Do Investors Unravel Real Earnings Management to Meet or Narrowly Beat Analysts' Expectations? Evidence from Conference calls

Yuan Ji The Hong Kong Polytechnic University yuan.af.ji@polyu.edu.hk

Oded Rozenbaum The George Washington University orozenbaum@gwu.edu

Preliminary—Please do not cite or distribute without permission

Current draft: June 20, 2017

Abstract

Numerous studies classify firms that meet or narrowly beat analysts' expectations as suspects of earnings manipulation. It is likely that not all firms meet or narrowly beat analysts' expectations by manipulating earnings. Using the textual content of conference calls, we examine whether investors can identify the subset of firms that meet or narrowly beat analysts' expectations by managing discretionary expenses. We find that increased mentions of discretionary expenses in the Q&A session of conference calls is associated with lower market reaction and downward revisions to analysts' earnings estimates, but only for firms that meet or just beat analysts' expectations. We further find a positive association between the number of mentions of discretionary expenses in the Q&A session of conference calls and the future increase in those expenses for firms that meet or narrowly beat analysts' expectations. These results are stronger for firms with high analyst coverage and low abnormal discretionary expenses. A similar examination of management presentation sessions in conference calls does not yield significant results. Our results suggest that investors identify when firms use discretionary expenses to meet or narrowly beat analysts' expectations, and update their expectations accordingly.

We appreciate the comments and suggestions of Agnes Cheng, Dina Elmahdy (discussant), Chris Jones, Sok-Hyon Kang, Jeffery Ng, Linda Parsons, James Potepa, Liang Tan, Kyle Welch, Jenny Zha-Geidt, Youli Zou, and of workshop participants at The George Washington University, 2017 Hong Kong Junior Accounting Faculty Conference and the 2017 AAA Mid-Atlantic regional meeting. All errors are our own.

1. Introduction

Financial reports free of errors and manipulations are essential for market trust and efficient resource allocation. Consequently, investors, regulators, and academics are expending considerable efforts to identify earnings manipulations. Managers' incentives are a significant determinant of earnings manipulations (Jones 1991; Dechow et al. 1996; and McVay et al. 2006). Managers face pressure to meet expectations, because failure to do so may lead to adverse outcomes, ranging from lower compensation to termination (Matsunaga and Park 2001; and Farrell and Whidbee 2003). Analysts' consensus estimates serve as a significant performance benchmark for managers. Multiple studies document that missing analysts' expectations results in a reduction in firm value (Bartov et al. 2002; Kasznik and McNichols 2002; and Skinner and Sloan 2002). Consequently, the literature categorizes firms who meet or narrowly beat analysts' expectations as suspects of earnings manipulation (Degeorge et al. 1999).¹

Within the group of firms that meet or narrowly beat analysts' expectations, some firms likely achieve the earnings goal fairly, while others achieve analysts' expectations by manipulating earnings. Graham et al. (2005) find in their survey of CFOs that 79.9% of respondents agree or strongly agree that their firm may lower discretionary expenses to meet analysts' expectations. Motivated by this finding, we use conference call transcripts to examine whether investors can identify, within the set of firms that meet or just beat analysts' expectations, the firms that manipulate discretionary expenses.²

¹ Prior Studies document that managers manipulate tax expenses (Dhaliwal et al. 2004), define non-GAAP earnings opportunistically (Doyle et al. 2013), reduce discretionary expenses such as advertising and R&D (Baber et al. 1991; and Roychowdhury 2006), engage in overproduction to reduce cost-of-goods-sold (Roychowdhury 2006), use aggressive assumptions to pension assets (Bergstresser et al. 2006), and manipulate accruals (Matsumoto 2002) to achieve various performance benchmarks, mainly analysts' expectations.

² Throughout the study discretionary expenses refer to selling, general and administrative, marketing and research and development expenses.

Firms usually initiate conference calls in proximity to earnings announcements. Firm managers can use conference calls to articulate on the firm's performance and investors, mostly sell-side analysts, can probe managers and obtain further clarifications. Sell-side analysts are sophisticated investors with in-depth knowledge of the firms that they cover (Amiram et al. 2016). We posit that investors will be more diligent when firms meet or narrowly beat analysts' expectations. We further argue that if investors question the sustainability of reported discretionary expenses when firms meet or just beat analysts' expectations, two outcomes will occur. First, investors will ask for clarifications from the management on discretionary expenses during conference calls. For example, in Novo Nordisk's conference call held on August 6, 2015, Tim Race from Deutsche Bank questions the low R&D expense: "...could you just help us understand how R&D may pick up in the short-term or not, and also just where you think a sustainable level is going forward?"³ Second, investors will update their expectations negatively on the firm's performance, which we empirically capture with the market reaction and analysts' revision of next year's earnings. Therefore, we expect to find a lower market reaction (revision of analysts' estimates) when there are increased mentions of discretionary expenses in the Q&A session of conference calls.

There are several reasons for not observing a negative association between the number of mentions of discretionary expenses in the Q&A session of conference call transcripts and either market reaction or analysts' revisions. First, investors may raise more questions on complex expense items, and not because of suspicions of manipulation. Second, Mayew (2008) finds that firms have sufficient discretion when they choose the analysts that ask questions during conference

³ http://seekingalpha.com/article/3419376-novo-nordisk-a-s-nvo-ceo-lars-rebien-sorensen-on-q2-2015-resultsearnings-call-transcript

calls. It is possible that firms use their discretion to block questions on items they may have manipulated (Cohen et al. 2013). Third, if investors cannot observe indicators of earnings manipulations in earnings announcements, they will not be able to raise relevant questions at conference calls. Fourth, investors may raise concerns about the sustainability of earnings, which may be alleviated by the responses of the management. Therefore, the direction of the association between the number of mentions of discretionary expenses in conference calls and the market reaction (revision of analysts' estimates) is not clear ex-ante.

We read over 200 conference call transcripts to create a word dictionary for discretionary expenses. We then count the number of times these words appear in the management's presentation session and the Q&A session of conference calls. We find that the magnitude of the market reaction and analysts' revisions of next year's EPS estimates are lower when there is a greater discussion on discretionary expenses in the Q&A session of the conference calls, but only for firms that meet or narrowly beat analysts' expectations. We do not observe comparable results when we examine a control group of firms that narrowly miss earnings expectations.⁴ This result provides additional support that our findings are attributed to earnings management and not to the complex nature of those expense items. If the results were driven by the inherent complexity of those items, we would have expected to observe negative associations between the amount of discussion on discretionary expenses in the Q&A session and either market reaction or analysts' revisions, regardless of whether the company meets or narrowly beats analysts' expectations.

⁴ We define firms that meet or narrowly beat analysts' expectations as firms that beat analysts' expectations by a range of [0,5] cents. Similarly, we define firms that just miss analysts' expectations as firms that miss analysts' expectations by a range of [-5,0] cents. In robustness tests, we modify the ranges to intervals of 3 cents and find similar results. We also examine other control groups of firms that beat analysts' expectations by a range of [5,10] cents and all firms that are not within a range of [0,5] cents. Results under those specifications are qualitatively unchanged.

Most conference calls begin with a presentation by the management. The association between the number of mentions discretionary expenses in the management presentation session and the propensity to meet or beat analysts' expectations is ambiguous. On the one hand, Lee (2016) suggests that managers may choose to voluntarily bring up items they manipulate to do so on their terms to avoid further discussions. On the other hand, managers may abstain from disclosing information that may reveal their manipulations (Hollander et al. 2010). Furthermore, managers may choose to discuss items that they have not manipulated to distract investors' attention. In which case, we expect to observe a negative association between the frequency managers discuss a specific expense item and the market reaction (analysts' revision). However, this negative association will not indicate that the items discussed are the ones manipulated. Overall, we do not find robust evidence of an association between manager's discussion of discretionary expenses in the presentation session of conference calls and either market reaction or analysts' revision.

To validate our assertions, we examine and find a positive association between the number of mentions of discretionary expenses and the change in discretionary expenses in the following year. These results suggest that the level of discretionary expenses is not sustainable when discretionary expenses are discussed more extensively in the Q&A session of conference calls of firms that meet or just beat analysts' expectations. Because current levels of discretionary expenses are not sustainable, they increase in the subsequent year. We do not find comparable results for our control sample of firms that narrowly miss analysts' expectations, which strengthens the validity of our inferences.

We conduct two cross-sectional tests to validate the inferences we make from our results. Analysts serve a monitoring role for firms that they cover (Irani and Oesch 2013). We expect that greater analyst coverage will increase the likelihood that some analysts will identify artificial reductions in discretionary expenses and inquire about them at conference calls. Consistent with our expectations, we find that the negative association between mentions of discretionary expenses in the Q&A session of conference calls and market reaction (analysts' revision) is stronger for firms with high analyst coverage. We also find that the positive association between mentions of discretionary of discretionary expenses in the Q&A session of conference calls and that the positive association between mentions of expenses in the Q&A session of conference calls and that the positive association between mentions of expenses in the Q&A session of conference calls and future increases in those expenses is stronger for firms with high analyst coverage.

