$$
 (4)

where p is an index for the question, a an index for the analyst, m an index for the manager, i an index for the firm, t an index for the quarter, and k for the year. Contrary to equation 1, I include analyst-firm (analyst-manager) fixed effects ( $\mu_{ai}$ ) to control for any non-observable, time-invariant characteristics of the analyst-firm (analyst-manager) relationship.  $\pi_q$  refers to quarter whereas  $\sigma_k$  indicates year fixed effects. I cluster standard errors at firm-level (Call et al., 2020). I control for analyst- ( $W_{a,i,t}$ ), question- ( $X_{p,a,i,t}$ ), conference call- ( $Z_{i,t}$ ), as well as firm-specific ( $Y_{i,t}$ ) characteristics. All variables are defined in Appendix A.

Management favorability ( $Favorability_{(p),a,i,t}$ ). To approximate the favorability of managements' public interaction with the questioning analyst (H3a), prior literature uses the non-occurrence of conversational interruptions (Francis et al., 2020) as well as the allowance to ask a question in the next conference call (Cohen et al., 2020b). From a conversation analysis perspective, it can be argued that interruptions are interpretable as a face-threatening act (Brown & Levinson, 1987), which may be responses to face-threatening acts of questioning analysts, namely direct questions. Consequently, interruptions are the opposite of management actions signaling favorability, implying that the absence of interruptions can be slightly interpreted as more favorable treatment by the management. I identify an interruption by two consecutive

hyphens ('--') at the end of an analyst question (*Interruption*). The resulting binary classification takes the value of 1 if the question contains an interruption, and 0 otherwise. This analysis is conducted at analysts' speech portion level which suggests including analystmanager fixed effects.

Furthermore, Cohen et al. (2020b) document that firms disproportionally allow more favorable analysts to participate in future conference calls. If indirect questions increase management favorability, I argue that analysts, who ask more indirect questions, are more likely being allowed to ask a question in the next conference call. In line with Cohen et al. (2020b), I identify next conference call participation by comparing the participants of the conference call of firm i in quarter t with quarter t+1 (NextCall). A value of 1 indicates that the respective analyst participates in the next conference call, and a value of 0 otherwise.

Hypothesis 3b intends to study the relationship between analysts' private access to management and the usage of indirect questions in conference calls. Measuring private interactions between management and analysts is an empirical challenge as these are not directly observable. To overcome this data limitation issue, prior literature assumes that an increase in private access to management leads to increased information provision (e.g., Bushee et al., 2017), which may result in an increase in analyst's forecast accuracy (Milian et al., 2017). Similar to Milian et al. (2017), I approximate the increase in private access to management by the change in analysts' abnormal forecast accuracy for firm i from quarter t to t+1 ( $\Delta Accuracy$ ).<sup>33</sup>

<sup>&</sup>lt;sup>33</sup> Milian et al. (2017) use the percentage change in absolute forecast error around the conference call. More specifically, they compare the last forecast of firm i in quarter t with the first forecast in quarter t+1. The authors reason their design choice by evidence of Soltes (2014) who shows that 43% of the private interactions happens within 72 hours after the earnings announcement. Contrary, I use the last forecast in quarter t+1 as benchmark to compute the change in forecast accuracy. My deviation is based on the intention to not exclude the remaining 57% of private interactions that occur over the quarter that also convey relevant information, as found by prior literature (e.g., Bushee et al., 2017). My argumentation is further supported by Chen and Matsumoto (2006) who compute the increase in forecast accuracy over the firms' quarters to investigate whether more favorable analysts have better access to management-provided information.

**Indirectness.** My analysis focusing on conversational interruptions is conducted at analyst-turn at talk level (*Interruption*; H3a). Contrarily, the analyses regarding next conference call participation (*NextCall*; H3a) as well as private access ( $\Delta Accuracy$ ; H3b) is at analyst-call level and therefore contains the analysts' average level of indirectness (*AvgIndirectness*).

Question characteristics  $(X_{p,a,i,t})$ . In line with regression model (3), I also control for the question characteristics. In line with the averaging of indirectness described above, I also aggregate the length of the analysts' turn-at-talk (AvgLengthQuestion) as well as exclude the position of the analyst's speech portion (CallPosition) and question position within the speech portion (QuestionPosition).

#### **Descriptive** statistics

#### [Please insert Table 2 here]

Table 2 depicts the descriptive statistics for question (Panel A), analyst (Panel B), conference call (Panel C), as well as firm-level (Panel D) variables. Panel A (B) is measured at analyst-turn at talk (analyst) level, whereas Panel C and Panel D are measured at firm-quarter level.

On average, 37% of all included questions are phrased in an indirect manner. The most (least) prominent type of indirect questions are query preparatories (want statement) with a relative frequency of 20% (7%). Analysts' questions (managements' answers) are on average 48.68 (115.44) words long and contain 0.61 (1.40) numbers as well as 1.03 (2.59) NER tags (all untabulated). A mean of 0.43 (0.39) for *LengthQuestion* (*LengthAnswer*) indicates that my sample tends to include the shorter questions (answers). Furthermore, a typical question receives 1.24 distinct answers, has a 11% chance of receiving no answer, and is interrupted in 1 out of 100 cases (all untabulated).

In comparison to all analysts that issue a forecast for firm i in quarter t, my sample tends to include the more accurate analysts as indicated by an AccuracyPre mean of 0.58.

Furthermore, an abnormal stock recommendation (*Recomm*) mean of 0.51 implies that the identified and included analysts have slightly more favorable views of the respective firms. These findings are arguably in line with prior literature documenting that especially analysts with higher quality information sets as well as more positive relationships with management are allowed to ask questions in conference calls (Mayew et al., 2013a). Furthermore, participating analysts have an average firm-specific of 5.28 years and 12.27 years of general experience as analysts (untabulated).

With respect to the conference call- as well as firm-specific variables, a typical conference call has 9.02 participants and a rather positive formulated management presentation (mean of *ToneMP* is 0.41). On average, a firm has a book-to-market ratio of 0.60, experiences a loss in 20 out of 100 quarters, has a leverage ratio of 0.60, gets covered by 11.47 analysts, and has an increasing ROA by 2%.

#### [Please insert Figure 1 here]

Figure 1 graphically illustrates the usage of indirect questions conditional on the respective turn-at-talk position (different stages of the conversation between each respective analyst and management) over the sample period. Within the first turn-at-talk, the likelihood that the management gets asked an indirect question is continuously increasing from 48.6% to 67.1% from 2008 to 2020. Furthermore, figure 1 indicates a similar development within all subsequent turns-at-talk. These severe increases (e.g., roughly 38% within the first turn-at-talk) further highlight the relevance of the underlying research question as the form of indirectness seems to get increasingly important in conference calls conversations.

Furthermore, figure 1 indicates that analysts less frequently rely on indirect questions over the course of the interaction. It seems plausible to assume that analysts especially focus on their first question and primarily interpret their follow-up questions as an opportunity to verify or specify the information received in the first question by the usage of direct questions.

#### IV. RESULTS

#### Differences in means

Table 3 reports the differences in means for the main variables of interest conditional on whether the respective questions are phrased in an indirect manner. With respect to the determinants, the descriptive results do not indicate any economically meaningful difference for *AccuracyPre* as well as *Recomm*. However, analysts with a lower abnormal firm-specific (general) experience are on average more likely to ask indirect questions, already indicating slight support for my expectations raised in H1b and H1d.

In terms of potential consequences, the differences in means show that the abnormal length of the management answer (number of answers, numbers, NER tags, linguistic complexity) is significantly longer (higher) in comparison to direct questions. The likelihood of receiving no answer (being interrupted) is approximately 55.6% higher (converging towards zero) for indirect questions. Even though the magnitude of the reported differences is already quite severe and points to the expected direction, my main analyses may provide more convincing results, controlling for any multicollinearity as well as for time-invariant characteristics of the analyst-firm as well as analyst-manager relationship.

#### [Please insert Table 3 here]

#### *Main results – Determinants (H1)*

Table 4 displays the results for my first set of hypotheses that investigates the association between observable analyst characteristics and the usage of indirect questions.

#### [Please insert Table 4 here]

I test the determinants not only individually (column 1-4) but also collectively in a combined model (column 4). As already indicted in the prior differences in means analysis, I

do not find a statistically significant association between analysts' forecast accuracy and the usage of indirect questions (column 1), implying that H1a can be rejected. Contrary to my expectations, this result suggests that less informed analysts are not more likely to use indirect questions to compensate their lack of knowledge.

Columns 2 to 4 display the analyses regarding the remaining analyst-specific determinants. In particular, I find that analysts with lower firm-specific (column 2), general experience (column 3), as well as less favorable views about the firm (column 4) tend to ask more indirect questions. These results suggest that analysts strategically adapt their questioning to compensate any disadvantages that may result from relatively less firm-specific (general) experience (H1b) as well as access to management (H1c). My inferences also hold for the full model reported in column 5 (all p-values < 0.01). According to the reported coefficients in the full model, the analyst with the lowest firm-specific as well as general experience has a  $(e^{-0.093}=0.9112)$  8.88% as well as a  $(e^{-0.170}=0.8437)$  15.63% higher likelihood to ask an indirect question in comparison to the most experienced one. Similarly, the least favorable analyst is  $(e^{-0.032}=0.9685)$  3.15% more likely to phrase the question in an indirect manner compared to the most favorable analyst. Hence, my findings suggest that Hypotheses H1b-c cannot be rejected. Overall, these results complement prior literature by showing that not only the content of analysts' questions is influenced by their characteristics but also the form.

#### *Main results – Consequences (H2 and H3)*

Having investigated the determinants of indirect questions, I now turn to the analysis of the conversational consequences. More specifically, I investigate the conversational consequences to get a better understanding why analysts apply those indirect questions. Table 5 depicts the regression results.

#### [Please insert Table 5 here]

My results show that indirect questions can be associated with a statistically significant increase in managements information provision on their answers for all proxies (all p-values < 0.01). More specifically, management answers following indirect questions tend to be longer, contain a higher number of answers, degree of precision, proprietary information, and linguistic complexity, implying that hypothesis H2a cannot be rejected. To the extent that the discussed characteristics of the response are informative (to the questioning analyst), these insights suggest that analysts can influence managements information provision but merely choosing a different question form. Especially inexperienced as well as less favorable analysts may arguably use indirect questions to compensate informational disadvantage.<sup>34</sup>

## [Please insert Table 6 here]

As reported in Table 6 column 1, indirectness is positively and statistically significantly associated with receiving a non-answer (p-value < 0.01), suggesting that the analyst enters a gamble.<sup>35</sup> In addition, I find that the likelihood of receiving no answer decreases if the question is longer, more precise, contains more proprietary information, and is less linguistically complex. However, the main effect of indirectness remains fairly stable and significant across all cross-sectional tests (column 2 to 6) and therefore hypothesis H2b cannot be rejected. However, my finding does not imply that management does not provide any information if they do not answer a question. Moreover, a non-answer could either by itself already be interpreted as an information signal or just denies providing specific, very concrete information but overall provides some general information in response to an analyst's question.

