

NBER WORKING PAPER SERIES

PLAYING FAVORITES:  
HOW FIRMS PREVENT THE REVELATION OF BAD NEWS

Lauren Cohen  
Dong Lou  
Christopher Malloy

Working Paper 19429  
<http://www.nber.org/papers/w19429>

NATIONAL BUREAU OF ECONOMIC RESEARCH  
1050 Massachusetts Avenue  
Cambridge, MA 02138  
September 2013

We would like to thank Javed Ahmed, Malcolm Baker, Bo Becker, Zhi Da, Kent Daniel, Alex Edmans, Ben Esty, Bill Mayew, Scott Mayfield, Atif Mian, Daniel Paravisini, Jose Scheinkman, Kelly Shue, Han Xia, and seminar participants at Case Western Reserve University, China Europe International Business School, University of Georgia, Harvard Business School, Hong Kong University of Science and Technology, Indiana University, London Business School, London School of Economics, University of Notre Dame, Pontificia Universidad Catolica De Chile, Princeton University, University of Washington, University of York, 2013 Helsinki Finance Summit, 2013 Yale Doctoral Summer Program in Behavioral Finance, 2013 European Finance Association Annual Meeting, Acadian Asset Management, and SAC Capital for helpful comments and discussions. Huaizhi Chen and David Kim provided excellent research assistance. We are grateful for funding from the National Science Foundation and the Paul Woolley Center at the London School of Economics. The views expressed herein are those of the authors and do not necessarily reflect the views of the National Bureau of Economic Research.

NBER working papers are circulated for discussion and comment purposes. They have not been peer-reviewed or been subject to the review by the NBER Board of Directors that accompanies official NBER publications.

© 2013 by Lauren Cohen, Dong Lou, and Christopher Malloy. All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that full credit, including © notice, is given to the source.

Playing Favorites: How Firms Prevent the Revelation of Bad News  
Lauren Cohen, Dong Lou, and Christopher Malloy  
NBER Working Paper No. 19429  
September 2013  
JEL No. G0,G12,G14

**ABSTRACT**

We explore a subtle but important mechanism through which firms manipulate their information environments. We show that firms control information flow to the market through their specific organization and choreographing of earnings conference calls. Firms that “cast” their conference calls by disproportionately calling on bullish analysts tend to underperform in the future. Firms that call on more favorable analysts experience more negative future earnings surprises and more future earnings restatements. A long-short portfolio that exploits this differential firm behavior earns abnormal returns of up to 101 basis points per month. Further, firms that cast their calls have higher accruals leading up to call, barely exceed/meet earnings forecasts on the call that they cast, and in the quarter directly following their casting tend to issue equity and have significantly more insider selling.

Lauren Cohen  
Harvard Business School  
Baker Library 273  
Soldiers Field  
Boston, MA 02163  
and NBER  
lcohen@hbs.edu

Christopher Malloy  
Harvard Business School  
Baker Library 277  
Soldiers Field  
Boston, MA 02163  
and NBER  
cmalloy@hbs.edu

Dong Lou  
Department of Finance  
London School of Economics and Political Science  
Houghton Street  
London, WC2A 2AE  
UK  
d.lou@lse.ac.uk

Regardless of the extent of disclosure regulations, there exists private information which managers can release at their discretion. Given the current regulatory environment in the US (and increasingly globally) of level playing-field information laws, firms can only communicate information in public information exchanges. However, even in these highly regulated venues, there are subtle choices that firms can make that reveal differential amounts of information to the market.

In this paper we explore a subtle, but economically important way in which firms shape their information environments, namely through their specific organization and choreographing of earnings conference calls. Our analysis rests on a simple premise: firms have an information advantage, and they understand this and have the ability to be strategic in its release.

Our empirical strategy is to examine firms' decisions to "cast" their earnings conference calls in a particular way, specifically, how and who they call on to participate in these calls. We focus on the firms that call specifically on analysts that give them the highest recommendations, under the hypothesis that firms that cast their conference calls in this way may be preventing the revelation of future negative information to the market. We then analyze the future behavior and outcomes associated with these firms.