Analysts and other conference call participants may question the sustainability of discretionary expenses after evaluating the discretionary expenses metrics in the earnings announcement. Therefore, in our second cross-sectional test, we follow Cohen and Zarowin (2010) to create a measure of abnormal discretionary expenses. We then partition the sample of firms that meet or just beat analysts' expectations into two groups with high and low abnormal discretionary expenses based on the median value. We find that the negative association between mentions of discretionary expenses in the Q&A session of conference calls and market reaction (analysts' revision) is stronger for firms that meet or just beat analysts' expectations and have low abnormal discretionary expenses. We also find that the positive association between mentions of discretionary expenses in the Q&A session of conference calls and future increases in those expenses is attributable to firms that meet or just beat analysts' expectations with low levels of abnormal discretionary expenses. Lastly, to further validate our proxy-the number of mentions of discretionary expenses in the Q&A session of conference calls-we test and find a positive association between the number of mentions of discretionary expenses in conference calls and the propensity to meet or just beat analysts' expectations.

Our study makes several contributions to the literature. First, our study extends the literature on the informativeness of conference calls and provides evidence on the information gathering efforts by investors and its impact on the information content of conference calls. Prior research suggests that investors rely on observable evidence to identify accounting manipulations (Bartov et al. 2002; and Defond and Park 2001). Our evidence further suggests that investors also use conference calls to gather information on earnings manipulations. Furthermore, multiple studies document the informativeness of conference calls (e.g., Brown et al. 2004; Bowen et al. 2002; Frankel et al. 1999; and Matsumoto et al. 2011). We extend these studies by providing evidence on conference call participants' intervention to acquire information. Our results also suggest that there are longer discussions in the Q&A session of conference calls on items conference call participants believe contributed to firms' ability to meet or narrowly beat analysts' expectations. Tasker (1998) documents a substitution effect between the information content of earnings announcements and conference calls. Our evidence suggests that when firms meet or narrowly beat analysts' expectations, investors use conference calls to complement the information they obtained from the earnings announcement.

Our study also contributes to the literature on earnings management. Many studies use the rule of whether firms meet or narrowly beat analysts' expectations as a proxy for earnings management (e.g., Barua et al. 2010; Doyle et al. 2013; and Haribar et al. 2006). Our study suggests that this proxy is subject to type I errors (i.e., falsely rejecting the null of no earnings management) and provides a way to reduce this flaw.

2. Motivation and research questions

Analysts' expectations are an important benchmark for firm managers. In a survey by Graham et al. (2005), 73.5% of responding CFOs claim that analysts' consensus forecasts are an

important benchmark they seek to achieve. The responding CFOs further claim that meeting earnings benchmarks help them to build credibility with the capital markets (86.3% of respondents) and maintain or increase stock price (82.2% of respondents). Consistent with this evidence, multiple studies find a negative market reaction when firms miss analysts' expectations (Bartov et al. 2002; Kasznik and McNichols 2002; and Skinner and Sloan 2002). As a result, managers face constant pressure to meet analysts' expectations. Prior studies find that missing analysts' expectations leads to adverse outcomes, ranging from lower compensation to termination (Matsunaga and Park 2001; and Farrell and Whidbee 2003). The pressure to meet analysts' expectations may lead managers to pursue real and accrual-based earnings management. In the survey by Graham et al. (2005), 79.9% of responding CFOs claim their firms decrease discretionary spending to meet benchmarks. Motivated by this result, we focus this study on discretionary expenses manipulations to meet or just beat analysts' expectations.

The strong incentives of managers to meet or narrowly beat earnings expectations are likely known to stock market participants.⁵ Keung et al. (2010) find that when firms meet or just beat earnings expectations, stock market participants assess the likelihood that the firm engaged in earnings management to reach that benchmark and incorporate this assessment in determining the firm's value. Similarly, AU Section 316 (consideration of fraud in financial statement audit) requires the auditor to consider managers' incentives to meet analysts' expectations when assessing the audit risk (p. 1749). As a result, a voluminous number of studies identify firms that meet or narrowly beat analysts' expectations as suspects of earnings manipulation (e.g., Baber et al. 2011; Black and Christensen 2009; Cook et al. 2008; Caskey and Ozel 2017; and Doyle et al.

⁵ Stock market participants include but not limited to investors, regulators, auditors, and sell-side analysts.

2013). However, this identification strategy for earnings management is likely subject to type I error (non-manipulating firms are classified as manipulative).

While some firms may manage earnings to meet or narrowly beat analysts' expectations, other firms may achieve this goal genuinely. We argue that investors and sell-side analysts will try to determine whether firms managed earnings to meet or just beat analysts' expectations, or whether earnings are genuine and current period's performance is sustainable. We further argue that earnings conference calls may be a good setting for investors and sell-side analysts to inquire about the sustainability of current period's performance. To the extent that conference call participants suspect that discretionary expenses were manipulated to meet or just beat analysts' expectations, they will inquire management about the sustainability of those expenses. For example, in Myers Industries conference call held on October 29, 2015, Marc Solecitto, an analyst from KeyBanc, notes: "Should we look at 11% margins in that business as sustainable or whether there are some one-time items that we should be aware of?" Furthermore, if investors are concerned about potential earnings manipulations and the sustainability of discretionary expenses, we expect them to update their valuation of the firm and expectations on future earnings accordingly.

Keung et al. (2010) find that analysts' revisions and market reaction following earnings announcements are attenuated when firms meet or just beat analysts' expectations. These results suggest that when firms meet or just beat analysts' expectations investors suspect that current period's performance is not sustainable, and incorporate it into their assessment of firm's value. If conference call participants raise questions on discretionary expenses because they suspect the discretionary expenses have been artificially lowered to meet or beat analysts' expectations, we expect to observe a negative association between the amount of discussion on discretionary expenses in the Q&A session of conference calls and the magnitude of analysts' revisions and market reaction. This reasoning also implies that we should not observe comparable results (i.e., a negative association between the amount of discussion on discretionary expenses in the Q&A session of conference calls and the magnitude of analysts' revisions and market reaction) for firms that just miss analysts' expectations. Finding similar results for firms that do not meet or narrowly beat analysts' expectations may open the results to additional alternative interpretations, such as the inherent complexity or adverse outlook of discretionary expenses.

There may be additional considerations that can reduce or eliminate the negative association between the amount of discussion on discretionary expenses and the market reaction or analysts' revision. First, investors may raise more questions on complex expense items, and not because of suspicions of manipulation. Second, Mayew (2008) finds that firms use discretion when they choose the analysts that ask questions in conference calls. Therefore, it is possible that firms would use their discretion to block questions on items they may have manipulated (Cohen et al. 2013). Third, if investors cannot observe indicators of earnings manipulations in earnings announcements, they will not be able to raise relevant questions in conference calls. Fourth, investors' concerns may be alleviated following the firm's response to the questions. Lastly, managers may manipulate earnings to meet other performance benchmarks. If so, the frequency of the appearance of these expense items in conference call transcripts will not be associated with either the market reaction or analysts' revision. Therefore, the direction of the association between the amount of discussion on discretionary expenses in the Q&A session of conference calls and changes in investors' expectations is not clear ex-ante.

RQ₁: Is the amount of discussion on discretionary expenses the Q&A session of conference calls negatively associated with the market reaction and analysts' revision?

Earnings conference calls usually begin with a management presentation on the firm's performance and future prospects. The association between the amount of discussion on discretionary expenses in the presentation session and either market reaction or analysts' revision is ambiguous. On the one hand, Lee (2016) suggests that managers may choose to voluntarily bring up items they manipulate in order to do so on their terms to avoid further discussions. On the other hand, managers may abstain from disclosing information that may reveal their manipulations (Hollander et al. 2010). Furthermore, managers may choose to bring up and discuss items that they have not manipulated to distract investors' attention. In which case, we can expect to observe a negative association between the frequency managers discuss a particular item and either market reaction or analysts' revision. However, this negative association will not indicate that the items managers discuss are the ones they also manipulated.

*RQ*₂: Is the amount of discussion on discretionary expenses in the presentation session of conference calls negatively associated with the market reaction and analysts' revision?

Following the results by Christensen et al. (2017), to the extent that firms artificially lower discretionary expenses, we expect that such actions will not be sustainable and reverse in the future (i.e., we expect to observe future increases in discretionary expenses). If increased discussions on discretionary expenses for firms that meet or narrowly beat analysts' expectations is associated with earnings manipulations, we expect to observe a positive association between the amount of discussion on discretionary expenses and future changes in those expenses.

RQ₃: Is the amount of discussion on discretionary expenses in the presentation and Q&A sessions of conference calls negatively associated with future increases in those expenses?

3. Research design

3.1 Identifying conference call discussions on discretionary expenses

Roychowdhury (2006) and Graham et al. (2005) suggest that firms cut discretionary costs, such as R&D and G&A to meet earnings expectations. To test our research questions, we identify the amount of discussion on discretionary expenses in both the presentation session and the Q&A session of conference calls. To do so, we read over 200 conference call transcripts and identified a vocabulary of words that relate to discretionary expenses. We proxy for the amount of discussion on discretionary expenses by counting the number of times "R&D", "research and development", "G&A", "SG&A", "selling, general and administrative", "general and administrative", "marketing expenses", or "advertising expenses" appear separately in the management presentation or the Q&A session of conference calls. Detailed variable definitions can be found in the Appendix.