## [Please insert Table 7 here]

<sup>&</sup>lt;sup>34</sup> This conclusion crucially depends on the assumption that the applied proxies approximate the information content of management answers. Despite extensive evidence already cited above, I admit that measuring information content in management answers remains an empirical challenge.

<sup>&</sup>lt;sup>35</sup> The results also hold for estimating a Logistic regression model. However, the strict fixed effects structure makes it infeasible to use Logistic regressions.

Table 7 column 1 illustrates the results of the analyses investigating the association between indirect questions and the favorability of managements' *public interaction* with the questioning analysts. Column 1 indicates a positive and statistically significant association between the usage of indirect questions and the likelihood of not being interrupted by the management (p-value < 0.01). Contrary, and measured on an aggregated analyst-speech-portion-level (Table 7 column 2), I do not find any statistically significant relationship between indirect questioning and the likelihood of being allowed to ask a question in the next conference call. Hence, these findings provide mixed evidence for my expectations raised in H3a, implying that H3a cannot (can) be rejected regarding management interruptions (next conference call participation).

Lastly, hypothesis H3b investigates the link between indirect questions and *private interaction* between the questioning analyst and management. Table 7 column 3 documents a positive and statistically significant association (p-value < 0.05). Given that my research design includes analyst-firm fixed effects and thereby already controls for time-invariant characteristics of the analyst-firm relationship, this result provides strong evidence that indirect questions improve private access to management. Consequently, hypothesis H3b cannot be rejected. Summing up, indirect questions can be associated not only with short-term benefits in terms of managements' information provision their answers but also with regard to positive long-term relationship building externalities.

#### V. ADDITIONAL ANALYSIS

#### *Information signal to the capital market*

In an additional analysis, I also investigate the capital market's reaction to the usage of indirect questions in conference calls. This additional analysis is motivated by prior literature that already documents that the content of analysts' questions is perceived as informative to investors (Chen et al., 2018a; Haag et al., 2021a). However, current literature provides no

indications whether and how the capital market also responds to the form of the question. Hence, this additional analysis extends our understanding of the implications of analysts' questions in conference calls by, first, studying whether and how the capital market (even) recognizes and interprets (positively or negatively) the excessive usage of indirect questions and, second, looking at whether indirect questions, and the thereby triggered increased managements' information provision in the answer, are informative to the capital market.

By using the relative share of indirect questions (AvgIndirectmess)<sup>36</sup> and cumulative size-decile adjusted returns around the conference call date (CAR[0;+1])<sup>37</sup>, I find a positive and statistically significant association between the relative share of indirect questions and abnormal returns around the conference call (Table 8 column 1; p-value < 0.05). This finding may be explained by the fact that indirect questions are a type of avoidance-based, negative politeness question strategy that reduces the degree of imposition. Hence, by using indirect questions, analysts engage with the management in a less forceful manner as they leave them more freedom in formulating their answer. This type of question form seems especially suitable if the analysts assume that the management is not hiding any bad news, which need to be teased out from the analysts' perspective. Therefore, it seems reasonable to assume that the observed positive capital market reaction is the outcome of investors' interpretation of indirect questions as a positive signal.

#### [Please insert Table 8 here]

Furthermore, I also look at absolute (unsigned) returns, bid-ask spreads, as well as abnormal and standardized trading volume to investigate whether the ratio of indirect questions can be associated with the overall informativeness of conference calls. In line with prior

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<sup>&</sup>lt;sup>36</sup> I calculate the relative share of indirect questions by dividing the number of indirect questions by the total number of analysts' questions (turns-at-talk) within a conference call.

<sup>&</sup>lt;sup>37</sup> Call et al. (2020) suggest using a [0;+1] trading window for the calculation of the cumulated size-decile adjusted returns to measure the capital market reaction around the conference call date. I acknowledge that the identification of the accompanied returns could be improved by using intra-day data.

literature, I measure absolute (unsigned) returns as cumulative absolute size-decile adjusted returns around the conference call date (*aCAR[0;+1];* Rennekamp et al. 2022), change in bidask spread as the difference between the average bid-ask spreads in the [+3,+1] and [-1,-3] trading windows around the conference call date (Δ*Spread;* Lee, 2016), abnormal trading volume as the ratio of trading volume of the day of the conference call and the average trading volume over a 20-day window prior to the conference call ([-2,-21]; *AbnVolume;* Bhagwat et al., 2021), and standardized trading volume as the daily trading volume standardized by shares outstanding averaged up until 10 days after the conference call date ([0,+10]; *StandVolume;* Bhagwat et al., 2021).

As illustrated in Table 8 column 2 to 5, I find that a higher ratio of indirect questions can be associated with higher information content in terms of absolute returns (column 2, p-value < 0.01). This result suggests that indirect questions not only send a positive signal but lead to more informative conversations between analysts and the management. Contrarily, this increased informativeness does not translate to a decrease in bid-ask spreads (column 3). Furthermore, my results show that a higher ratio of indirect questions is positively and statistically significant associated with investor disagreement (*AbnVolume*, column 4, p-value < 0.01; *StandVolume*, column 5, p-value < 0.05). Hence, managements information provision in response to indirect questions is arguably controversially perceived by investors, suggesting that the disclosed information is of relevance and not trivially interpretable.

Overall, these capital market tests show that also the form of analysts' questions is of relevance for the investors. This implies that by far smaller nuances than previously studied significantly influence the informativeness of this interactive disclosure setting.

### Conference call casting

Finally, I want to investigate whether management prefers indirect questions depending on the favorability of the questions' underlying topic. In line with Allee et al. (2022), it seems likely to assume that management allows questions to be asked earlier if they prefer the indirect form

regarding certain topics. To capture this behavior, I use the casting measures from Allee et al. (2022) and adapt it to indirect questions. *CastFirst* approximates whether the conference call started with an indirect question, whereas *CashHalf* measures the ratio of indirect questions in the first half of the conference call. My main dependent variable is the question (and answers) tone measured by the word list of Loughran and McDonald (2011).

## [Please insert Table 9 here]

The tone of the questions in the conference call (*CallToneQuestion*) is negatively and statistically significantly associated with the first question being indirect (Table 9 column 1, p-value < 0.01), implying that unfavorable questions which are phrased in an indirect manner are more likely allowed to open the Q&A session. In a similar line, I also find a positive and statistically significant association between the tone of the questions and the ratio of indirect questions in the first half of the conference call (Table 9 column 2, p-value < 0.01). Both results suggest that management especially prefers indirect questions if the question is regarding unfavorable topics. These findings can arguably be explained by managements' preference for a cheap escape opportunity in case of an unfavorable topic.

#### VI. CONCLUSION

I study the determinants and consequences of indirect questions in conference calls. Prior literature already shows that analysts' questioning influences managements' ad-hoc (Haag et al., 2021a; Haag et al., 2021b) as well as future (Chapman & Green, 2018) information provision. Based on arguments from the literature studying social interactions, I form expectations that especially less knowledgeable, less experienced (firm-specific and general), and less favorable analysts increasingly make use of indirect questions. With respect to consequences, I argue that the usage of indirect questions leads to increased information provision by the management but, contrary, also to a higher likelihood of receiving non-

answers. Moreover, I hypothesize that indirect questions can be associated with improved favorability of managements' public as well as private interaction with the respective analyst.

Using 580,268 analysts' turns-at-talk, I find no statistically significant association between analysts' prior forecast accuracy and their usage of indirect questions, indicating that the usage of indirect questions is not influenced by the analysts' knowledgeability. However, and in line with my expectations, I find that analysts with lower firm-specific (general) experience and less favorable outstanding stock recommendations make increasingly use of indirect questions.

With respect to consequences of interest, I find support for my hypothesis suggesting a positive correlation between indirectness and managements' information provision. Contrary, the results also indicate that indirectness can also be associated with a higher likelihood of non-answers, suggesting that the analyst is entering a gamble from an information acquisition perspective. Additionally, I observe mixed evidence regarding the favorability of managements' *public* interaction with analysts that use indirect questions. My results regarding analysts' *private* interaction with management show a positive and statistically significant association between indirectness and analysts' private access to management. In additional analyses, I document a that indirect questions send a positive signal to the capital market and make the conference call more informative to investors. Furthermore, I also show that management prefers indirect questions when being asked questions about unfavorable topics.

My study is subject to three limitations. *Firstly*, my identification of indirect questions relies on a set of regular expressions, which are initially developed based on predefined classification schemes from the conversation analysis literature and subsequently adjusted to the conference call setting. Following Camiciottoli (2009), I restrict my analysis to the four most prominent types of indirectness in conference calls (query preparatories, hedged statements, want statements, and if-clauses). If analysts also frequently apply other types of indirect questions, my identification may be inaccurate and therefore the resulting evidence

may not be generalizable to the overall concept of indirectness but may rather just represent evidence for the four types.

Secondly, and in line with prior literature (e.g., Mayew, 2008), I approximate analyst characteristics based on observable variables from I/B/E/S. Even though prior literature frequently uses those measures, they are not perfect and may be prone to measurement errors as, e.g., the knowledgeability of the analyst before the conference call (AccuracyPre) as well as private interaction with management ( $\Delta Accuracy$ ) is not directly observable. These measures are basically derived from an outcome-perspective implying that, e.g., analysts' forecasts are an accurate representation of their knowledge as well as that an increase in the forecast accuracy can only be related to better private access to management.

Thirdly, as this research question is theoretically motivated by Goffman's (1967) concept of Saving Face and Brown's and Levinson's (1987) politeness theory, I do not consider any other conversational elements that may threaten managements negative face in another way (e.g., suggestions, advice, reminders, threats, warnings) (Brown & Levinson, 1987). Thereby I assume that there is no systematic correlation between these elements and the usage of indirect questions. If this assumption is not true, my analysis may be prone to omitted-variable bias.

Overall, this study highlights the relevance of indirect questions in the conference call setting and thereby providing evidence that not only the question content is determined by analyst characteristics as well as influences managements' information provision (interaction with management) but also the question form.