To better understand our approach, consider the example from our sample of Sealed Air Corp. Sealed Air Corp. produces a variety of packaging materials, the most well-known of which is Bubble Wrap, and held their Q1 earnings conference call in April 2007. While Sealed Air was covered by 11 analysts, on this particular call, it allowed a select few to participate in the conference call: those analysts that had particularly high recommendations on the firm leading up to it. These analysts largely complimented the firm on the quarter, joked with the CEO, and one analyst complimented them on cash strategy, but did not push them on the upcoming quarter. Figure 1 shows excerpts from the conference call: Panels A and B reveal three situations of analysts joking with the CEO and largely complimenting the CEO on the quarter, and Panel C then provides an overt example of a casted call. It turns out that JP Morgan Analyst Claudia Shank published a *pre-call report* before the earnings call alerting the company as to her concerns. The CEO of Sealed Air then, after deciding to call on her during the call, and

after hearing her question, begins his response: “*Sure, Claudia. In fact, you were the only one that published a pre-call report, so I appreciate that, I was prepared for it. Thank you.*”

Three months later, at the Q2 earnings call immediately following the April call where analysts with particularly positive recommendations were called upon, Sealed Air missed expectations, had their first negative free cash flow quarter (following 20 consecutive positive ones), and dropped 7% on the announcement. In this paper we show that this pattern of firms appearing to choreograph information exchanges directly prior to the revelation of negative news is systematic across the universe of firms.<sup>1</sup>

More generally, our key finding is that firms that manipulate their conference calls in this way appear to be hiding bad news, which ultimately leaks out in the future. Specifically, we show that casting firms experience higher contemporaneous returns on the (manipulated) call in question, but negative returns in the future. These negative future returns are concentrated around future calls where they stop this casting behavior, and hence allow negative information to be revealed to the market. A long-short portfolio that goes long the non-casting firms and short the casting firms around their subsequent call earns abnormal returns ranging from 91 basis points ( $t=2.73$ ) to 101 basis points ( $t=3.11$ ) per month. Further, we observe no sign of any return reversal in the future, suggesting that the negative information that is hidden is information important for fundamental firm value.

If firms are deliberately choosing to call on more favorable analysts, we might expect them to do so when it is especially valuable. For instance, firms that engage in more earnings management (discretionary accruals), may be especially wary of calling on analysts that will probe into these accrual behaviors. Additionally, firms that barely meet or exceed earnings expectations (meeting at 0, or beating by 1 penny), have been shown in prior literature to be far more likely to have manipulated earnings in order to

---

<sup>1</sup> Another example that occurred in April 2013 was that of the earnings call of Amazon.com, when bearish analyst Colin Gillis was locked-out of the quarterly earnings call, and leaked this to *The Seattle Times*. “Amazon analyst frozen out on company Q&A calls: Analyst skeptical about Amazon wonders why he’s not getting a chance to ask questions during the e-commerce giant’s quarterly conference calls,” *The Seattle Times*, May 1, 2013. At their subsequent earnings announcement (July 2013), Amazon missed analysts’ expectations on EPS, missed analysts’ expectations on revenues, and guided downward for future earnings.

do so, and so may be less likely to want to be aggressively questioned. Lastly, firms planning to do SEOs (or have insider selling) in the near future may be interested in keeping share price high to maximize proceeds, and so may prefer to call on friendly analysts. We find evidence on all three of these paths: firms with higher discretionary accruals, firms that barely meet/exceed earnings expectations, and firms about to issue equity are all significantly more likely to cast their calls (i.e., call on analysts with more optimistic views of the firm).

Further, if firms are deliberately engaging in this activity to withhold negative information (as we find evidence for, given their negative subsequent returns), we might expect this to be more difficult for firms who are in more transparent information environments. We find evidence consistent with this: firms with fewer analysts and less institutional ownership are significantly more likely to engage in casting their calls. In addition, we find that firms with more stock price volatility (presumably causing more potential instances of a need to withhold negative information) also cast their calls significantly more often.

Analysts who have higher recommendations are called on more frequently in earnings calls. However, we show that the firms that engage in this casting have negative future returns, causing bullish recommendations to be worse predictors of future firm returns. We thus test whether analysts gain any benefit from being called on during a firm's conference call. There could be many sources of this value. For instance, analysts may choose to ask their privately most valuable questions (for example, one whose answer would help complete the analyst's model of the firm's future prospects), which likely vary by analyst, making the opportunity to have the company answer the individual analyst's question more valuable. We find suggestive evidence that this is the case: analysts who are able to ask questions during the conference call have significantly more accurate earnings forecast in the future (while those analysts who do not see no commensurate increase in accuracy). Meanwhile, it is not costless for firms to engage in casting their calls: firms who are frequent casters of their calls, see significant future drops in analyst coverage.