3.2 Testing RQ1 and RQ2

We test research question (1) on the association between the amount of discussion on expense items in the Q&A a session of conference calls and the market reaction (analysts' revision) around the conference call date using an OLS regression:

$$CAR_{i,t} [Revision_{i,t}] = b_0 + b_1 SUR_{i,t} + b_2 Q_Disc.Expenses_{i,t} + b_3 Q_Disc.Expenses \times SUR_{i,t} + b_4 Q_Length_{i,t} + b_5 Participants_{i,t} + b_6 ForecastDispersion + b_7 Book-to-Market_{i,t} + b_8 LnSize_{i,t} + b_9 ROA_{i,t} + b_{10} Loss_{i,t} + b_{11} AbDisc.Expenses_{i,t} + \sum IndustryFixedEffects + \sum YearFixedEffects + e_{i,t}$$
(1)

CAR is the three-day cumulative abnormal returns around firm *i*'s conference call for quarter *t*'s results. *Revision* is the change in next year's analysts' consensus estimate immediately following the conference call. *SUR* is firm *i*'s unexpected EPS in quarter *t* (compared to the prevailing analysts' consensus estimate). *Q_Disc.Expenses* captures the number of times words related to

discretionary expenses appear in the Q&A session of firm *i*'s conference call for quarter *t*'s results. We control for the total amount of information contained in the conference call using *Q_Length* and *Participants*, where *Q_Length* captures the number of words in the Q&A session of conference calls and *Participants* captures the number of participants on the conference call. We also control for general firm characteristics such as book-to-market (*Book-to-Market*), firm size (*LnSize*), and firm profitability (*ROA* and *Loss*) and information uncertainty (*ForecastDispersion*). Lastly, we control for an accounting-based measure of abnormal discretionary expenses (*AbDisc.Expenses*) following Cohen and Zarowin (2010), and include industry and year fixed effects.⁶ We estimate Eq. (1) separately for our treatment group of firms that meet our just beat analysts' expectations by up to 5 cents and our control group of firms that just miss analysts' expectations by up to 5 cents.

We use a variation of Eq. (1) to examine the association between the amount of discussion on discretionary expenses in the presentation session of conference calls and the market reaction (analysts' revision) around the conference call date (Research Question 2). We replace our word count measure from the Q&A session of conference calls with an identical measure that is extracted from the management presentation session ($P_Disc.Expenses$). We provide detailed variable definitions in the appendix.

3.3 Testing RQ3

Research Question 3 examines the association between the amount of discussion on discretionary expenses in the presentation and Q&A sessions of conference calls and future changes in those expenses. Our research design is motivated by Christensen et al. (2017):

⁶ In robustness tests we replace the industry fixed-effects with firm fixed-effects. Inferences remain unchanged.

 $\Delta Disc. Expenses_{i,t+1} = c_0 + c_1 Q_Disc. Expenses_{i,t} + c_2 P_Disc. Expenses_{i,t} + c_3 Q_Length_{i,t} + c_4 P_Length_{i,t} + c_5 Participants_{i,t} + c_6 Forecast Dispersion_{i,t} + c_7 Book-to-Market_{i,t} + c_8 LnSize_{i,t} + c_9 ROA_{i,t} + c_{10} Loss_{i,t} + c_{11} AbDisc. Expenses_{i,t} + \sum Industry Fixed Effects + c_{i,t}$ (2)

Where $\Delta Disc.Expenses_{i,t+1}$ is the change in discretionary expenses (R&D, SG&A, and marketing expenses) in year *t*+1 relative to year *t*. All other variables are as previously defined. When firms engage in earnings management by lowering expenses to meet or narrowly beat expectations, we expect to observe future increases in those expenses, since the low levels are likely unsustainable. If investors can identify when discretionary expenses are manipulated to meet or beat analysts' expectations and raise questions about it in conference calls, we expect to find a positive association between the amount of discussion on discretionary expenses and future changes in those expenses. We estimate Eq. (1) separately for our treatment group of firms that meet our just beat analysts' expectations by up to 5 cents and our control group of firms that just miss analysts' expectations by up to 5 cents.

4. Sample selection and descriptive statistics

4.1 Sample selection

We download all available articles from the transcript center of the *SeekingAlpha.com* website, which contains conference call transcripts from January 1st, 2000 to December 31st, 2015.⁷ We use Python to remove articles that are either audio webcasts or non-earnings conference call manuscripts to ensure our sample is restricted to conference call transcripts. Specifically, we require that the title of the article includes either "earnings call transcript" or "earnings conference call transcript", and remove articles with the word "webcast" in the title. We also require each item

⁷SeekingAlpha.com is founded in 2004 by former Wall Street analyst David Jackson. It provides articles and research that cover a wide range of investment portfolios. It also provides daily updated conference call transcripts, which are publicly available.

to include three parts: a participant list, a presentation session, and a question-and-answer session. Also, we download all transcripts in the raw HTML format, which enables us to identify the main body of each transcript and remove other content. We then collect the following information from each transcript: ticker symbol of the firm, the date of the conference call, the number of analysts participating in the call, and two separate parts, one for the presentation session and one for the question-and-answer session. After deleting 58 transcripts with missing a ticker symbol and 269 observations with other data errors, we are left with an initial sample of 94,077 observations for our sample period. However, as we focus on meet or beat analyst forecast behavior in the last quarter (Quarter 4) of each fiscal year, we delete conference call manuscripts for other quarters. This process reduces the sample size to 23,891 unique earnings conference call transcripts.

Finally, we use firm ticker symbol to merge the conference call data with Compustat annual financial to obtain additional accounting-based variables. We obtain analyst EPS consensus estimates from the I/B/E/S summary file, and merge it with our data based on the ticker symbol and year. This matching process reduced the sample by 8,283 observations. Therefore, our general sample contains 15,608 earnings conference call manuscripts for 3,698 unique firms covering the years 2000 to 2015. In some analyses, we examine different subsets of the data, which results in smaller subsamples. In most analyses, we examine separately our treatment group of firms that meet our just beat analysts' expectations by up to 5 cents and our control group of firms that just miss analysts' expectations by up to 5 cents. Detailed variable definitions can be found in the appendix.

4.2 Descriptive statistics

Table 1 presents descriptive statistics of all the main variables we use in our analyses. We are interested in distinguishing between our treatment group of firms that meet or just beat analysts' expectations by up to 5 cents and our control group firms that just miss analysts' expectations by up to 5 cents. Therefore, we present the means of all variables for firms the meet or narrowly beat analysts' expectations (MBE = 1) and firms that narrowly miss analysts' expectations (MBE = 0). Mean $Q_Disc.Expenses$ for the subsample of firms that meet or narrowly beat analysts' consensus estimate is 2.686, and 2.435 for firms that just miss analysts' expectations. The difference, 0.251, is statistically significant at the 1% level. These results suggest that there is more discussion on discretionary expenses (i.e., R&D, SG&A, and adverting expenses) in the Q&A session of conference calls when firms meet or just beat analysts' expectations. We find similar patterns for discussions on discretionary expenses in the presentation session of conference calls ($P_Disc.Expenses$). The mean for MBE = 1 firms is 1.613, and 1.478 for MBE = 0 firms. The difference, 0.135, is also statistically significant at the 1% level.

We also find that firms that just meet earnings expectations have longer conference call Q&A and presentation sessions. Mean Q_Length (P_Legnth) is 8.247 (6.922) for MBE = 1 firms and 8.182 (6.742) for MBE = 0 firms. Similarly, there are more participants at conference calls of firms that just meet analysts' expectations compared to firms that just miss analysts' expectations. The earnings surprise (*SUR*) is, by construction, slightly positive for MBE = 1, with a mean of 0.017, and slightly negative for MBE = 0 firms, with a mean of -0.002. As a result, the market reaction (*CAR*) and analysts' revision (*Revision*) are higher for firms that just beat analysts' expectations.

firms. Mean *Revision* is 0.190 for MBE = 1 firms and 0.168 for MBE = 0 firms. The difference, 0.023, is statistically and economically significant. Lastly, the change in discretionary expenses ($\Delta Disc.Expenses$) in the subsequent year is higher for MBE = 1 firms. This result suggests that level of discretionary expenses of firms that just beat analysts' expectations is not sustainable. Overall, the univariate results provide preliminary evidence that increased discussions on discretionary expenses in conference calls are associated with a higher likelihood of meeting or narrowly beating analysts' consensus estimates.

Table 2 provides the correlation matrix for key variables, with Spearman (Pearson) correlations reported below (above) the diagonal. Row 1 (with Pearson correlations) reports that meeting or just beating analysts' expectations (*MBE*) is positively associated with $Q_Disc.Expenses$ (correlation = 0.044). Consistent with the results in Table 1, this correlation suggests that discretionary expenses appear significantly more times in the Q&A session of conference calls when firms meet or just beat analysts' expectations. We also find that Q_Length is positively associated with *MBE*, suggesting that firms that meet or beat analysts' expectations have longer Q&A sessions during conference calls. Lastly, there is a 0.167 correlation between $Q_Disc.Expenses$ and $\Delta Disc.Expenses$. This correlation informs that more discussions on discretionary expenses is associated with future increases in those expenses, suggesting that the level of the discretionary expenses in year *t* is not sustainable.