## APPENDIX A: VARIABLE DEFINITIONS

Label	Definitions
PANEL A: Question variables	
Indirectness	Indicator variable equal to 1 if question q of analyst a's contains an indirect question phrase (QueryPrepQ, HegdedQ, WantQ, IfQ), 0 otherwise.
QueryPrepQ	Indicator variable equal to 1 if question $q$ in analyst $a$ 's speech portion contains a query preparatory phrase, 0 otherwise. Query preparatory phrases are identified by the regular expressions contained in Appendix C.
HedgedQ	Indicator variable equal to 1 if question $q$ in analyst $a$ 's speech portion contains a hedged statement, 0 otherwise. Hedged statements are identified by the regular expressions contained in Appendix C.
WantQ	Indicator variable equal to 1 if question $q$ in analyst $a$ 's speech portion contains a want statement, 0 otherwise. Want statements are identified by the regular expressions contained in Appendix C.
IfQ	Indicator variable equal to 1 if question $q$ in analyst $a$ 's speech portion contains an if-clause, 0 otherwise. If-clauses are identified by the regular expressions contained in Appendix C.
LengthQuestion	Abnormal length of question, measured as the abnormal number of words of the question.
LengthAnswer	Abnormal length of answer, measured as the abnormal number of words of the answer.
Answers	Abnormal number of answers, measured as the sum of speaker changes within a management's answer.
NoAnswer	Indicator variable equal to 1 if management does not answer analyst <i>a</i> 's question, 0 otherwise (Gow et al., 2021).
Interruption	Indicator variable equal to 1 if management interrupts the analyst, identified by the interruption markers of "" at the end of an analyst's turn-at-talk.
CallPosition	Position of the analyst's speech portion in the conference call.
QuestionPosition	Position of question in analyst's speech portion in the conference call.
ToneQuestion	Abnormal tone of the question, measured as the abnormal difference between positive and negative word counts of all words contained in the word list of Loughran and McDonald (2011) scaled by the number of words of the question.
NumbersQuestion (NumbersAnswer)	Abnormal number of percentage and currency number references in the question (answer), measured as the abnormal count of all percentage and currency numbers in the question (answer).
NERQuestion (NERAnswer)	Abnormal number of Named-entity-recognition (NER) tags identified with the 7-class model of the Stanford Named Entity Recognizer in the question (answer), measured as the abnormal count of all NER tags in the question (answer).
FogQuestion (FogAnswer)	Abnormal linguistic complexity of the question (answer), measured as the abnormal Fog index of the question (answer).
	PANEL B: Analyst variables
AnalystIndirect	Percentage of analyst a's indirect questions during the conference call, calculated as the average of <i>Indirectness</i> of all questions of analyst a in the conference call.

ErrorPre (ErrorPost)	Analyst $a$ 's absolute forecast error before (after) the conference call regarding EPS in quarter $t+1$ , calculated as the absolute difference between the analyst's forecast for EPS in quarter $t+1$ and the actual EPS in quarter $t+1$ .
AccuracyPre (AccuracyPost)	Analyst $a$ 's abnormal (i.e., relative to other analysts) absolute forecast accuracy before (after) the conference call regarding EPS in quarter $t+1$ .
ΔAccuracy	Analyst <i>a</i> 's change in abnormal (i.e., relative) absolute forecast accuracy around the conference call regarding EPS in quarter <i>t</i> +1, calculated as <i>AccuracyPost - AccuracyPre</i> .
Recomm	Abnormal stock recommendation of analyst $a$ , calculated as the abnormal recommendation level where 1 indicates strong sell and 5 indicates strong buy.
ForcFreq	Abnormal forecast frequency of analyst $a$ , calculated as the abnormal overall number of EPS forecasts by the analyst for any firm in the 12 months prior to the conference call.
FirmCoverage	Abnormal number of firms covered by analyst $a$ , measured as the abnormal number of firms covered by the analyst in the 12 months prior to the conference call.
IndCoverage	Abnormal number of two-digit SIC industries covered by analyst <i>a</i> , measured as the abnormal number of two-digit SIC industries covered by the analyst in the 12 months prior to the conference call.
FirmExperience	Abnormal firm experience of analyst <i>a</i> , measured as the abnormal difference between the conference call date and the date of the first forecast issued by the analyst, divided by 365.
GeneralExperience	Abnormal general experience of analyst $a$ , measured as the abnormal difference between the conference call date and the date of the first forecast issued by the analyst for any firm, divided by 365.
RecHorizon	Abnormal outstanding stock recommendation horizon of analyst <i>a</i> , measured as the abnormal difference between the conference call date and the date of the outstanding recommendation, divided by 365.
SizeBrokerage	Abnormal brokerage house size of analyst <i>a</i> , measured as the abnormal total number of analysts employed by the brokerage house in the 12 months prior to the conference call.
PastCall	Indicator variable equal to 1 if analyst $a$ asked a question in the past conference call $(t-1)$ , 0 otherwise.
NextCall	Indicator variable equal to 1 if analyst $a$ asks a question in the next conference call $(t+1)$ , 0 otherwise.
	PANEL C: Conference call variables
AvgIndirectness	Percentage of indirect questions during the conference call, calculated as the average of <i>Indirectness</i> of all questions in the conference call.
Participants	Natural logarithm of the number of analysts asking a question during the conference call.
ToneMP	Tone of the management presentation in the conference call, measured as the calculated as the difference between positive and negative word counts of all words contained in the word list of Loughran and McDonald (2011) scaled by the number of words of the management presentation.
CallToneQuestion (CallToneAnswer)	Tone of all analysts' questions (management answers) during the conference call, calculated as the difference between all positive and negative word counts of all words contained in the word list of Loughran and McDonald (2011) of all questions (answers) scaled by the number of words in all questions.

AvgLengthQuestion	Average length of the analyst's questions, measured as average number of words of all questions of analyst $a$ .
CastFirst	Indicator variable equal to 1 if the first question of the conference call is phrased in an indirect manner.
CastHalf	Proportion of indirect question in the first half of the conference call, measured as the number of indirect questions in the first half divided by the number of questions in the first half of the conference call.
	Panel D: Firm-level variables
CAR[0,+1]	Cumulative abnormal size-decile adjusted return during [0,+1] trading window around the conference call date.
ΔSpread	Difference between the average bid-ask spread in the [+3,+1] and [-1,-3] trading window around the conference call date.
AbnVolume	Abnormal trading volume of the day of the conference call scaled by the average trading volume over a 20-day window prior to the conference call.
StandVolume	Daily trading volume standardized by shares outstanding averaged over a [0,+10] trading window around the conference call date.
Size	Natural logarithm of total assets in thousands of firm <i>i</i> in quarter <i>t</i> .
BTM	Book value of equity divided by market value of equity of firm <i>i</i> in quarter <i>t</i> .
Loss	Indicator variable equal to 1 if firm $i$ reports negative earnings in quarter $t$ , 0 otherwise.
Leverage	Leverage share of equity (long term debt + short term liabilities)/common equity of firm $i$ in quarter $t$ .
$\Delta ROA$	Change in return on assets of firm <i>i</i> between quarter <i>t</i> and quarter <i>t-1</i> .
Coverage	Natural logarithm of the average number of forecasts provided for firm $i$ regarding earnings in quarter $t+1$ at the date of the conference call in quarter $t$ .
Surprise	Difference between quarterly EPS and analyst consensus forecast of firm $i$ in quarter $t$ .
Beat	Indicator variable equal to 1 if actual earnings exceed consensus analysts' earnings forecast (EPS>Actual), 0 otherwise.

**Notes:** This table lists the variables used in the empirical analysis and their description. Note that all continuous variables are winsorized at 1 and 99 percent level.

## APPENDIX B: REGULAR EXPRESSIONS

Below please find the regular expressions to identify indirect questions in conference call transcripts. SPEECH ACT PHRASES contain the question words that are typically used in this context. The logical operator indicates how the different regular expressions of the different types are connected.