Lastly, we attempt to get a measure of the aggressiveness of the questions asked

by favorable vs. non-favorable analysts. While this is a difficult task, we use as simple measures both how positive the tone of the question is (positive vs. negative words), and also the length of the manager's response. We find suggestive evidence that favorable analysts—i.e., those with higher outstanding recommendations—tend to both ask more positive questions, which are followed by significantly shorter management responses.

The remainder of the paper is organized as follows. Section I provides a brief background and literature review. Section II describes the data we use, while Sections III explores firm behavior in casting earnings conference calls. Section IV examines the effect on firms of casting calls, while Section V explores the mechanism in more detail. Section VI concludes.

## **I. Background and Literature Review**

Our paper adds to a large literature examining firms' attempts to manage their information environments, the manner in which firms disclose information to the markets, and the impact of different forms of disclosure on various stakeholder groups (e.g., investors, customers, regulators, media, etc.). A series of recent papers, for example, studies the impact of Regulation Fair Disclosure ("RegFD"), which was enacted in 2003, and was designed to combat selective disclosure by firms. Effective October 23, 2000, companies must reveal any material information to all investors and analysts simultaneously in the case of intentional disclosures, or within 24 hours in the case of unintentional disclosures. According to SEC Proposed Rule S7-31-99, regulators believe that allowing selective disclosure is "not in the best interests of investors or the securities markets generally." Several recent papers examining the impact of Regulation FD on the behavior of equity analysts conclude that the law has in fact been effective in curtailing selective disclosure to analysts (see, for example, Cohen, Frazzini, and Malloy (2011), Mohanram and Sunder (2006), Groysberg, Healy, Chapman, Shanthikumar and Gui (2007), Agrawal, Chadha, and Chen (2006), and Gintchel and Markov (2004)). Our paper is unique in that we take as given the "level playing field" imposed by Regulation Fair Disclosure (RegFD), and explore the subtle choices firms can make even within this seemingly strict information disclosure environment, choices that can (as we document) have large impacts on market prices and firm outcomes.

Since the laboratory we exploit is that of quarterly earnings conference calls, our paper is also relevant to a large literature studying the relationship between firms and analysts, as well as studies of the information content of earnings announcements and earnings conference calls specifically. For example, a recent strand of the literature examines management communication during conference calls and its association with information content (Hollander, Pronk and Roelofsen (2010), Matsumoto, Pronk and Roelofsen (2011)), future performance (Mayew and Venkatachalam (2012)) and financial fraud and misreporting (Larcker and Zakolyukina (2011), and Hobson, Mayew and Venkatachalam (2012)). Chen and Matsumoto (2006) also find that in the pre-Reg FD period that analysts with access to management deliver more accurate earnings forecasts. Lastly, Mayew (2008) and Mayew, Sharp, and Venkatachalam (2011) also explore differential analyst participation on conference calls, but focus on its implications for analyst accuracy; our focus is on the *firms* engaging in this type of behavior, and the signal that this behavior conveys for future firm outcomes.

## II. Data and Summary Statistics

We draw from a variety of data sources to construct the sample we use in this paper. A critical input to our study is the earnings conference call transcript data. We obtain these transcripts from Thomson Reuters, specifically from the StreetEvents data feed. We collect the complete transcripts of all conference calls from 2003-2011. We isolate the name of the firm conducting the call, along with the name and affiliation of all analysts listening on the call. In practice, firms know the identities of all listeners to the call, as each person must dial in through a conference call-in service that requires them to sign in at the outset of each call; the company then filters who can ask questions, and also determines the queue. In the Thomson data, we see only the names of analysts who were called on to ask a question during the call; we assume that all other analysts covering the stock were listening to the call, but were not called on.<sup>2</sup>

---

<sup>2</sup> We show that analysts who are able to ask questions during the call have significant increases in their future forecast accuracy following the call. In addition, we contacted a number of analysts, and in those conversations the analysts commented that it was a “job-requirement” to call-in (and if possible to ask questions) during the conference calls. One recounted an instance where a lead-analyst at his firm had not called in, and it being mentioned at the lead analyst’s performance review.