5. Results

5.1 Test of RQ1: The amount of discussion on discretionary expenses at the Q&A session of conference calls and market reaction (analysts' revision) around the conference call date

Table 3 presents the results from testing Research Question 1—the relation between the market reaction (analysts' revision) around the conference call date and the amount of discussion

on discretionary expenses during the Q&A session of conference calls. To differentiate our interpretation from alternative explanations, we expect that when, and only when, firms meet or narrowly beat analysts' expectations, stock returns (analyst revisions) will be attenuated when there is a greater discussion on discretionary expenses in the Q&A session of conference calls. Therefore, we test the model in Eq. (1) separately for firms that meet or narrowly beat analyst's expectations by up to 5 cents in columns 1 and 3, and for firms that just miss analysts' expectations by up to 5 cents columns 2 and 4.

Column 1 presents the results of examining the three-day cumulative abnormal returns around the conference call date when firms just beat analysts' expectations. The coefficient estimate on our main variable of interest, $Q_Disc.Expenses \times SUR$ is -0.008 (t-statistic = -2.671), which implies a lower market reaction to the earnings surprise when there is more discussion on discretionary expenses is the Q&A session of conference calls. We do not observe similar coefficient estimates in column 2 for firms that just miss analysts' expectations. The coefficient estimate on $Q_Disc.Expenses \times SUR$ is 0.002 (t-statistic = 0.426). This finding provides additional support that our findings are attributable to investor suspicion of earnings manipulation and are less likely driven by the complexity of discretionary expenses.

Column 2 presents the results of examining the revision of the analysts' consensus estimates following the conference call for firms that meet or just beat analysts' expectations. We find that analysts' revision of their expectations is lower when there are more mentions of discretionary expenses. The coefficient estimates on $Q_Disc.Expenses \times SUR$ is -0.088 (t-statistic = -2.469). As before, we do not observe similar coefficient estimates for the subset of firms that just miss analysts' expectations in column 4. The coefficient estimate on our variable of interest is insignificantly different from zero (estimate = -0.007 and t-statistic = -0.524).

In summary, the results in Table 3 suggest that when conference call participants discuss discretionary expenses more extensively, the market reaction and analysts' revision of their EPS forecasts are smaller. These results imply that investors believe that discretionary expenses were manipulated to meet or beat analysts' expectations. We do not find similar results when firms that just miss expectations, which provides additional support that our findings are attributable to the suspicions of conference call participants of earnings manipulation, and are less likely to be driven by alternative explanations, such as the complex nature of certain expenses.

5.2 Test of RQ2: The amount of discussion on discretionary expenses at the presentation session of conference calls and market reaction (analysts' revision) around the conference call date

Table 4 presents the results for testing Research Question 2—the relation between the market reaction (analysts' revision) around the conference call date and the amount of discussion on discretionary expenses during presentation sessions of conference calls. We do not find a significant association between the amount of discussion on discretionary expenses by the management at the presentation session of conference calls and either market reaction or analysts' revision. We present the results for firms that just meet analysts' expectations when market reaction is the dependent variable in column 1. The coefficient estimate on P_Disc.Expenses \times SUR is -0.002 (t-statistic = -0.221). The results are not materially different from firms that just miss analysts' expectations. The coefficient estimate on Q_Disc.Expenses \times SUR for firms that just miss analysts' expectations (in column 2) is -0.009 (t-statistic = -0.816).

We present the results where the dependent variable is analysts' revisions in columns 3 and 4. The coefficient estimate on $Q_Disc.Expenses \times SUR$ for firms that just meet analysts' expectations is -0.083 (t-statistic = -1.171), and -0.046 (t-statistic = -0.543) for firms that just miss analysts' expectations. To conclude, we do not find an association between the amount of

discussion on discretionary expenses in the presentation session of conference calls and either market reaction or analysts' revision. This finding suggests that managements do not provide information that reveals earnings management to the same extent as the information investors obtain during the Q&A sessions.

5.3 Test of RQ3: The amount of discussion on discretionary expenses at conference calls and discretionary expense sustainability

Deflating discretionary expenses is a form of real earnings management. If firms artificially lower discretionary expenses to beat expectations, we expect to observe a future increase in the level of those expenses since it is likely unsustainable. Research question 3 examines whether there is a positive association between the amount of discussion on discretionary expenses at conference calls and future increases in discretionary expenses. We present the results in Table 5. The sample in columns 1 is restricted to firms that just meet analysts' expectations and the sample in column 2 is restricted to firms that just miss earnings expectations. The coefficient estimate on $Q_Disc.Expenses$ in column 1 is 0.003 (t-statistic = 2.081). In contrast, the coefficient estimate on $Q_Disc.Expenses$ for firms that just miss analysts' expectations is economically and statistically insignificant. The difference in results between the two groups of firms allows us to attribute the results for the subset of firms that just meet earnings expectations to investors' ability to identify manipulations of discretionary expenses and inquire about them at conference calls.

We do not find statistically significant results for the amount of discussion at the presentation sessions of conference calls both for our treatment group of firms that just meet analysts' expectations and our control group of firms that just miss analysts' expectations. The coefficient estimates on *P_Disc.Expenses* are 0.002 (t-statistic = 1.644) and 0.003 (t-statistic = 0.859) for firms that just meet and just miss analysts' earnings expectations, respectively.

6. Additional analyses

6.1 The impact of investors' likelihood of identifying and questioning management on discretionary expenses

Irani and Oesch (2013) find that sell-side analysts play a monitoring role in firms that they cover. They further find that more analyst coverage enhances the quality of the monitoring. Building on those findings, we argue that the greater number of analysts covering a firm, the higher the likelihood that manipulations of discretionary expenses will be detected and discussed in the Q&A session of conference calls. We examine the impact of analyst coverage by partitioning the sample of firms that just beat analysts' expectations into two groups: (1) firms with analyst coverage above the population median, and (2) firms with coverage below the population median. We then apply the models in Eq. (1) and (2) for the two subsamples separately. We expect to find stronger results for the subset of firms with high analyst coverage.

We present the results from estimating Eq. (1) in Table 6. We find that the association between the number of mentions of discretionary expenses in the Q&A session of conference calls and either market reaction or analysts' revision is stronger for firms with high analyst coverage. Columns 1 and 2 present the results for market reaction. The coefficient estimate on $Q_Disc.Expenses \times SUR$ is -0.016 (t-statistic = -4.326) for firms with high analyst coverage, compared to a coefficient estimate of -0.006 (t-statistic = -1.450) for firms with low analyst coverage. We find similar results for analysts' revision. The coefficient estimates on $Q_Disc.Expenses \times SUR$ are -0.157 (t-statistic = -3.329) and -0.042 (t-statistic = -0.656) for firms with high and low analyst coverage, respectively.

Table 7 provides the results from estimating Eq. (2) for firms that just meet analysts' expectations, partitioned on high and low analyst coverage. We find that the association between

the number of mentions of discretionary expenses at conference calls and the change in discretionary expenses in the following year is stronger for firms with high analyst coverage. The coefficient estimate on $Q_Disc.Expenses$ for firms with high analyst coverage is 0.004 (t-statistic = 2.154), compared to a coefficient estimate of 0.002 (t-statistic = 1.344) for firms with low analyst coverage. Overall, our results suggest that greater analyst coverage increases the probability of discretionary expense manipulations being detected and questioned at earnings conference calls.

6.2 The impact of an accounting-based measure of discretionary expenses.

Earnings conference calls are initiated after and in proximity to the earnings announcement. Therefore, investors are likely to obtain red-flags on manipulations of discretionary expenses from the information available in the earnings announcement. We follow Cohen and Zarowin (2010) and construct a measure of abnormal discretionary expenses (*AbDisc.Expenses*; details are available in the appendix). We then partition the sample of firms that just beat analysts' expectations into firms with low abnormal discretionary expenses (with values below the sample median) and firms with high abnormal discretionary expenses (with values above the sample median). Since firms are likely to manipulate discretionary expenses by artificially lowering them, we expect to find stronger results for firms with low abnormal discretionary expenses.

We present the results from estimating equation (1) in Table 8. We expect to find a stronger association between the number of mentions of discretionary expenses in the Q&A session of conference calls and either market reaction or analysts' revision for firms with low abnormal discretionary expenses. We provide the results where market reaction is the dependent variable in columns 1 and 2. The coefficient estimates on $Q_Disc.Expenses \times SUR$ are 0.002 (t-statistic = 0.389) and -0.019 (t-statistic = -2.704) for firms with high and low abnormal discretionary expenses, respectively. We present the results where the depedent variable is analysts' revision in

columns 3 and 4. The coefficient estimate on $Q_Disc.Expenses \times SUR$ for firms with high abnormal discretionary expenses is -0.067 (t-statistic = -1.414), compare to -0.186 (t-statistic = -2.115) for firms with low abnormal discretionary expenses.