Type	Logic	Regular expressions
Query	OR	$r"(?i)\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $
preparatory		(SPEECH ACT PHRASES)\b"
phrases	OR	$   r''(?i) \land (I('M -AM -) WE('RE -ARE -)) \land s?([\w',\&@\#\$\%\(\)\[\]] + \s) \{0,2\} (HOPING MAYBE PERHEPS PERCHANCE) \land s?([\w',\&@\#\$\%\(\)\] + \s) \{0,2\} (HOPING MAYBE PERHEPS PERCHANCE) \land s?([\w',\&@\#\$\%\(\)\] + \s) \{0,2\} (HOPING MAYBE PERHEPS PERCHANCE) \land s?([\w',\&@\#\$\%\(\)\) + \s) \{0,2\} (HOPING MAYBE PERHEPS PERCHANCE) \land s?([\w',\&@\#\$\%\(\)\) + \s) \{0,2\} (HOPING MAYBE PERHEPS PERCHANCE) \land s.([\w',\&@\#\$\%\(\)\) + \s) \{0,2\} (HOPING MAYBE PERHEPS PERCHANCE) \land s.([\w',\&@\#\$\%\(\)\) + \s) \{0,2\} (HOPING MAYBE PERHEPS PERCHANCE) \land s.([\w',\&@\#\$\%\(\)\) + \s) \{0,2\} (HOPING MAYBE PERHEPS PERCHANCE) \land s.([\w',\&@\#\$\%\(\)\) + \s) \{0,2\} (HOPING MAYBE PERHEPS PERCHANCE) \land s.([\w',\&@\#\$\%\(\)\) + \s) \{0,2\} (HOPING MAYBE PERHEPS PERCHANCE) \land s.([\w',\&@\#\$\%\(\)\) + \s) \{0,2\} (HOPING MAYBE PERHEPS PERCHANCE) \land s.([\w',\&@\#\$\%\(\)\) + \s) \{0,2\} (HOPING MAYBE PERHEPS PERCHANCE) \land s.([\w',\&@\#\$\%\(\)\) + \s) \{0,2\} (HOPING MAYBE PERHEPS PERCHANCE) \land s.([\w',\&@\#\$\%\(\)\) + \s) \{0,2\} (HOPING MAYBE PERHEPS PERCHANCE) \land s.([\w',\&@\#\$\%\(\)\) + \s) \{0,2\} (HOPING MAYBE PERHEPS PERCHANCE) \land s.([\w',\&@\#\$\%\(\)\) + \s) \{0,2\} (HOPING MAYBE PERHEPS PERCHANCE) \land s.([\w',\&@\#\$\%\(\)\) + \s) \{0,2\} (HOPING MAYBE PERHEPS PERCHANCE) \land s.([\w',\&@\#\$\%\(\)\) + \s) \{0,2\} (HOPING MAYBE PERHEPS PERCHANCE) \land s.([\w',\&\&\&\%\(\)\) + \s) \{0,2\} (HOPING MAYBE PERHEPS PERCHANCE) \land s.([\w',\&\&\&\%\(\)\) + \s) \{0,2\} (HOPING MAYBE PERHEPS PERCHANCE) \land s.([\w',\&\&\&\%\(\)\) + \s) \{0,2\} (HOPING MAYBE PERHEPS PERCHANCE) \land s.([\w',\&\&\&\%\(\)\) + \s) \{0,2\} (HOPING MAYBE PERHEPS PERCHANCE) \land s.([\w',\&\&\&\%\(\)\) + \s) \{0,2\} (HOPING MAYBE PERHEPS PERCHANCE) \land s.([\w',\&\&\%\(\)\) + \s) \{0,2\} (HOPING MAYBE PERHEPS PERCHANCE) \land s.([\w',\&\&\%\(\)\) + \s) \{0,2\} (HOPING MAYBE PERHEPS PERCHANCE) \land s.([\w',\&\&\%\(\)\) + \s) \{0,2\} (HOPING MAYBE PERHEPS PERCHANCE) \land s.([\w',\&\&\%\(\)\) + \s) \{0,2\} (HOPING MAYBE PERHEPS PERCHANCE) \land s.([\w',\&\&\%\(\)\) + \s) \{0,2\} (HOPING MAYBE PERHEPS PERCHANCE) \land s.([\w',\&\&\%\(\)\) + \s) \{0,2\} (HOPING MAYBE PERHEPS PERCHANCE) \land s.([\w',\&\&\%$
(QueryPrepQ)		$([\w',\&@\#\$\%\\]+\s)\{0,2\}TO(GET HAVE HEAR SEE START)\b"$
	OR	$   r''(?i)\b(HOPING MAYBE PERHAPS ANY\ COLOR)\b\s?([\w',\&@\#\$\%\(\)\[\]] + \s)\{0,2\}(I YOU WE SOMEONE ANYONE)\b\s?([\w',\&@\#\$\%\(\)\[\]] + \s)\{0,2\}(I YOU WE SOMEONE ANYONE)\b\s?([\w',\&@\#\$\%\(\])\] + \s)\{0,2\}(I YOU WE SOMEONE ANYONE)\b\s?([\w',\&@\#\$\%\(\])\b\s?([\w',\&\&\&\%\(\])\b\s?([\w',\&\&\&\%\(\])\b\s?([\w',\&\&\&\%\(\])\b\s?([\w',\&\&\&\&\%\(\])\b\s?([\w',\&\&\&\&\%\(\])\b\s?([\w',\&\&\&\&\&\%\(\])\b\s?([\w',\&\&\&\&\&\&\%\(\])\b\s?([\w',\&$
		$([\w',\&@\#\$\%\(\)\[\]]+\s)\{0,2\}(CAN COULD WILL WOULD MAY MIGHT)\b\s?([\w',\&@\#\$\%\(\)\[\]]+\s)\{0,4\}(SPEECH)+\color=0.00000000000000000000000000000000000$
		ACT PHRASES)\b"
	NOT	$r"(?i)\b(WHAT WHEN WHERE WHO WHOM WHICH WHOSE WHY HOW)\b(s?(\w[\s], ()]*?)\{0,5\}((CAN COULD WILL WHOSE WHY HOW)\b(s)\})$
		WOULD MAY MIGHT) (I YOU WE))\b\s?([\w',&@#\$%_\-\(\)\[\]]+\s){0,4}(SPEECH ACT PHRASES)\b"
Hedged	OR	r"(?i)\b(WONDER.* CURIOUS)\b"
statements	OR	r"(?i)\b((I('M  AM  ) WE('RE  ARE  )) WAS JUST WOULD BE)\b\s?([\w',&@#\$%_\-\(\)\[\]]+\s){0,2}(INTEREST.*\b\s?([\w',&@#
(HedgedQ)		$ $\%\(\)\[\]] + \s) \{0,2\} (IN TO IF WHETHER) TRYING\b\s?([\w',\&@\#\$\%\(\)\[\]] + \s) \{0,2\} (GET\ A\ SENSE\  UNDERSTAND))\b'' $
Want		$ r''(?i)\b(I WE ME US JUST)\b'\s?([\w',\&@\#\$\%_\-\(\)\[]]+\s)\{0,3\}(WANT.* .*'D LIKE WOULD LIKE)\b'\s?([\w',\&@\#\$\%_\-\(\)\) \} ) ) ) \\$
statement		[\]]+\s){0,1}TO\b\s?([\w',&@#\$%_\-\(\)\[\]]+\s){0,3}(SPEECH ACT PHRASES GET\b\s?([\w',&@#\$%_\-\(\)\[\]]+\s){0,2}
(WantQ)		(IMPRESSION SENSE))\b"
If-clauses	OR	$ r''(?i) b F b ?([\w',\&@\#\$\%_\-\(\)\[]] + s) \{0,2\} YOU b ?([\w',\&@\#\$\%_\-\(\)\[]] + s) \{0,2\} (CAN COULD WILL B) \} $
(IfQ)		WOULD MAY MIGHT)\b\s?([\w',&@#\$%_\-\(\)\[\]]+\s){0,4}(SPEECH ACT PHRASES)\b"
	OR	$ r''(?i) b IF b s?([\w',\&@\#\$\%_\-\(\)\[\]] + s) \{0,2\} YOU b s?([\w',\&@\#\$\%_\-\(\)\[\]] + s) \{0,2\} (.*T NOT) b s?(\w[\s , ()]*?) \{0,2\} (.*T NOT) b s?(\w[\w , ()]*?) \{0,2\} (.*T NOT) $
		(MIND)\b"
	OR	$ r''(?i) \\ b s?([\w',\&@\#\$\%_\-\(\)\[]] + \\ s)\{0,2\}([\w',\&@\#\$\%_\-\(\)\[]] + \\ s)\{0,2\}(CAN COULD WILL MAY B) \\  s (-1) \\  s (-1$
		MIGHT)\b"

## SPEECH ACT PHRASES

 $5\} MORE SPECIFIC| BE CLEAR| BE SURE| BREAK \b\s?([\w',\&@\#\$\% \-\(\)\)[]] + \s)\{0,2\} (DOWN| UP| OUT)| BRING \b\s?([\w',\&@\#\%\% \-\(\)\)[]$  + \s)\{0,2\} (DOWN| UP| OUT)| BRING \b\s?([\w',\&@\#\%\% \-\(\)\)[] + \s)\{0,2\} (DOWN| U UP|BUILD ON|CALL OUT|CATEGORIZE|CHALLENGE|CHARACTERIZE|CHAT|CHECK|CIRCLE BACK|CITE|CLARIFY|CLOSE OUT|COME BACK| COMMENT|CONCENTRATE|CONFIRM|CONTRAST|COVER|CROSS-EXAMINE|DEEPEN|DEFINE|DELVE|DEMAND|DESCRIBE|DETAIL|DIAL| DIFFERENTIATE|DIG|DIMENSION|DIRECT|DISAGGREGATE|DISCLOSE|DISCUSS|DIVE|DOUBLE BACK|DOUBLE CHECK|DOUBLECHECK| DOUBLE-CHECK|DRILL|ELABORATE|EXAMINE|EXPAND|EXPLAIN|EXPLORE|FEEL|FIGURE **OUT|FIND** OUT|FLESH|FOCUS|FOLLOW\*|  $FRAME[GAIN\b\s?([\w',\&@\#\$\% \-\(\)\[]]+\s)\{0,2\}PERSPECTIVE[GATHER]GET[GIVE]GLEAN[GO\b\s?([\w',\&@\#\$\% \-\(\)\[]]+\s)\{0,2\}PERSPECTIVE[GATHER]GET[GIVE]GLEAN[GO\b\s?([\w',\&@\#\$\% \-\(\)\]]+\s)\{0,2\}PERSPECTIVE[GATHER]GET[GIVE]GLEAN[GO\b\s?([\w',\&@\#\$\% \-\(\)\]]+\s)\{0,2\}PERSPECTIVE[GATHER]GET[GIVE]GLEAN[GO\b\s?([\w',\&@\#\$\% \-\(\)\]]+\s)\{0,2\}PERSPECTIVE[GATHER]GET[GIVE]GLEAN[GO\b\s?([\w',\&@\#\$\% \-\(\)\]]+\s)\{0,2\}PERSPECTIVE[GATHER]GET[GIVE]GLEAN[GO\b\s?([\w',\&@\#\$\% \-\(\)\]]+\s)\{0,2\}PERSPECTIVE[GATHER]GET[GIVE]GLEAN[GO\b\s?([\w',\&@\#\$\% \-\(\)\]]+\s)\{0,2\}PERSPECTIVE[GATHER]GET[GIVE]GLEAN[GO\b\s?([\w',\&@\#\$\% \-\(\)\)]+\s)\{0,2\}PERSPECTIVE[GATHER]GET[GIVE]GLEAN[GO\b\s?([\w',\&@\#\$\% \-\(\)\)]+\s)\{0,2\}PERSPECTIVE[GATHER]GET[GIVE]GLEAN[GO\b\s?([\w',\&@\#\$\% \-\)\]]+\s)\{0,2\}PERSPECTIVE[GATHER]GET[GIVE]GLEAN[GO\b\s?([\w',\&@\#\$\% \-\)\]]+\s)\{0,2\}PERSPECTIVE[GATHER]GET[GIVE]GLEAN[GO\b\s?([\w',\&@\#\$\% \-\)\]]+\s)\{0,2\}PERSPECTIVE[GATHER]GET[GIVE]GLEAN[GO\b\s?([\w',\&@\#\$\% \-\)\]]+\s)\{0,2\}PERSPECTIVE[GATHER]GET[GIVE]GLEAN[GO\b\s?([\w',\&@\#\$\% \-\)\]]+\s)\{0,2\}PERSPECTIVE[GATHER]GET[GIVE]GLEAN[GO\b\s?([\w',\&@\#\$\% \-\)\]]+\s)\{0,2\}PERSPECTIVE[GATHER]GET[GIVE]GLEAN[GO\b\s?([\w',\&@\#\$\% \-\)\]]+\s)\{0,2\}PERSPECTIVE[GATHER]GET[GIVE]GLEAN[GO\b\s?([\w',\&@\#\$\% \-\)\]]+\s)\{0,2\}PERSPECTIVE[GATHER]GET[GIVE]GLEAN[GO\b\s?([\w',\&@\#\$\% \-\)\]]+\s)\{0,2\}PERSPECTIVE[GATHER]GET[GIVE]GLEAN[GO\b\s?([\w',\&@\#\$\% \-\)\]]+\s)\{0,2\}PERSPECTIVE[GATHER]GET[GATHER]$ INTO|MORE|TO|THROUGH|OVER)|HEAR|HELP|HIGHLIGHT|HIT ON|INQUIRE|INTERROGATE|INVESTIGATE|JUMP (BACK|IN\*)|KNOW|LET\b\s  $?([\w',\&@\#\%\ \-\()\)[]]+\s)\{0,4\}KNOW|LEVEL\ SET|LOOK|LOOK\ BACK|MAKE\ SURE|MENTION|MORE\ (COLOR|SPECIFIC)|NEEDLE|OFFER\b\s?$  $([\w',\&@\#\%\\-\()\)]]+\s)\{0,2\}INSIGHT*|OUTLINE|OVERLAY|PARSE|PIGGYBACK|PRESSURE|PROBE|PROVIDE|PUT\b\s?([\w',\&@\#\%\\-\()\)]]$  $REPEAT|REQUEST|RESPOND|REVIEW|REVISIT|RUN\b\s?([\w',\&@\#\$\% \ \-\(\)\)]+\s)\{0,2\}THROUGH|SAY|SCOPE|SEE|SENSE|SHARE|SHED|$ STATE|STAY IN|STEP BACK|TALK|TAP INTO|TELL|TEMPT|TEST|THINK|TIE|TOUCH|TRANSLATE|TRY TO FIGURE OUT|TURN|UNDERSTAND|  $UNPACK|UNWIND|UPDATE.*|VERIFY|WALK\b\s?([\w',&@#$\% \-\(\)\[\]]+\s){0,2}THROUGH$ 