To construct our dataset, we first hand-match the StreetEvents analyst names for each call back to the brokerage house and analyst last name and first initial available on IBES, using a conservative matching procedure. This allows us to match the data to IBES, so that we can obtain data on past forecast accuracy and past recommendation levels. For some of our additional tests, we also examine the text of each question in order to assess the difficulty of the question.

In addition to analysts' past forecasts and recommendations, we also obtain analyst data on length of career, Institutional Investor All Star status, and other selected analyst biographical items (such as past employment, educational background, etc.) from ZoomInfo and LinkedIn. We also collect additional firm-level data, such as firm restatements over our sample period from the Audit Analytics database, as well as monthly stock returns, shares outstanding, volume, and market capitalization from CRSP, and a variety of firm-specific accounting variables from Compustat.

Table I presents summary statistics from our final dataset. Each analyst covering a given stock is designated as “in” for a particular conference call if she was called on during that call, and “out” if she was not called on during that call. An analyst is said to be “covering” a stock if she has produced a stock recommendation for a given stock in the IBES database in the past year. Table I shows that an average of 4.26 unique analysts (out of an average of 11.45 analysts covering a stock) are called on during a typical quarterly earnings call. In a preview of some of our results, Table I also shows that analysts who are called tend to issue more optimistic recommendations (an average of 3.73 on a 1-5 scale, where 1=Strong Sell, 2=Sell, 3=Hold, 4=Buy, 5=Strong Buy) relative to other analysts covering the stock (=3.53). The average level difference in analyst recommendations between the two groups (equal to 0.19) is statistically significant and of the same magnitude as the optimism effect associated with affiliation (i.e., when a firm has an underwriting relationship with the analyst's brokerage house), which is the subject of a vast analyst literature (see, for example, Lin and McNichols (1998), Lin et al. (2005), Michaely and Womack (1999), Hong and Kubik (2003)). Additionally, the median recommendation of participating analysts is a Buy, while the median of those analysts not in the call is a Hold recommendation. Table I also shows that participating analysts are more accurate on the given call than non-participating



analysts, a result we show more formally below. Finally, Table I reports some firm-level summary statistics; relative to the average firm on CRSP, our sample is tilted towards stocks that are larger, have lower book-to-market ratios (i.e., are more “growth-like” in nature), and have higher institutional ownership; a function of stocks covered by sell side stock analyst universe.

### III. Firm Behavior on Earnings Conference Calls

#### A. Analyst Recommendations and Conference Call Participation

Our first tests examine the recommendations of analysts that are called on by firms, relative to those who are not, during quarterly earnings conference calls. Specifically, we run panel regressions where the dependent variable is the recommendation level of all analysts covering the firm on their most recent recommendation before the conference call; the main independent variable of interest is a dummy variable ( $IN$ ) that equals 1 for analysts called on during the call, and 0 for those analysts who were not. We also control for a variety of other determinants of analyst recommendations, including several analyst-level variables (such as the number of years the analyst has worked in the industry, the number of years the analyst has covered the firm in question, the number of stocks currently covered by the analyst, the number of stocks currently covered by the analyst’s brokerage firm, and a dummy if the analyst was named an Institutional Investor All-Star analyst within the past year) and numerous firm-level measures (such as size, book-to-market ratio, past year returns, share turnover, and idiosyncratic volatility). We then test the hypothesis that firms choose to call on or “cast” their earnings calls with analysts who were more favorable in their past recommendations on these firms.

Table II shows that firms do indeed call on analysts who issue more favorable recommendations in the year leading up to a conference call. Further, Table II shows that this effect persists even after controlling for a host of analyst- and firm-level variables known to correlate with analyst recommendations, and after including firm-quarter fixed effects (in Columns 1-2, thus comparing in and out analysts covering the same firm in the same quarter), and after including analyst-time fixed effects (in Columns

3-4, thus comparing in and out stocks covered by the same analyst in the same quarter). Columns 1-4 indicate that the magnitude of this difference (ranging from 0.18 to 0.28) is highly statistically significant ( $p\text{-value}<0.01$ ), and (as noted earlier) comparable in magnitude to the much-publicized affiliation effect in analyst research. Columns 5 and 6 flip the specification around, and run logit regressions using being “called on” as the dependent variable, and the prior recommendation level (minus the average recommendation level) as the independent variable of interest; these tests again reveal a positive and significant effect of prior recommendation level on the likelihood of being called on during an earnings conference call.