Table 9 provides the results from estimating Eq. (2) for firms with high (low) abnormal discretionary expenses. The coefficient estimate on $Q_Disc.Expenses$ for firms with high abnormal discretionary expenses in column 1 is insignificant (estimate = 0.001, t-statistic = 0.330), compared to a coefficient estimate of 0.006 (t-statistic = 4.322) for firms with low abnormal discretionary expenses. Overall, the results suggest that investors scrutinize firms that just meet analysts' expectations and have low abnormal discretionary expenses. The investors then raise questions and revise their expectations on the firm's future performance when they believe discretionary expenses were managed downwards.

6.3 Mentions of discretionary expenses at conference calls and the likelihood of meeting or narrowly beating analysts' expectations

The results suggest that when investors suspect that discretionary expenses were used to manipulate earnings to meet or just beat analysts' expectations, they ask about it during the Q&A sessions of conference calls. To further validate our findings, we examine whether the number of mentions of discretionary expenses during conference calls is associated with meeting or narrowly beating analysts' expectations. To test this question, we follow Doyle et al. (2013) and use the following logit regression:

$$MBE_{i,t} = c_0 + c_1Q_Disc.Expenses_{i,t} + c_2P_Disc.Expenses_{i,t} + c_3Q_Length_{i,t} + c_4P_Length_{i,t} + c_5Participants_{i,t} + c_6ForecastDispersion_{i,t} + c_7Book-to-Market_{i,t} + c_8LnSize_{i,t} + c_9ROA_{i,t} + c_{10}Loss_{i,t} + c_{11}AbDisc.Expenses_{i,t} + \Sigma IndustryFixedEffects + \SigmaYearFixedEffects + e_{i,t}$$
(3)

Detailed variable definitions can be found in the appendix. The results suggest that mentions of discretionary expenses in the Q&A session of conference calls are positively associated with the

likelihood of meeting or just beating analysts' expectations (coefficient estimate on $Q_Disc.Expenses = 0.013$, t-statistic = 3.295). Consistent with our prior findings, we do not find that the number of mentions of discretionary expenses in the presentation session of conference calls is significantly associated with the likelihood of meeting or just beating analysts' expectations. We further find that the likelihood of meeting or just beating analysts' expectations is positively associated with the length of the Q&A session (coefficient estimate = 0.029, t-statistic = 2.349), book-to-market ratio (coefficient estimate = 0.018, t-statistic = 2.309), firm size (coefficient estimate = 2.051, t-statistic = 6.369), and negatively associated with return on assets (coefficient estimate = -0.012, t-statistic = -1.676). Overall, these results suggest that when firms meet or just beat analysts expectations, investors raise more questions on discretionary expenses during the Q&A session of earnings conference calls.

7. Conclusion

Firms face a strong pressure to meet or beat analysts' expectations. According to the survey by Graham et al. (2005), the most common form of earnings management to meet earnings expectations is to decrease discretionary expenses artificially. However, not all firms that meet or just beat analysts' expectations do so by manipulating discretionary expenses. In this study, we examine whether investors can determine which firms meet analysts' expectations truthfully and which firms achieve that goal through manipulating discretionary expenses. We argue that if investors have suspicions on manipulation of discretionary expenses to meet or just beat analysts' expectations, they are going to (1) revise their expectations on the firm's future performance and value downwards, and (2) inquire about it during the Q&A session of earnings conference calls. We find that within the subset of firms that meet or just beat analysts' expectations, there is a negative association between the number of mentions of discretionary expenses and market reaction (analysts' revision). However, we do not find significant results for our control group of firms that just miss analysts' expectations, which makes some alternative explanations less likely.

If firms manage discretionary expenses by lowering them to meet analysts' expectations, we expect to find a future increase in those expenses. Consistent with our expectations, we find a positive association between the number of mentions of discretionary expenses in the Q&A session of conference calls and next year's change in those expenses for firms that just meet analysts' expectations. But we do not observe similar results for our treatment group of firms that just miss analysts' expectations. These findings suggest that our results are not attributable to the complexity of discretionary expenses.

We also perform multiple robustness tests. We find stronger results for firms with high analyst coverage, consistent with the monitoring role of sell-side financial analysts. We also find stronger results for firms with low abnormal discretionary expenses. We expect that investors obtain their information from earnings announcements, which is the basis for their questions at conference calls. Our results suggest that investors scrutinize firms with low abnormal discretionary expenses, and raise questions at conference calls when they suspect discretionary expenses were manipulated.

Our study makes several contributions to the literature. First, our study extends the literature on the informativeness of conference calls, and provides evidence on the information gathering efforts by investors and its impact on the information content of conference calls. Second, many studies use the rule of whether firms meet or narrowly beat analysts' expectations as a proxy for earnings management. Our study documents differential investor behavior for firms that just meet analysts' earnings expectations, which suggests that this proxy is subject to type I

errors (i.e., falsely rejecting the null of no earnings management) and provides a way to reduce this limitation.

Appendix – Variable definitions

Variables	Definition
AbDisc.Expenses	Actual discretionary expenses (XRD + XAD + XSGA) less predicted discretionary expense based on the following industry-year regression: $\frac{DiscExp_{it}}{Assets_{i,t-1}} = d_{1t} \frac{1}{Assets_{i,t-1}} + d_{2t} \frac{Sales_{it-1}}{Assets_{i,t-1}} + \varepsilon_{it}$
Book-to-Market	The ratio of book value of equity (CEQ) to market value of equity (PRCC_F * CSHO) (Compustat).
CAR	Cumulative abnormal returns over the three-days surrounding firm i 's conference call for quarter t (CRSP and SeekingAphla).
ForecastDispersion	The average of the standard deviation of analyst forecast deflated by the median of the forecast (I/B/E/S).
LnSize	The natural logarithm of the market value of the equity (PRCC_F * CSHO) (Compustat).
Loss	An indicator variable that equal to one if net income (NI) is negative, and zero otherwise (Compustat).
MBE	An indicator variable equal to one if actual EPS minus the median analysts' consensus EPS estimate is greater than 0 but less than 5 cents, and zero otherwise (I/B/E/S).
P_Disc.Expenses	The sum of the number of times "G&A", "SG&A", "selling, general and administrative", "general and administrative", "marketing expenses", and "advertising expenses" and the number of times "research and development" and "R&D" appear in the presentation session of the conference call (SeekingAlpha).
P_Length	The natural logarithm of the number of words in the presentation session of the conference call. (SeekingAlpha).
Participants	The number of analysts participating in the conference call (SeekingAlpha).
Q_Disc.Expenses	The sum of the number of times "G&A", "SG&A", "selling, general and administrative", "general and administrative", "marketing expenses", and "advertising expenses" and the number of times "research and development" and "R&D" appear in the Q&A session of the conference call (SeekingAlpha).
Q_Length	The natural logarithm of the number of words in the Q&A session of the conference call. (SeekingAlpha).
Revision	Analysts' consensus estimate for next year's earnings immediately after the conference call minus the analysts' consensus estimate immediately before the conference call, scaled by the analysts' consensus estimate immediately before the conference call (I/B/E/S).
ROA	Return on assets (IB/AT) in quarter t (Compustat).

SUR	Actual EPS minus the most recent analysts' consensus estimate, scaled by the most recent analysts' consensus estimate (I/B/E/S).
∆Disc.Expenses	The sum of next year's G&A expense minus current year's G&A expense, scaled by current year's G&A expense and next year's R&D expense minus current year's R&D, scaled by current year's R&D expense (Compustat).

References

- Amiram, D., E. Owens, and O. Rozenbaum. 2016. Do information releases increase or decrease information asymmetry? New evidence from analyst forecast announcements. *Journal of Accounting and Economics* 62(1), 121-138.
- Baber, W.R., P.M. Fairfield, and J. Haggard. 1991. The effect of concern about reported income on discretionary spending decisions: the case of research and development. *The Accounting Review* 66(4), 818-829.
- Baber, W.R., S.H. Kang, and Y. Li. 2011. Modeling discretionary accrual reversal and the balance sheet as an earnings management constraint. *The Accounting Review* 86(4), 1189-1212.
- Bartov, E., D. Givoly, and C. Hayn. 2002. The rewards to meeting or beating earnings expectations. *Journal of Accounting and Economics* 33(2), 173-204.
- Barua, A., S. Lin, and A. M. Sbaraglia. 2010. Earnings management using discontinued operations. *The Accounting Review*, 85(5), 1485-1509.
- Bergstresser, D., M. Desai, and J. Rauh. 2006. Earnings manipulation, pension assumptions, and managerial investment decisions. *Quarterly Journal of Economics* 121(1), 157-195.
- Black, D.E., and T.E. Christensen. 2009. US managers' use of 'pro forma' adjustments to meet strategic earnings targets. *Journal of Business Finance & Accounting*, 36(3-4), 297-326.
- Bowen, R.M., A.K. Davis, and D.A. Matsumoto. 2002. Do conference calls affect analysts' forecasts? *The Accounting Review* 77(2), 285-316.
- Brown, S., S.A. Hillegeist, and K. Lo. 2004. Conference calls and information asymmetry. *Journal of Accounting and Economics* 37(3), 343-366.
- Caskey, J., and N.B. Ozel. 2017. Earnings Expectations and Employee Safety. *Journal of Accounting and Economics* 63(1), 121-141.
- Christensen, T.E., A. A. Huffman, and M.F. Lewis-Western. 2017. Earnings management proxies: prudent business decisions or earnings manipulation? Working paper.
- Cohen, D., Zarowin, P. 2010. Accrual-based and real earnings management activities around seasoned equity offering. *Journal of Accounting and Economics* 50(1), 2-19.
- Cohen, L., D. Lou, and C. Malloy. 2013. Playing favorites: How firms prevent the revelation of bad news. Working Paper.
- Cook, K.A., G.R. Huston, and T.C. Omer. 2008. Earnings Management through Effective Tax Rates: The Effects of Tax-Planning Investment and the Sarbanes-Oxley Act of 2002. *Contemporary Accounting Research* 25(2), 447-471.
- Dechow, P. M., R.G. Sloan, and A.P. Sweeney. 1996. Causes and consequences of earnings manipulation: an analysis of firms subject to enforcement actions by the SEC. *Contemporary Accounting Research* 13(1), 1-36.