## APPENDIX C: QUESTION EXAMPLES

Type	<b>Conference call</b>	Analyst	Question
Query preparatory phrases	Equity Residential Q3 2016	Taro Cassano, Jefferies & Co.	"Okay. Great. That's helpful. And then just another quick one, just in the Bay area and San Francisco again, a lot of conversation around increased rent control initiatives showing up on the ballots during the election season. Can you talk a little bit about what you're seeing from that perspective, and what could be the potential risk to your portfolio out there?"
	NVIDIA Corp. Q3 2009	James Schneider, Goldman Sachs	"Okay, fair enough. I guess as a follow-up, in terms of the market [data] we've seen over the last few quarters, notwithstanding the macro weakness affecting desktop GPU demand, there seems to be a pretty precipitous share shift between desktops and notebooks. Can you address your outlook over the next several quarters, whether you think that there is some kind of break point where the rate of desktop share continues or doesn't decline as much going forward?"
	Laboratory Corporation of America Holding Q4 2013	Gary Lieberman, Wells Fargo	"Good morning. Thanks for taking the question. It seems like when you were first talking about the pressure from government reimbursement, at least to me, it seemed like you were more optimistic about receiving the revenue and maybe receiving it in more of a timely fashion. Is that accurate, or can you maybe characterize what you're thinking is now in terms of eventually getting that?"
	Dollar General Corp. Q2 2017	Robert Frederick Ohmes, BofA Merrill Lynch	"I was hoping you could remind us or give us some color on the Dollar Express impact on your results. It looked like because of the timing of the closing, it makes the sort of simple calculation in new store productivity look a little light for the second quarter. But could you sort of let me know if that's true and how the core new store productivity looked in the second quarter? []"
Hedged statements	Hancock Holding Co.	Jon Arfstrom, RBC Capital Markets	"But at the same time, you had a great Q4. Even if you exclude the purchased loans, you were still close to 5%. <u>Just curious</u> if you're at the lower end of the range of 7%, what's different? What's changed between Q4 and Q1 as you look out into 2016?"
	Marcus Corp. Q4 2016	Jim Goss, Barrington Research Associates	"Okay. May I shift to Screenvision for a moment. You're sort of the king standing in terms of Screenvision with Carmike now being bought by AMC. Yet AMC is selling its MCMI stake and I wonder how that dynamic might change with them more involved in Screenvision potentially?"
	Synchronoss Technologies, Inc. Q2 2010	Greg Burns, Sidoti & Company	"Good afternoon. Just a question in regards to Sprint. Seems like they're turning their business around here, putting up some incrementally better numbers. <u>I was just wondering</u> if you could maybe give us a little update on how your relationship with them is progressing?"

	Del Frisco's Restaurant Group Q3 2014	Jeff Farmer, Wells Fargo	"Helpful. And just one more. In reference to you touched on this, but expanding the marketing efforts for the Grille I think included radio, digital, billboard. I am curious if there is a precedent or a market test across really any of your concepts to illustrate how effective that sort of first ticket the marketing cut can be? I am just curious what type of incremental transaction, for example, you been able to generate with the implementation of this sort of broader marketing strategy?"
Want statement	SailPoint Technologies Holdings Inc.	Andrew Nowinski, Piper Jaffray Companies	"Okay, understood. And then I <u>wanted to ask</u> about the partnerships with the Active and CyberArk. Now how has that impacted your win ratio on deals that you go into alone versus going into with partners? And has that helped you in the federal market as well?"
	Constant Contact, Inc. Q2 2010	Bill Warmington, Raymond James	"Okay and last question for you is on the social media side you've acquired NutshellMail. You've announced the partnership with [HootSuite] and I wanted to ask whether email is still being viewed by the small business as the first step into social media marketing or well, I guess whether it will continue to be viewed that way, whether you still want to position it that way, some thoughts on your strategy there."
	Loral Space & Communications Q1 2009	Unidentified Audience Member	"Second question, <u>I would like to know</u> you and Mr. Schwartz during the last year, how many shares have you sold bought, and at what prices, please?"
	INmune Bio Inc. Q4 2019	Swayampakula Ramakanth, H.C. Wainwright & Co	"This is RK with Wainwright. A couple of questions from me. Continuing on the topic of trastuzumabresistant HER2-positive breast cancer. Is it possible for you to give us some color regarding what percentage of patients have them up for over-expression? And I think you stated this, but I just want to double check with you, has the work done by the academician able to show that INB03 actually decreases MUC4 expression in breast cancer cells in the preclinical models?"
	Lincoln National Corp. Q1 2016	Suneet Kamath, UBS	"Randy, <u>I wanted to follow-up</u> on the reinsurance transaction that you just talked about towards the end of your prepared comments. Can you, one, give us a sense of what may be the earnings impact of that transaction is? And then, two, in terms of that \$400 million of capital, was that contemplated in your original 50% to 55% capital return guidance?"
If-clauses	Arch Coal, Inc. Q1 2013	Dave Gagliano, Barclays Capital	"Okay, and then as a follow-up, just I <u>was wondering</u> if you could just confirm the forward sales in the quarter the PRB. Was it 8 million tons for 2013 delivery at about \$10.50 per ton?"
	Assurant Inc. Q2 2018	Kai Pan, Morgan Stanley	"Okay, that's great. One last one, if I may, on the potential impact from tariffs. So your contract mostly written, but would not be earned in like 2 or 3 years down the road. How do you factor that in like a potential rising cost for the component, for example, for mobiles or for the autos?"

Texas Roadhouse Inc. Q3 2019	Dennis Geiger, UBS	"Just given where you're at now on labor inflation per store, and considering the better labor scheduling and efficiencies, wondering if you could just talk about employee and customer satisfaction metrics, kind of what you're seeing also on the throughput trends? Maybe in the context of those more tightly managed stores, but then just broadly across the system?"
Wal Mart Stores Inc. Q4 2018	Charles P. Grom, Gordon Haskett Research Advisors	"Doug, from a capital allocation standpoint, <u>could you discuss</u> a little bit about closing the 63 Sam's stores earlier? And then should we expect to see continued closings both in the U.S. and International? And then for Brett, on the digital side, <u>could you shed some light</u> on the growth between 1P and 3P for the e-com business?"

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**Table 1: Sample** 

Sample	Observations
Number of total conference call transcripts	156,468
- Conference calls without Q&A session	5,116
- Transcripts with missing/incorrect firm/time identifier	5,049
- Firm-quarters with missing fundamentals (COMPUSTAT)	33,197
Number of conference call transcripts	113,106
Thereof: Nr. of unique firms	4,475
Total number of analysts' turns-at-talk	3,107,907
- Number of analysts' turns-at-talk with no answer (e.g., "Thanks.")	326,594
Number of analysts' turns-at-talk	2,781,313
Avg. number of analysts' turns-at-talk per conference call	24.59
Number of analysts' speech portion	806,002
Avg. number of turns-at-talk per analysts' speech portion	3.45
Number of managers' turns-at-talk	3,382,268
Avg. number of managers' turns-at-talk (answers to questions)	1.22
- No name match with IBES Recommendation	1,239,244
- No match with IBES Detail/missing abnormal measures	961,801
Number of matched of analyts' turns-at-talk	580,268
Thereof: Number of conference call transcripts	52,509
Thereof: Number of unique firms	2,670
Thereof: Number of unique analysts	2,871
Thereof: Number of unique brokerage houses	256
Number of matched of analysts' speech portion	173,335
Avg. Number of matched analysts' turns-at-talk per conference call	11.05

Note: This table describes the sample selection process and presents the final sample of the analysis. The sample includes all US-conference calls held between from 01/01/2008 to 09/11/2020. All transcripts are downloaded from Thompson Reuters EIKON.

**Table 2: Summary statistics** 

Variables	N	Mean	SD	$1^{st}$	$25^{th}$	Median	$75^{th}$	99 <sup>th</sup>
		PANEL A	l: Questio	on variab	les			
Indirectness	580,268	0.37	0.48	0.00	0.00	0.00	1.00	1.00
QueryPrepQ	580,268	0.20	0.40	0.00	0.00	0.00	0.00	1.00
HedgedQ	580,268	0.12	0.32	0.00	0.00	0.00	0.00	1.00
WantQ	580,268	0.07	0.26	0.00	0.00	0.00	0.00	1.00
<i>IfQ</i>	580,268	0.08	0.28	0.00	0.00	0.00	0.00	1.00
LengthQuestion	580,268	0.43	0.36	0.00	0.08	0.37	0.74	1.00
LengthAnswer	580,268	0.39	0.36	0.00	0.04	0.30	0.69	1.00
Answers	580,268	0.12	0.29	0.00	0.00	0.00	0.00	1.00
<i>NumbersQuestion</i>	580,268	0.10	0.26	0.00	0.00	0.00	0.00	1.00
NumbersAnswer	580,268	0.13	0.26	0.00	0.00	0.00	0.13	1.00
NERQuestion	580,268	0.16	0.27	0.00	0.00	0.00	0.22	1.00
NERÄnswer	580,268	0.19	0.27	0.00	0.00	0.06	0.27	1.00
FogQuestion	580,268	0.41	0.26	0.00	0.23	0.40	0.57	1.00
FogAnswer	580,268	0.46	0.27	0.00	0.26	0.47	0.65	1.00
NoAnswer	580,268	0.11	0.31	0.00	0.00	0.00	0.00	1.00
Interruption	580,268	0.01	0.11	0.00	0.00	0.00	0.00	1.00
ToneQuestion	580,268	0.40	0.24	0.00	0.24	0.35	0.54	1.00
CallPosition	580,268	4.98	3.34	1.00	2.00	4.00	7.00	15.00
QuestionPosition	580,268	2.95	2.26	1.00	1.00	2.00	4.00	11.00
		PANEL I	<b>B</b> : Analys	st variabl	es			
AnalystIndirect	173,335	0.45	0.35	0.00	0.17	0.43	0.67	1.00
ErrorPre	173,335	0.10	0.15	0.00	0.02	0.05	0.12	0.95
AccuracyPre	173,335	0.58	0.34	0.00	0.33	0.63	0.88	1.00
Recomm	173,335	0.51	0.38	0.00	0.00	0.50	1.00	1.00
ForcFreq	173,335	0.50	0.31	0.00	0.27	0.49	0.74	1.00
FirmCoverage	173,335	0.49	0.31	0.00	0.25	0.47	0.71	1.00
IndCoverage	173,335	0.41	0.34	0.00	0.11	0.33	0.67	1.00
FirmExperience	173,335	0.48	0.35	0.00	0.17	0.43	0.83	1.00
GeneralExperience	173,335	0.45	0.33	0.00	0.17	0.39	0.71	1.00
RecHorizon	173,335	0.36	0.34	0.00	0.07	0.24	0.59	1.00
SizeBrokerage	173,335	0.50	0.34	0.00	0.18	0.52	0.80	1.00
PastCall	173,335	0.70	0.46	0.00	0.00	1.00	1.00	1.00
NextCall	173,335	0.70	0.46	0.00	0.00	1.00	1.00	1.00
Gender	173,335	0.09	0.29	0.00	0.00	0.00	0.00	1.00
	PA	NEL C: C	Conferenc	e call var	riables			
AvgIndirectness	52,509	0.41	0.16	0.11	0.29	0.39	0.50	0.85
Participants	52,509	9.02	3.49	3.00	6.00	9.00	11.00	19.00
ToneMP	52,509	0.01	0.01	-0.01	0.01	0.01	0.02	0.03
Call Tone Question	52,509	0.00	0.01	-0.01	0.00	0.00	0.01	0.02
CallToneAnswer	52,509	0.01	0.01	-0.01	0.00	0.01	0.01	0.02