- Defond, M.L. and C.W. Park. 2001. The reversal of abnormal accruals and the market valuation of earnings surprises. *The Accounting Review* 76(3), 375-404.
- Degeorge, F., J. Patel, and R. Zeckhauser. 1999. Earnings management to exceed thresholds. *Journal of Business* 72(1), 1-33.
- Dhaliwal, D., C.A. Gleason, and L.F. Mills. 2004. Last-chance earnings management: using the tax expense to meet analysts' forecasts. *Contemporary Accounting Research* 21(2), 431-459.
- Doyle, J.T., J.N. Jennings, and M.T. Soliman. 2013. Do managers define non-GAAP earnings to meet or beat analyst forecasts? *Journal of Accounting and Economics* 56(1), 40-56.
- Farrell, K.A., and D.A. Whidbee. 2003. Impact of firm performance expectations on CEO turnover and replacement decisions. *Journal of Accounting and Economics* 36(1-3), 165-196.
- Frankel, R., M. Johnson, and D.J. Skinner. 1999. An empirical examination of conference calls as a voluntary disclosure medium. *Journal of Accounting Research* 37(1), 133-150.
- Graham, J.R., C.R. Harvey, and S. Rajgopal, 2005. The economic implications of corporate financial reporting. *Journal of Accounting and Economics* 40(1), 3-73.
- Hollander, S., M. Pronk, and E. Roelofsen. 2010. Does silence speak? An empirical analysis of disclosure choices during conference calls. *Journal of Accounting Research* 48(3), 531-563.
- Hribar, P., N.T. Jenkins, and W.B. Johnson. 2006. Stock repurchases as an earnings management device. *Journal of Accounting and Economics* 41(1), 3-27.
- Irani, R. M., and D. Oesch. 2013. Monitoring and corporate disclosure: evidence from a natural experiment. *Journal of Financial Economics* 109(2), 398-418.
- Jones, J.: 1991. Earnings management during import relief investigations. *Journal of Accounting Research* 29(2), 193-228.
- Kasznik, R., and M.F. McNichols. 2002. Does meeting earnings expectations matter? Evidence from analyst forecast revisions and share prices. *Journal of Accounting Research* 40(3), 727-759.
- Keung, E., Z.X. Lin, and M. Shih. 2010. Does the stock market see a zero or small positive earnings surprise as a red flag? *Journal of Accounting Research* 48(1), 91-121.
- Lee, J.. 2016. Can investors detect managers' lack of spontaneity? Adherence to predetermined scripts during earnings conference calls. *The Accounting Review* 91(1), 229-250.
- Matsumoto, D.. 2002. Management's incentives to avoid negative earnings surprises. *The Accounting Review* 77(3), 483-514.
- Matsumoto, D., M. Pronk, and E. Roelofsen. 2011. What makes conference calls useful? The information content of managers' presentations and analysts' discussion sessions. *The Accounting Review* 86(4), 1383-1414.
- Matsunaga, S.R., and C.W. Park. 2001. The effect of missing a quarterly earnings benchmark on the CEO's annual bonus. *The Accounting Review* 76(3), 313-332.

- Mayew, W.J.. 2008. Evidence of management discrimination among analysts during earnings conference calls. *Journal of Accounting Research* 46(3), 627-659.
- McVay, S., V. Nagar, and V.W. Tang. 2006. Trading incentives to meet the analyst forecast. *Review of Accounting Studies* 11(4), 575-598.
- Public Company Accounting Oversight Board (PCAOB). 2002. Consideration of Fraud in a Financial Statement Audit. AU Section 316.
- Roychowdhury, S.. 2006. Earnings management through realactivities manipulation. *Journal of Accounting and Economics* 42(3), 335-370.
- Skinner, D.J., and R.G. Sloan. 2002. Earnings surprises, growth expectations, and stock returns or don't let an earnings torpedo sink your portfolio. *Review of Accounting Studies* 7(2), 289-312.
- Tasker, S.C. 1998. Bridging the information gap: Quarterly conference calls as a medium for voluntary disclosure. *Review of Accounting Studies* 3(1-2), 137-167.

Table 1: Descriptive statistics

Table 1 presents the mean of the continuous variables in our analyses. We present the mean for firms that meet or narrowly beat analysts' consensus estimate and firms that narrowly miss analysts' expectations. Variable definitions are available in the Appendix. *, **, and *** indicate significance (two-sided) at the 10%, 5%, and 1% levels, respectively.

Sample:	<i>MBE</i> = 1 [0,5]		MBE = 0 [-5,0)		
	Ν	Mean	Ν	Mean	Difference
$Q_Disc.Expenses$	3,136	2.686	2,513	2.435	0.251***
P_Disc.Expenses	3,136	1.613	2,513	1.478	0.135***
Q_Length	3,136	8.247	2,513	8.182	0.064***
P_Length	3,136	6.922	2,513	6.742	0.180***
Participants	3,136	7.279	2,513	6.866	0.412***
ForecastDispersion	3,136	0.020	2,513	0.022	-0.003
LnSize	3,136	4.841	2,513	4.542	0.298***
ROA	3,136	0.037	2,513	0.036	0.001
Loss	3,136	0.260	2,513	0.264	-0.004
SUR	2,928	0.017	1,859	-0.002	0.019***
AbDisc.Expenses	2,928	0.139	1,859	0.141	-0.002
Book-to-Market	2,928	2.259	1,859	2.119	0.140***
CAR	2,928	0.007	1,859	-0.008	0.015***
Revision	2,860	0.190	1,718	0.168	0.023***
$\Delta Disc. Expenses$	3,136	0.121	2,513	0.105	0.016***

Table 2: Correlations

Table 2 presents the correlations among the variables we use in the main analyses. Pearson (Spearman) correlations are presented above (below) the diagonal. Variable definitions are available in the Appendix. Correlation values in bold are significant at the 5% level.

		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1)	MBE		0.044	0.040	0.035	0.006	0.036	-0.009	0.031
(2)	Q_Disc.Expenses	0.042		0.315	-0.008	0.168	0.058	-0.059	0.104
(3)	P_Disc.Expenses	0.039	0.336		0.164	-0.012	0.182	-0.011	0.099
(4)	Q_Length	0.033	0.009	0.227		-0.055	0.441	0.025	0.041
(5)	P_Length	0.011	0.151	-0.015	0.120		0.095	-0.005	0.054
(6)	Participants	0.038	0.037	0.184	0.755	0.151		0.030	0.079
(7)	ForecastDispersion	-0.057	-0.088	-0.042	0.075	0.000	0.089		-0.002
(8)	AbDisc.Expenses	0.017	0.048	0.048	0.037	0.011	0.082	0.033	
(9)	Book-to-Market	0.063	0.123	0.109	0.092	0.029	0.131	0.128	0.245
(10)	LnSize	0.045	0.079	0.088	0.146	0.074	0.196	0.131	0.251
(11)	ROA	0.106	0.008	0.065	0.179	0.023	0.213	0.193	0.177
(12)	Loss	-0.094	-0.007	-0.041	-0.073	0.003	-0.074	0.011	0.079
(13)	CAR	0.039	0.015	-0.004	-0.001	-0.015	0.015	-0.001	0.009
(14)	Revision	0.027	0.043	0.024	-0.037	-0.024	-0.041	-0.020	0.023
(15)	SUR	0.034	0.031	0.017	0.002	0.002	0.023	0.032	0.001
(16)	$\Delta Disc. Expenses$	0.064	0.158	0.111	0.074	0.018	0.089	0.012	0.095
		(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
(1)	MBE	0.072	0.039	0.104	-0.094	0.035	-0.005	0.010	0.057
(2)	$Q_Disc.Expenses$	0.127	0.085	0.019	-0.003	0.013	0.008	0.019	0.167
(3)	P_Disc.Expenses	0.106	0.088	0.069	-0.036	-0.013	-0.005	-0.005	0.109
(4)	Q_Length	0.059	0.075	0.091	-0.044	0.008	-0.029	0.001	0.049
(5)	P_Length	0.021	0.048	0.010	0.002	-0.013	-0.029	-0.005	0.014
(6)	Participants	0.155	0.190	0.210	-0.075	0.013	-0.057	0.006	0.071
(7)	ForecastDispersion	0.027	0.054	0.095	-0.030	0.006	0.031	0.012	-0.006
(8)	AbDisc.Expenses	0.305	0.347	0.176	0.138	0.004	0.012	0.001	0.202
(9)	Book-to-Market		0.875	0.349	0.227	0.010	0.041	-0.007	0.364
(10)	LnSize	0.999		0.363	0.242	0.006	-0.007	-0.006	0.337
(11)	ROA	0.396	0.403		-0.380	0.068	-0.180	-0.011	0.198
(12)	Loss	0.305	0.299	-0.294		-0.057	0.151	0.005	0.112
(13)	CAR	0.015	0.011	0.069	-0.065		0.153	0.068	0.011
(14)	Revision	0.055	-0.010	-0.139	0.071	0.183		0.078	0.016