Table 2 (continued): Summary statistics

PANEL D: Firm-level variables								
CAR[0,1]	52,509	0.00	0.08	-0.24	-0.04	0.00	0.04	0.23
aCAR[0.1]	52,509	0.07	0.06	0.00	0.03	0.06	0.10	0.31
$\Delta Spread$	52,509	-0.01	0.14	-0.72	-0.03	0.00	0.02	0.55
AbnVolume	52,509	2.48	1.67	0.57	1.41	1.99	2.98	9.90
StandVolume	52,509	0.60	0.73	0.01	0.19	0.38	0.72	4.59
Size	52,509	8.12	1.73	4.54	6.89	8.04	9.25	12.46
BTM	52,509	0.49	0.38	-0.29	0.23	0.41	0.68	1.91
Loss	52,509	0.20	0.40	0.00	0.00	0.00	0.00	1.00
Leverage	52,509	0.60	0.25	0.10	0.43	0.59	0.77	1.37
$\Delta ROA$	52,509	0.02	0.03	-0.11	0.01	0.02	0.03	0.10
Coverage	52,509	2.44	0.54	1.10	2.08	2.48	2.83	3.43
Surprise	52,509	0.03	0.16	-0.64	-0.01	0.02	0.07	0.68
Beat	52,509	0.64	0.48	0.00	0.00	1.00	1.00	1.00

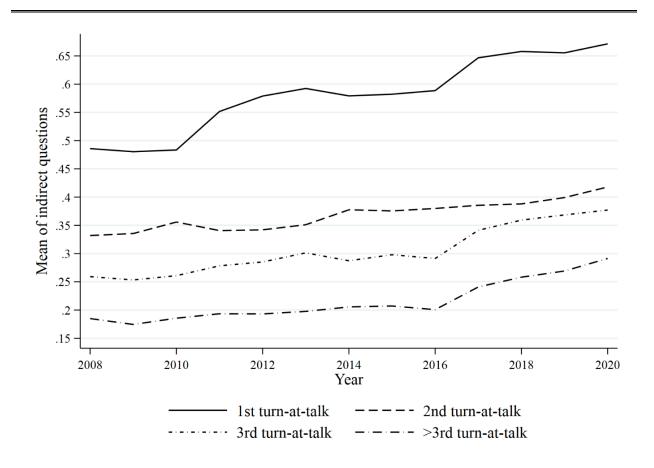
**Notes:** This table lists the variables used in the empirical analysis and the corresponding distribution parameters. Note that all variables are winsorized at the 1 and 99 percent level. For an overview on the variables please see Appendix A.

**Table 3: Differences in mean** 

	Indirectness = 0 $(N = 366,374)$	Indirectness = 1 $(N = 213,894)$	t-1	test
	Mean	Mean	Diff.	t-value
AccuracyPre	0.570	0.580	-0.00***	(-5.03)
Recomm	0.510	0.510	0.000	-0.580
ForcFreq	0.500	0.510	-0.00*	(-2.23)
FirmCoverage	0.490	0.480	0.00***	-5.300
IndCoverage	0.410	0.410	0.01***	-9.160
FirmExperience	0.500	0.480	0.01***	-15.370
GeneralExperience	0.470	0.440	0.03***	-30.470
RecHorizon	0.370	0.360	0.01***	-10.860
SizeBrokerage	0.480	0.510	-0.03***	(-27.90)
PastCall	0.700	0.710	-0.01***	(-5.52)
Gender	0.080	0.100	-0.02***	(-21.31)
LengthAnswer	0.320	0.520	-0.20***	(-206.10)
Answers	0.100	0.150	-0.06***	(-68.46)
NumbersAnswer	0.100	0.170	-0.07***	(-98.76)
NERAnswer	0.140	0.260	-0.12***	(-157.88)
FogAnswer	0.410	0.530	-0.13***	(-180.87)
NoAnswer	0.090	0.140	-0.06***	(-65.37)
Interruption	0.020	0.000	0.01***	-43.490
CallPosition	5.000	4.930	0.06***	-7.090
QuestionPosition	3.390	2.190	1.20***	-222.100
Participants	9.520	9.910	-0.39***	(-39.92)
ToneMP	0.010	0.010	-0.00***	(-47.33)

Notes: This table displays the differences in mean for the main variables of interest, conditional on whether the question is phrased in an indirect manner. For a detailed overview on the variables please see Appendix A. \*, \*\*, \*\*\* indicate two-tailed significance at the 10 percent, 5 percent, and 1 percent levels. t-values are reported in parentheses.

Figure 1: Usage of indirect questions over sample period



**Notes:** Figure 1 displays the yearly average usage of indirect questions over the sample period. The mean of indirect questions is calculated as the share of indirect relative to all total questions asked during all conference calls during each respective fiscal year of the sample period.

**Table 4: Determinants of indirect questions** 

	(1	)	(2	)	(3	)	(4	)	(5	)
Variables	Logit(Indi	rectness)								
	Coeff.	t-stat								
AccuracyPre	0.007	(0.82)							0.005	(0.58)
FirmExperience			-0.100***	(-6.70)					-0.093***	(-5.55)
GeneralExperience					-0.209***	(-13.18)			-0.170***	(-9.87)
Recomm							-0.034***	(-3.19)	-0.032***	(-3.02)
ForcFreq	0.101***	(4.80)	0.127***	(5.91)	0.104***	(4.97)	0.099***	(4.68)	0.104***	(4.97)
FirmCoverage	-0.171***	(-7.53)	-0.169***	(-7.24)	-0.126***	(-5.55)	-0.171***	(-7.54)	-0.121***	(-5.35)
IndCoverage	-0.015	(-1.04)	-0.014	(-0.93)	-0.009	(-0.60)	-0.014	(-0.95)	-0.009	(-0.61)
RecHorizon	-0.068***	(-5.43)	-0.026**	(-2.03)	-0.050***	(-4.04)	-0.064***	(-5.10)	-0.030**	(-2.34)
SizeBrokerage	0.090***	(6.00)	0.100***	(6.85)	0.071***	(4.82)	0.086***	(5.79)	0.066***	(4.48)
PastCall	0.011	(1.56)	0.019**	(2.57)	0.012*	(1.70)	0.012*	(1.70)	0.017**	(2.40)
Gender	0.120***	(6.12)	0.159***	(8.45)	0.110***	(5.52)	0.119***	(6.07)	0.108***	(5.43)
CallPosition	-0.036***	(-29.65)	-0.035***	(-27.91)	-0.037***	(-30.02)	-0.037***	(-29.88)	-0.037***	(-30.41)
QuestionPosition	-0.305***	(-61.79)	-0.318***	(-63.08)	-0.304***	(-61.49)	-0.305***	(-61.77)	-0.304***	(-61.40)
Participants	0.005***	(3.40)	0.006***	(3.10)	0.005***	(3.35)	0.006***	(3.48)	0.005***	(3.35)
ToneMP	2.459***	(4.80)	5.081***	(8.20)	2.533***	(4.94)	2.486***	(4.86)	2.537***	(4.95)
Size	0.014	(1.07)	0.002	(0.33)	0.015	(1.16)	0.015	(1.10)	0.016	(1.23)
BTM	0.030*	(1.79)	-0.065***	(-3.98)	0.031*	(1.89)	0.029*	(1.75)	0.031*	(1.87)
Loss	0.004	(0.41)	0.045***	(3.77)	0.003	(0.30)	0.004	(0.41)	0.003	(0.27)
Leverage	-0.007	(-0.23)	-0.120***	(-4.36)	-0.007	(-0.23)	-0.005	(-0.19)	-0.004	(-0.14)
$\Delta ROA$	0.219	(1.17)	0.101	(0.52)	0.196	(1.05)	0.221	(1.18)	0.194	(1.03)
Coverage	0.071***	(3.72)	0.127***	(7.12)	0.063***	(3.33)	0.072***	(3.76)	0.061***	(3.20)
Surprise	0.000***	(9.95)	0.000***	(10.07)	0.000***	(11.31)	0.000***	(10.11)	0.000***	(11.22)
Beat	0.002	(0.28)	0.011	(1.49)	0.001	(0.20)	0.002	(0.23)	0.002	(0.23)
Constant	0.358***	(2.97)	-0.024	(-0.57)	0.402***	(3.36)	0.373***	(3.10)	0.421***	(3.51)

Table 4 (continued): Determinants of indirect questions

N	580,268	580,268	580,268	580,268	580,268
R <sup>2</sup>	0.0844	0.0701	0.0850	0.0844	0.0852
Firm FE	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES
Quarter FE	YES	YES	YES	YES	YES
Cluster	FIRM	FIRM	FIRM	FIRM	FIRM

Notes: This table illustrates the association between analysts' characteristics and the usage of indirect questions in conference calls, estimated as Logit model with clustered standard errors at firm level. Indirectness indicates whether the respective question is phrased in an indirect manner. *AccuracyPre* approximates the quality of analyst a's underlying information set measured by the relative forecast accuracy before the conference call in quarter t regarding the earnings in quarter t. *FirmExperience* (*GeneralExperience*) approximates analyst a's firm-specific (general) experience as the difference between the conference call date for firm i in quarter t and analyst a's first appearance in the firm-specific (general) I/B/E/S detail file scaled by 365 days. *Recomm* captures analyst a's favorability towards firm i in quarter t measured by analyst a's outstanding stock recommendation. For a detailed overview on the variables please see Appendix A. \*, \*\*, \*\*\* indicate two-tailed significance at the 10 percent, 5 percent, and 1 percent levels. t-values are reported in parentheses.