0.045

0.257

-0.029

0.027

0.161

0.023

0.105

0.014

0.016

0.011

0.010

0.284

(15)

(16)

SUR

 $\Delta Disc. Expenses$

0.012

0.282

Table 3: Market reaction to conference calls conditional on the content of the Q&A sessions

Table 3 presents results of estimation of Eq. (1) separately for firms that meet or narrowly beat analysts' expectations and for firms that narrowly miss expectations. All variable definitions are presented in the Appendix. Robust t-statistics are reported in parentheses. *, **, and *** indicate significance (two-sided) at the 10%, 5%, and 1% levels, respectively.

	(1)	(2)	(3)	(4)
Sample:	[0,5] cents meet	[0,5] cents miss	[0,5] cents meet	[0,5] cents miss
Dependent Variable:	CAR	CAR	Revision	Revision
Intercept	0.015	-0.029***	0.110***	0.210***
	(0.967)	(-2.949)	(2.706)	(2.940)
SUR	0.099***	0.049**	1.181***	0.245
	(7.934)	(2.090)	(6.124)	(1.353)
Q_Disc.Expenses	0.001*	-0.001	0.001	-0.003
	(1.931)	(-1.566)	(0.056)	(-0.922)
$Q_Disc.Expenses \times SUR$	-0.008***	0.002	-0.088**	-0.007
	(-2.671)	(0.426)	(-2.469)	(-0.524)
Q_Length	-0.001	0.002	0.004	-0.012
	(-0.427)	(1.492)	(0.767)	(-1.426)
Participants	0.001	0.001	-0.007***	-0.005**
	(0.098)	(0.273)	(-5.804)	(-2.562)
ForecastDispersion	-0.006	0.015	0.165*	0.285**
	(-0.714)	(1.421)	(1.851)	(1.979)
Book-to-Market	-0.001	-0.000***	0.036***	-0.001
	(-0.193)	(-3.537)	(5.365)	(-0.194)
LnSize	-0.001	0.001	-0.014***	0.006***
	(-0.034)	(0.525)	(-4.344)	(3.256)
ROA	0.028	0.049	0.003***	-0.052*
	(0.990)	(1.182)	(2.826)	(-1.699)
Loss	-0.004	-0.001	-0.159***	-0.197***
	(-0.809)	(-0.129)	(-4.157)	(-5.249)
AbDisc.Expenses	-0.001	0.001	0.003	0.005
	(-0.421)	(0.422)	(0.343)	(0.776)
Year Effects	Yes	Yes	Yes	Yes
Industry Effects	Yes	Yes	Yes	Yes
Cluster Standard Errors	Firm and Year	Firm and Year	Firm and Year	Firm and Year
Observations	2,928	1,859	2,860	1,718
Adj R-squared	0.044	0.048	0.160	0.136

Table 4: Market reaction to conference calls conditional on the content of the presentation sessions

Table 4 presents results of estimation of Eq. (1) separately for firms that meet or narrowly beat analysts' expectations and for firms that narrowly miss expectations. All variable definitions are presented in the Appendix. Robust t-statistics are reported in parentheses. *, **, and *** indicate significance (two-sided) at the 10%, 5%, and 1% levels, respectively.

	(1)	(2)	(3)	(4)
Sample:	[0,5] cents meet	[0,5] cents miss	[0,5] cents meet	[0,5] cents miss
Dependent Variable:	CAR	CAR	Revision	Revision
1				
Intercept	0.020	-0.035	0.584***	0.317
	(0.900)	(-0.971)	(3.847)	(1.423)
SUR	0.075**	0.081***	0.787***	0.110*
	(2.213)	(5.491)	(2.826)	(1.857)
P_Disc.Expenses	-0.001	-0.002**	-0.002	-0.003
	(-1.238)	(-2.143)	(-1.404)	(-0.774)
P_Disc.Expenses × SUR	-0.002	-0.009	-0.083	-0.046
	(-0.221)	(-0.816)	(-1.171)	(-0.543)
P_Length	-0.002	0.002	-0.043**	-0.017
	(-0.652)	(0.576)	(-2.305)	(-0.632)
Participants	0.001	0.001***	-0.005***	-0.004**
	(0.496)	(2.850)	(-3.046)	(-2.397)
ForecastDispersion	-0.008	0.005	0.156	0.147
	(-0.747)	(0.523)	(1.209)	(1.349)
Book-to-Market	-0.001	-0.001	-0.001	0.034***
	(-0.018)	(-0.288)	(-0.208)	(2.791)
LnSize	0.001	0.001	-0.000	-0.008
	(0.002)	(0.162)	(-0.010)	(-1.456)
ROA	0.026	0.039	-1.186***	-1.138***
	(0.720)	(0.755)	(-4.066)	(-3.897)
Loss	-0.005	-0.003	0.040	0.058**
	(-0.947)	(-0.406)	(1.248)	(2.103)
AbDisc.Expenses	-0.001	0.001	-0.020	0.011
	(-0.863)	(0.377)	(-0.439)	(1.285)
Year Effects	Yes	Yes	Yes	Yes
Industry Effects	Yes	Yes	Yes	Yes
Cluster Standard Errors	Firm and Year	Firm and Year	Firm and Year	Firm and Year
Observations	2,928	1,859	2,860	1,718
Adj R-squared	0.046	0.059	0.151	0.155

Table 5: The content of conference calls and discretionary expense sustainability

Table 5 presents results of OLS estimation of Eq. (2) The dependent variables represent year t+1 discretionary expenses minus year t discretionary expenses, scaled by total assets at the end of year t. All variable definitions are presented in the appendix. Robust t-statistics are reported in parentheses. *, **, and *** indicate significance (two-sided) at the 10%, 5%, and 1% levels, respectively.

	(1)	(2)
Sample:	[0,5] cents meet	[0,5] cents miss
Dependent Variable:	$\Delta Disc. Expenses$	$\Delta Disc. Expenses$
Intercept	0.322***	0.107***
	(12.500)	(4.243)
Q_Disc.Expenses	0.003**	0.001
	(2.081)	(0.106)
P_Disc.Expenses	0.002	0.003
	(1.644)	(0.859)
Q_Length	0.001	-0.002
	(0.247)	(-0.754)
P_Length	-0.002**	-0.004
	(-2.315)	(-1.423)
Particpants	0.003**	0.003
	(2.322)	(1.615)
ForecastDispersion	0.099***	0.042
	(2.628)	(1.240)
Book-to-Market	0.027***	-0.001
	(10.996)	(-1.420)
LnSize	-0.008***	0.002
	(-6.330)	(1.367)
ROA	0.055	-0.125
	(0.684)	(-0.946)
Loss	-0.021*	-0.018
	(-1.774)	(-1.279)
AbDisc.Expenses	-0.003	-0.002
	(-0.574)	(-0.317)
Year Effects	Yes	Yes
Industry Effects	Yes	Yes
Cluster Standard Errors	Firm and Year	Firm and Year
Observations	3,136	2,513
Adj R-squared	0.248	0.199

Table 6: Market reaction to conference calls conditional on the content of the Q&A sessions partitioned on the level of analyst coverage

Table 6 presents results of estimation of Eq. (1) for two subgroups of firms that meet or narrowly beat analysts' expectations: (1) firms with high analyst coverage (coverage above the median) and (2) firms with low analyst coverage (coverage below the median). All variable definitions are presented in the appendix. Robust t-statistics are reported in parentheses. *, **, and *** indicate significance (two-sided) at the 10%, 5%, and 1% levels, respectively.

	(1)	(2)	(3)	(4)
Sample:	High coverage	Low coverage	High coverage	Low coverage
Dependent Variable:	CAR	CAR	Revision	Revision
Intercept	0.004	0.020	0.088	0.115
	(0.162)	(1.101)	(1.206)	(1.122)
SUR	0.235***	0.084***	1.681**	0.949***
	(3.035)	(6.435)	(2.487)	(4.303)
Q_Disc.Expenses	0.001	0.001	0.003*	-0.001
	(1.523)	(1.639)	(1.884)	(-0.129)
$Q_Disc.Expenses \times SUR$	-0.016***	-0.006	-0.157***	-0.042
	(-4.324)	(-1.450)	(-3.329)	(-0.656)
Q_Length	-0.001	-0.001	-0.001	0.014
	(-0.266)	(-0.586)	(-0.118)	(1.191)
Participants	0.001**	-0.001	0.001	-0.002
	(2.044)	(-0.491)	(0.202)	(-0.395)
ForecastDispersion	-0.020	-0.010*	0.030	0.187**
	(-0.756)	(-1.911)	(0.211)	(1.969)
Book-to-Market	0.001	0.001	0.002***	0.018***
	(0.681)	(0.305)	(2.687)	(3.617)
LnSize	0.000	0.000	-0.001	-0.008
	(1.274)	(0.158)	(-0.684)	(-1.153)
ROA	0.002***	0.018	-0.374	-1.588***
	(14.052)	(1.426)	(-1.093)	(-5.433)
Loss	0.004	0.004	-0.073**	-0.033
	(0.690)	(0.700)	(-2.514)	(-0.864)
AbDisc.Expenses	-0.001	0.001	0.006	0.003
	(-0.351)	(0.039)	(0.821)	(0.216)
Year Effects	Yes	Yes	Yes	Yes
Industry Effects	Yes	Yes	Yes	Yes
Cluster Standard Errors	Firm and Year	Firm and Year	Firm and Year	Firm and Year
Observations	1,464	1,464	1,430	1,430
Adj R-squared	0.074	0.077	0.200	0.192

Table 7: The content of conference calls and expense sustainability partitioned on partitioned on the level of real earnings management proxies

Table 7 presents results of estimation of Eq. (2) for two subgroups of firms that meet or narrowly beat analysts' expectations: (1) firms with high analyst coverage (coverage above the median) and (2) firms with low analyst coverage (coverage below the median). All variable definitions are presented in the appendix. Robust t-statistics are reported in parentheses. *, **, and *** indicate significance (two-sided) at the 10%, 5%, and 1% levels, respectively.

	(1)	(2)
Sample:	High coverage	Low coverage
Dependent Variable:	$\Delta Disc. Expenses$	$\Delta Disc. Expenses$
Intercept	0.058**	0.044*
	(2.043)	(1.792)
Q_Disc.Expenses	0.004**	0.002
	(2.154)	(1.344)
P_Disc.Expenses	0.001	0.005***
	(0.136)	(2.883)
Q_Length	0.003	-0.003
	(0.844)	(-0.740)
P_Length	-0.001	-0.001
	(-0.578)	(-1.398)
Particpants	0.003	0.010***
	(1.491)	(7.324)
ForecastDispersion	0.132*	0.081***
	(1.825)	(3.252)
Book-to-Market	0.040***	0.028***
	(8.813)	(5.190)
LnSize	-0.013***	-0.006*
	(-4.497)	(-1.880)
ROA	-0.306	0.233**
	(-1.401)	(2.272)
Loss	-0.035*	-0.007
	(-1.893)	(-0.585)
AbDiscExp	-0.007	0.004
	(-1.109)	(1.119)
Year Effects	Yes	Yes
Industry Effects	Yes	Yes
Cluster Standard Errors	Firm and Year	Firm and Year
Observations	1,568	1,568
Adj R-squared	0.275	0.232

Table 8: Market reaction to conference calls conditional on the content of the Q&A sessions partitioned on abnormal discretionary expenses

Table 8 presents results of estimation of Eq. (1) for two subgroups of firms that meet or narrowly beat analysts' expectations: (1) firms with high levels of abnormal discretionary expenses (levels above the median); and (2) firms with low levels of discretionary expenses (levels below the median). All variable definitions are presented in the appendix. Robust t-statistics are reported in parentheses. *, **, and *** indicate significance (two-sided) at the 10%, 5%, and 1% levels, respectively.

	(1)	(2)	(3)	(4)
Sample:	High	Low	High	Low
•	AbDisc.Expenses	AbDisc.Expenses	AbDisc.Expenses	AbDisc.Expenses
Dependent Variable:	CAR	CAR	Revision	Revision
Intercept	0.020	0.022	0.050	0.357***
	(1.549)	(1.548)	(0.767)	(3.238)
SUR	0.055	0.137***	1.473***	1.156***
	(0.976)	(5.569)	(3.392)	(2.610)
Q_Disc.Expenses	0.001	0.002**	-0.001	0.003
	(0.730)	(2.316)	(-0.486)	(0.555)
Q_Disc.Expenses×SUR	0.002	-0.019***	-0.067	-0.186**
	(0.389)	(-2.704)	(-1.414)	(-2.115)
Q_Length	0.001	-0.005**	0.018*	-0.012
	(0.028)	(-2.173)	(1.858)	(-1.060)
Participants	-0.000	0.001	-0.005*	-0.007**
	(-0.469)	(0.908)	(-1.806)	(-2.084)
ForecastDispersion	-0.021	0.014	0.087	0.169
	(-1.277)	(0.756)	(1.144)	(0.779)
Book-to-Market	-0.001	-0.001	0.003***	0.024**
	(-0.222)	(-0.520)	(4.563)	(2.424)
LnSize	-0.001	0.002	-0.005**	-0.012
	(-0.803)	(1.285)	(-1.967)	(-1.263)
ROA	0.002	0.126	-0.679***	-1.125***
	(0.056)	(1.580)	(-3.361)	(-4.866)
Loss	0.005	-0.020	-0.105**	-0.110**
	(0.584)	(-1.499)	(-2.010)	(-1.981)
Year Effects	Yes	Yes	Yes	Yes
Industry Effects	Yes	Yes	Yes	Yes
Cluster Standard Errors	Firm and Year	Firm and Year	Firm and Year	Firm and Year
Observations	1.464	1.464	1.430	1.430
Adj R-squared	0.043	0.103	0.218	0.260

Table 9: The content of conference calls and expense sustainability partitioned on partitioned on abnormal discretionary expenses

Table 9 presents results of estimation of Eq. (2) for two subgroups of firms that meet or narrowly beat analysts' expectations: (1) firms with high levels of abnormal discretionary expenses (levels above the median); and (2) firms with low levels of discretionary expenses (levels below the median). All variable definitions are presented in the appendix. Robust t-statistics are reported in parentheses. *, **, and *** indicate significance (two-sided) at the 10%, 5%, and 1% levels, respectively.

Sample:	High AbDisc.Expenses	Low AbDisc.Expenses
Dependent Variable:	△Disc.Expenses	△Disc.Expenses
Intercept	0.090**	-0.020
	(2.172)	(-0.472)
Q_Disc.Expenses	0.001	0.006***
	(0.330)	(4.322)
P_Disc.Expenses	0.001	0.004
	(0.762)	(1.506)
Q_Length	0.001	0.009
	(0.062)	(1.523)
P_Length	0.001	-0.011**
	(0.188)	(-2.264)
Particpants	0.002	0.011***
	(0.847)	(3.064)
ForecastDispersion	0.098	0.067
	(0.894)	(0.555)
Book-to-market	0.001**	0.001***
	(2.552)	(6.303)
LnSize	0.001	0.004**
	(0.626)	(1.987)
ROA	0.272	-0.114
	(1.236)	(-0.449)
Loss	-0.008	0.001
	(-0.446)	(0.017)
Year Effects	Yes	Yes
Industry Effects	Yes	Yes
Cluster Standard Errors	Firm and Year	Firm and Year
Observations	1,568	1,568
Adj R-squared	0.138	0.225

Table 10: Mentions of discretionary expenses at conference calls and the likelihood of meeting or narrowly beating analysts' expectations

Table 10 presents results of estimation of Eq. (3). All variable definitions are presented in the appendix. Robust tstatistics are reported in parentheses. *, **, and *** indicate significance (two-sided) at the 10%, 5%, and 1% levels, respectively.

	(1)	(2)
Dependent Variable:	MBE	MBE
	1 429	1 2 ()
Intercept	-1.438	-1.362
	(-1.012)	(-0.894)
Q_Disc.Expenses		0.013***
		(3.295)
P_Disc.Expenses		0.006
		(1.389)
Q_Length	0.029**	0.029**
	(2.361)	(2.349)
P_Length	0.019	0.004
	(0.498)	(0.094)
Participants	0.007	0.007
	(1.538)	(1.316)
ForecastDispersion	-0.068	-0.068
	(-1.147)	(-1.172)
Book-to-Market	0.019**	0.018**
	(2.459)	(2.309)
LnSize	2.101***	2.051***
	(6.719)	(6.369)
ROA	-0.013*	-0.012*
	(-1.834)	(-1.676)
Loss	-0.021	-0.024
	(-0.547)	(-0.625)
AbDisc.Expenses	-0.014	-0.014
	(-1.140)	(-1.090)
Firm Effects	No	No
Industry Effects	Yes	Yes
Year Effects	Yes	Yes
Cluster Standard Errors	Firm and Year	Firm and Year
Pseudo R-squared	0.045	0.048
Observations	15.608	15.608