**Table 5: Managements' information provision** 

	(1		(2)		(3)		(4)		(5)	
Variables	Length	Answer	Answ	vers	Numbers	Answer	NERAr	iswer	FogAn	swer
	Coeff.	t-stat								
Indirectness	0.075***	(59.62)	0.026***	(23.86)	0.049***	(49.08)	0.071***	(66.37)	0.052***	(54.48)
NumbersQuestion					0.158***	(72.87)				
NERQuestion							0.144***	(73.50)		
FogQuestion									0.179***	(67.53)
AccuracyPre	-0.000	(-0.23)	-0.000	(-0.26)	0.001	(1.04)	0.002	(1.31)	-0.001	(-0.56)
Recomm	0.005***	(2.60)	0.002	(1.51)	-0.001	(-0.64)	0.002	(1.11)	0.001	(0.57)
ForcFreq	-0.002	(-0.61)	0.002	(0.81)	0.001	(0.53)	0.001	(0.19)	-0.007**	(-1.99)
FirmCoverage	0.001	(0.30)	-0.004	(-1.06)	0.000	(0.15)	0.002	(0.73)	0.007*	(1.73)
IndCoverage	0.002	(0.83)	-0.002	(-0.69)	0.001	(0.22)	0.003	(1.46)	-0.003	(-1.00)
FirmExperience	-0.008**	(-2.00)	0.000	(0.08)	-0.003	(-0.92)	-0.004	(-1.06)	-0.003	(-0.71)
GeneralExperience	0.002	(0.43)	-0.001	(-0.12)	0.002	(0.49)	-0.000	(-0.01)	-0.004	(-0.73)
RecHorizon	0.002	(0.82)	0.001	(0.31)	-0.000	(-0.21)	-0.001	(-0.32)	0.000	(0.04)
SizeBrokerage	0.003	(0.90)	0.002	(0.45)	0.004	(1.21)	0.003	(0.99)	0.003	(0.89)
PastCall	-0.000	(-0.24)	0.000	(0.11)	-0.001	(-0.81)	-0.000	(-0.44)	-0.000	(-0.17)
Gender	0.004	(0.19)	0.018	(0.95)	-0.013	(-0.99)	0.007	(0.60)	0.014	(0.90)
LengthQuestion	0.424***	(184.93)	0.045***	(27.20)	0.047***	(34.36)	0.086***	(58.24)	0.143***	(89.89)
CallPosition	-0.005***	(-21.41)	0.000**	(2.26)	-0.003***	(-19.13)	-0.004***	(-24.37)	-0.002***	(-11.79)
QuestionPosition	0.001***	(3.78)	-0.003***	(-10.99)	-0.005***	(-23.19)	-0.007***	(-26.94)	-0.004***	(-14.27)
Participants	-0.002***	(-7.69)	-0.004***	(-13.87)	-0.002***	(-9.64)	-0.003***	(-11.86)	-0.003***	(-9.62)
<b>ToneMP</b>	0.026	(0.33)	-0.019	(-0.23)	-0.105	(-1.63)	-0.062	(-0.89)	-0.066	(-0.60)
Size	-0.002	(-0.94)	0.002	(0.71)	0.002	(1.15)	0.002	(0.83)	-0.001	(-0.41)
BTM	0.003	(1.02)	0.000	(0.10)	0.003	(1.25)	0.003	(1.33)	0.000	(0.13)
Loss	0.001	(0.33)	-0.003**	(-2.04)	-0.002	(-1.25)	-0.001	(-0.79)	0.006**	(2.51)
Leverage	-0.003	(-0.57)	0.011**	(2.20)	0.001	(0.31)	0.002	(0.53)	0.009	(1.38)
$\Delta ROA$	0.014	(0.45)	-0.014	(-0.44)	0.035	(1.36)	0.001	(0.06)	0.032	(0.81)
Coverage	-0.003	(-0.93)	-0.000	(-0.06)	0.002	(0.90)	0.001	(0.56)	0.002	(0.59)
Surprise	-0.000***	(-22.85)	0.000***	(5.49)	-0.000***	(-12.26)	-0.000***	(-11.45)	0.000***	(14.71)
Beat	0.000	(0.27)	-0.000	(-0.40)	-0.003***	(-2.89)	-0.002**	(-2.24)	0.003**	(2.13)
Constant	0.224***	(10.80)	0.086***	(3.79)	0.083***	(4.75)	0.123***	(6.84)	0.325***	(11.68)
N	580,		580,2		580,2		580,2		580,2	
R <sup>2</sup>	0.3		0.16		0.19		0.22		0.25	
Analyst-Firm FE	YES		YE	S	YE	S	YE	S	YE	S
Analyst-Manager	YES		YES		VEC		YES		YES	
FE					YES					
Year FE	YE		YE		YE		YES		YE	
Quarter FE	YE		YE		YES		YES		YES	
Cluster	FIR	2M	FIR	<u>M</u>	FIR	<u>M</u>	FIR	<u>M</u>	FIR	<u>M</u>

**Notes:** This table illustrates the association between indirect questions and managements' information provision, estimated with OLS regressions, clustered at the firm level. The dependent variables approximate managements' information provision measured as the answers' length (LengthAnswer), number of answers (*Answers*), number of quantitative information (*NumbersAnswer*), and number of named-entity-recognition tags (*NERAnswer*). Indirectness indicates whether the respective question is phrased in an indirect manner. For a detailed overview on the variables please see Appendix A. \*, \*\*\*, \*\*\*\* indicate two-tailed significance at the 10 percent, 5 percent, and 1 percent levels. t-values are reported in parentheses.

**Table 6: Escaping of question situation** 

	(1)	1	(2)	)	(3)		(4)		(5)	)	(6)	)
Variables	NoAns	wer	NoAns	wer	NoAns	wer	NoAns	wer	NoAns	swer	NoAns	swer
	Coeff.	t-stat										
Indirectness	0.049***	(40.90)	0.036***	(29.59)	0.049***	(40.88)	0.048***	(40.69)	0.047***	(39.65)	0.044***	(37.35)
LengthQuestion			0.077***	(42.50)								
Indirectness $\times$ LengthQuestion			-0.041***	(-13.31)								
AbnToneQ					-0.016***	(-7.59)						
$Indirectness \times AbnToneQ$					-0.002	(-0.37)						
NumbersQuestion							0.031***	(12.61)				
Indirectness ×												
NumbersQuestion							-0.030***	(-7.31)				
NERQuestion									0.051***	(21.46)		
Indirectness $\times$ NERQuestion									-0.035***	(-9.32)		
FogQuestion											0.081***	(37.15)
Indirectness $\times$ FogQuestion											-0.056***	(-13.18)
AccuracyPre	0.001	(0.98)	0.001	(0.95)	0.001	(0.99)	0.001	(0.97)	0.001	(0.97)	0.001	(0.99)
Recomm	0.001	(0.49)	0.001	(0.38)	0.001	(0.48)	0.001	(0.45)	0.001	(0.42)	0.001	(0.39)
ForcFreq	-0.005	(-1.45)	-0.006*	(-1.76)	-0.005	(-1.48)	-0.005	(-1.48)	-0.005	(-1.53)	-0.005	(-1.44)
FirmCoverage	0.003	(0.77)	0.003	(0.74)	0.003	(0.77)	0.003	(0.79)	0.003	(0.80)	0.002	(0.70)
IndCoverage	0.002	(0.73)	0.002	(0.64)	0.002	(0.68)	0.002	(0.73)	0.002	(0.76)	0.002	(0.82)
FirmExperience	0.006	(1.45)	0.006	(1.41)	0.007	(1.50)	0.006	(1.45)	0.006	(1.47)	0.007	(1.55)
GeneralExperience	0.005	(1.02)	0.006	(1.06)	0.005	(1.03)	0.005	(0.98)	0.005	(0.93)	0.005	(0.88)
RecHorizon	0.002	(1.00)	0.002	(0.95)	0.002	(1.00)	0.002	(1.02)	0.002	(1.01)	0.002	(1.00)
SizeBrokerage	0.005	(1.23)	0.005	(1.30)	0.004	(1.21)	0.004	(1.22)	0.004	(1.20)	0.005	(1.31)
PastCall	-0.002	(-1.37)	-0.002	(-1.47)	-0.002	(-1.38)	-0.002	(-1.41)	-0.002	(-1.43)	-0.001	(-1.29)
Gender	0.029*	(1.67)	0.029*	(1.65)	0.029*	(1.67)	0.029*	(1.66)	0.028	(1.61)	0.029*	(1.67)
CallPosition	0.001***	(6.82)	0.001***	(7.18)	0.001***	(6.76)	0.001***	(6.88)	0.001***	(6.91)	0.001***	(6.82)
QuestionPosition	-0.004***	(-15.36)	-0.003***	(-14.21)	-0.004***	(-15.14)	-0.003***	(-14.68)	-0.003***	(-13.59)	-0.003***	(-13.35)
Participants	-0.001***	(-3.89)	-0.001***	(-3.34)	-0.001***	(-3.93)	-0.001***	(-3.77)	-0.001***	(-3.51)	-0.001***	(-2.89)
ToneMP	-0.387***	(-4.64)	-0.379***	(-4.57)	-0.409***	(-4.91)	-0.386***	(-4.63)	-0.389***	(-4.67)	-0.395***	(-4.73)
Size	-0.002	(-0.92)	-0.002	(-0.91)	-0.002	(-0.91)	-0.002	(-0.95)	-0.003	(-1.01)	-0.002	(-0.82)
BTM	0.002	(0.70)	0.002	(0.75)	0.002	(0.72)	0.002	(0.69)	0.002	(0.67)	0.002	(0.67)
Loss	0.000	(0.25)	0.000	(0.26)	0.001	(0.28)	0.000	(0.24)	0.000	(0.27)	0.001	(0.29)

Table 6 (continued): Determinants of indirect questions

Leverage	-0.004	(-0.66)	-0.003	(-0.61)	-0.004	(-0.68)	-0.004	(-0.71)	-0.004	(-0.71)	-0.004	(-0.68)
$\Delta ROA$	0.002	(0.07)	0.001	(0.02)	0.002	(0.07)	0.002	(0.07)	0.003	(0.08)	0.001	(0.04)
Coverage	0.003	(0.94)	0.003	(1.08)	0.003	(0.97)	0.003	(0.95)	0.003	(0.95)	0.003	(0.93)
Surprise	-0.000***	(-7.78)	-0.000***	(-7.43)	-0.000***	(-7.19)	-0.000***	(-7.56)	-0.000***	(-5.53)	-0.000***	(-8.24)
Beat	-0.000	(-0.32)	-0.001	(-0.48)	-0.000	(-0.41)	-0.000	(-0.33)	-0.000	(-0.31)	-0.000	(-0.37)
Constant	0.106***	(4.86)	0.111***	(5.09)	0.106***	(4.84)	0.107***	(4.88)	0.108***	(4.95)	0.105***	(4.80)
N	580,2	68	580,2	68	580,2	68	580,2	68	580,2	68	580,2	68
R <sup>2</sup>	0.12	0	0.12	5	0.12	1	0.12	1	0.12	1	0.12	3
Analyst-Firm FE	YES	S										
Analyst-Manager FE	YES											
Year FE	YES											
Quarter FE	YES											
Cluster	FIRM	M	FIRM									

**Notes:** This table illustrates the association between indirect questions and managements' effort to escape the question situation by providing no answer, estimated as Logit model with clustered standard errors at firm level. *Indirectness* indicates whether the respective question is phrased in an indirect manner. *NoAnswer* approximates whether the management does not answer the question, identified by the regular expression scheme of Gow et al. (2021). For a detailed overview on the variables please see Appendix A. \*, \*\*, \*\*\* indicate two-tailed significance at the 10 percent, 5 percent, and 1 percent levels. t-values are reported in parentheses.

**Table 7: Management favorability** 

	(1)		(2)		(3)		
Variables	Interrup	otion	Logit(Next	tCall)	$\Delta AccuracyPre$		
	Coeff.	t-stat	Coeff.	t-stat	Coeff.	t-stat	
Indirectness	-0.005***	(-15.04)					
AvgAnalystInd			0.004	(1.08)	0.006**	(2.06)	
AccuracyPre	-0.000	(-0.56)	0.005	(1.28)	-0.999***	(-300.86)	
Recomm	-0.000	(-0.23)	0.047***	(9.58)	-0.007*	(-1.82)	
ForcFreq	0.000	(0.03)	0.027***	(3.07)	0.006	(0.83)	
FirmCoverage	0.002	(1.35)	-0.024**	(-2.48)	-0.002	(-0.20)	
IndCoverage	-0.001	(-0.52)	-0.011	(-1.63)	-0.003	(-0.63)	
FirmExperience	0.001	(0.71)	0.017	(1.47)	-0.008	(-0.88)	
GeneralExperience	-0.001	(-0.44)	0.022	(1.56)	-0.004	(-0.37)	
RecHorizon	0.000	(0.27)	-0.003	(-0.67)	-0.000	(-0.03)	
SizeBrokerage	0.000	(0.14)	0.006	(0.62)	-0.015**	(-2.07)	
PastCall	-0.000	(-1.15)	-0.004	(-1.32)	0.000	(0.17)	
Gender	-0.001	(-0.22)	-0.001	(-0.01)	-0.054*	(-1.82)	
LengthQuestion	-0.013***	(-24.24)					
CallPosition	0.000***	(2.78)					
QuestionPosition	0.001***	(7.09)					
Participants	-0.000	(-0.74)	0.003***	(3.89)	0.001	(1.22)	
ToneMP	-0.022	(-0.74)	-0.443**	(-2.15)	-0.233	(-1.44)	
Size	0.000	(0.32)	0.002	(0.34)	0.000	(0.04)	
BTM	0.001	(0.67)	-0.037***	(-4.98)	0.009	(1.62)	
Loss	-0.000	(-0.25)	-0.004	(-0.79)	-0.007*	(-1.70)	
Leverage	0.001	(0.76)	-0.007	(-0.50)	-0.002	(-0.23)	
$\Delta ROA$	-0.002	(-0.21)	0.086	(0.98)	-0.053	(-0.82)	
Coverage	0.000	(0.05)	0.008	(0.86)	0.024***	(3.66)	
Surprise	0.000	(0.93)	0.000***	(5.31)	-0.000***	(-10.02)	
Beat	-0.001*	(-1.76)	0.000	(0.09)	-0.003	(-1.15)	
Constant	0.014*	(1.90)	0.751***	(13.77)	0.539***	(13.54)	
N	580,20	68	173,33	35	173,335		
R <sup>2</sup>	0.08	6	0.182	2	0.532		
Analyst-Firm FE	YES	5	YES		YES		
Year FE	YES		YES		YES		
Quarter FE	YES	5	YES		YES		
Cluster	FIRN	Л	FIRM	1	FIRM		

Notes: This table illustrates the relation between indirect questions and the favorability of managements' public (column 1 and 2) as well as private (column 3) interaction with analyst a. Indirectness (AvgAnalystInd) indicates whether the respective question is phrased in an indirect manner (captures the relative share of analyst a's indirect questions in comparison to analyst a's total number of questions in the conference call of firm i in quarter t). Interruption and NextCall ( $\Delta AccuracyPre$ ) approximates the favorability of managements' public (private) interaction and are (is) measured as (the change in relative forecast accuracy calculated as the difference between analyst a's relative forecast accuracy before the conference call in quarter t+1 regarding the earnings in quarter t+1 and in quarter t regarding the earnings in quarter t). Column 1 (2 and 3) are calculated on an analyst-question (analyst-speech-portion) level. For a detailed overview on the variables please see Appendix A. \*, \*\*, \*\*\* indicate two-tailed significance at the 10 percent, 5 percent, and 1 percent levels. t-values are reported in parentheses.

**Table 8: Capital market reaction** 

	(1)		(2)		(3)		(4)		(5)		
Variables	CAR[0;	+1]	aCAR[0;+1]		$\Delta Spread$		AbnVolume		StandVolume		
	Coeff.	t-stat	Coeff.	t-stat	Coeff.	t-stat	Coeff.	t-stat	Coeff.	t-stat	
AvgIndirectness	0.006**	(2.24)	0.011***	(4.84)	-0.000	(-0.10)	0.351***	(4.48)	0.122**	(2.34)	
CallToneQ	2.591***	(33.34)	-0.764***	(-13.55)	-0.254*	(-1.84)	-6.576***	(-3.79)	0.462	(0.55)	
CallToneA	0.296***	(3.96)	-0.122*	(-1.91)	-0.022	(-0.15)	-0.126	(-0.06)	-1.105	(-0.86)	
Participants	0.000	(0.35)	0.000**	(2.41)	-0.000	(-0.02)	0.023***	(5.16)	0.015***	(3.70)	
<b>ToneMP</b>	0.434***	(8.91)	-0.122***	(-2.81)	0.022	(0.24)	2.077	(1.32)	-2.656**	(-2.57)	
AvgRec	0.003***	(3.75)	-0.002**	(-2.45)	-0.005**	(-2.57)	-0.011	(-0.38)	0.052***	(2.67)	
Size	-0.002***	(-5.19)	-0.010***	(-26.48)	0.004***	(6.23)	-0.089***	(-6.57)	0.002	(0.20)	
BTM	0.006***	(4.92)	0.012***	(8.08)	-0.006**	(-2.05)	0.187***	(4.24)	-0.301***	(-11.37)	
Loss	-0.003***	(-2.87)	0.012***	(11.31)	0.003	(1.23)	0.015	(0.47)	0.050***	(2.71)	
Leverage	0.009***	(4.75)	0.013***	(6.09)	-0.005	(-1.27)	0.305***	(4.11)	-0.172***	(-2.82)	
$\Delta ROA$	0.070***	(4.03)	-0.049***	(-2.95)	-0.017	(-0.43)	3.770***	(6.89)	2.599***	(6.13)	
Coverage	-0.004***	(-3.83)	0.000	(0.33)	0.011***	(5.05)	-0.055	(-1.40)	0.313***	(9.42)	
Surprise	0.039***	(12.14)	0.012***	(4.95)	-0.010*	(-1.87)	0.327***	(5.06)	0.349***	(7.40)	
Beat	0.024***	(26.35)	-0.004***	(-5.37)	-0.001	(-0.68)	-0.146***	(-7.53)	-0.026**	(-2.48)	
Constant	-0.019***	(-4.43)	0.162***	(37.47)	-0.076***	(-7.63)	2.311***	(14.24)	-0.324***	(-2.65)	
N	52,509		52,509		52,509		52,509		52,509		
R <sup>2</sup>	0.106		0.19	6	0.016		0.127		0.263		
Industry FE	YES		YES		YES	YES		YES		YES	
Year FE	YES		YES	YES		YES		YES		S	
Quarter FE	YES		YES	S	YES		YES		YES		
Cluster	FIRM	1	FIRM	<u>M</u>	FIRM	1	FIRM		FIRM		

**Notes:** This table displays the association between analysts' usage of indirect questions and the capital market's reaction, estimated with OLS regressions clustered at the firm-level. CAR[0,+1] measures the cumulative abnormal size-decile adjusted return of firm i around the conference call in quarter t.  $\Delta Spread$  measures the change in the bid-ask spread of firm i around the conference call in quarter t. AbnVolume (StandVolume) measures the abnormal (standardized) trading volume of firm i of the day of (around) the conference call in quarter t. AbnVolume (StandVolume) measures the abnormal (standardized) trading volume of firm i of the day of (around) the conference call in quarter t. AbnVolume (StandVolume) measures the abnormal (standardized) trading volume of firm i in quarter t. AbnVolume (StandVolume) measures the abnormal (standardized) trading volume of firm i in quarter t. AbnVolume (StandVolume) measures the abnormal (StandVolume) measures the

**Table 9: Conference call casting** 

	(1)		(2)				
Variables	CastFi	rst	CastHalf				
	Coeff.	t-stat	Coeff.	t-stat			
CallToneQ	-1.198***	(-2.91)	-0.322***	(-4.55)			
CallToneA	-0.638	(-1.29)	-0.005	(-0.06)			
Participants	-0.004***	(-4.00)	-0.004***	(-28.02)			
ToneMP	-0.218	(-0.64)	0.023	(0.47)			
AvgRec	0.005	(0.91)	0.000	(0.02)			
Size	0.011***	(3.91)	0.002***	(5.25)			
BTM	0.007	(0.82)	-0.001	(-0.50)			
Loss	0.001	(0.11)	0.001	(1.04)			
Leverage	0.007	(0.48)	0.001	(0.30)			
$\Delta ROA$	-0.020	(-0.18)	-0.000	(-0.02)			
Coverage	0.024***	(2.78)	0.004***	(2.89)			
Surprise	0.020	(1.31)	0.002	(0.67)			
Beat	-0.001	(-0.19)	0.000	(0.01)			
Constant	0.047	(1.45)	0.056***	(11.81)			
N	52,509	9	52,509				
R <sup>2</sup>	0.031		0.057				
Industry FE	YES		YES				
Year FE	YES		YES				
Quarter FE	YES		YES				
Cluster	FIRM	[	FIRM				

**Notes:** This table displays the association between managements' casting the conference call in terms of prefering indirect questions and the favorability of analysts' questions. *CastFirst* indicates whether the first question of the conference call of firm *i* in quarter *t* is phrased in an indirect manner. *CashHalf* measures the proportion of indirect question in the first half of the conference call of firm *i* in quarter *t*. Industry fixed effects are based on three-digit SIC code. For a detailed overview on all variables please see Appendix A. \*, \*\*\*, \*\*\* indicate two-tailed significance at the 10 percent, 5 percent, and 1 percent levels. t-values are reported in parentheses.