### *B. Types of Firms that Call on Bullish Analysts*

Next we examine the behavior and characteristics of firms that tend to call specifically on analysts with higher past recommendations. Our first test explores the determinants of firms’ casting decisions. We create a measure called RecIn-RecOut, equal to the difference in average recommendation level by “in” analysts (i.e., those analysts a firm choose to call on) versus “out” analysts (i.e., those analysts a firm does not call on, but who cover the firm in the given quarter). We then run panel regressions with this firm-level RecIn-RecOut variable on the left-hand side of the regression.

For our explanatory variables, we start by analyzing a series of measures that plausibly capture a firm’s incentive to call on more favorable analysts. Specifically, we examine discretionary accruals, as firms with higher accruals may have an incentive to call on bullish analysts to avoid a potentially unfavorable discussion of the specific composition of their earnings. We also create a dummy variable equal to one if a firm’s earnings surprise in the quarter in question is exactly 0 or 1 cent, since firms that just meet (or barely exceed) consensus forecasts may want to avoid any difficult questions about the precise manner in which they hit their forecasts so narrowly. Additionally, we create a dummy variable equal to one if the firm in question issues a secondary equity offering (SEO) in quarter  $t$  or quarter  $t+1$ , as firms issuing equity in the near future may want to avoid the release of any potential bad news that could decrease their issuance proceeds. Finally, we create a dummy variable equal to one if the insiders of the firm

conducting the call on aggregate engage in net-selling of their insider owned shares – the idea being that firms may want to prop up price (delay the release of bad news) if they plan to engage in sales of their shares, as they would like to sell the shares at the highest price possible. We also control for the same firm-level variables defined in Table II, and run the tests as panel regressions with firm and time (quarter) fixed effects and standard errors also clustered by quarter.

Columns 1-2 of Table III show that discretionary accruals (*ACCRUAL*), a dummy for meeting or barely exceeding consensus earnings forecasts (*SUE(0)*), subsequent insider selling of shares (*INSIDER*), and future equity issuance (*SEO*), are all positive and significant predictors of RecIn-RecOut, consistent with the idea that firms with the largest incentive to call on favorable analysts are exactly the firms that do so. In terms of magnitude, a one-standard deviation move in accruals leads to a 25% increase in RecIn-RecOut. In addition, firms that meet or barely exceed forecasts have 23% higher value of RecIn-RecOut, firms in which insiders net sell their insider shares in the following quarter have a 3% higher RecIn-RecOut, and firms that subsequently issue equity have a 40% higher value of RecIn-RecOut.

Next we investigate firms' information environments, to test the idea that firms operating in a more transparent environment will be less willing to stage, or alternatively may gain less from staging, their conference calls by calling on favorable analysts. To proxy for the firm's information environment, we use the following measures: 1) analyst coverage, and specifically the number of unique analyst estimates made in the 12 months leading up to the call, 2) the proportion of the firm that is held by institutional investors, and 3) the idiosyncratic volatility of the firm, measured as the standard deviation of the four-factor adjusted monthly return over the past 12 months. Columns 3-6 show that firms with more analyst coverage and a higher proportion of institutional holdings, i.e., firms operating in more transparent environments, tend to stage their conference calls significantly less, as expected. By contrast, firm-level volatility is positively related to RecIn-RecOut, consistent with firms that potentially have more information flow generating price shocks, engaging significantly more in the staging of their calls.

Another question in this vein is the extent to which we are capturing the information

staging activities of a few firms that engage in this frequently throughout our sample, or whether this is a more systematic activity engaged in by a large universe of firms at precisely those times when it is most valuable for the to withhold negative information. We explore this in two ways. First, Table III includes firm fixed effects. If it were simply a subset of firms always casting their calls, the firm fixed effect would capture this, and these independent variables would be insignificant upon the fixed effects inclusion. In contrast, Table III shows that even controlling for firm fixed effects, all of the results on motivators for potentially wanting to cast a call (e.g., insider trading, future SEOs, earnings management, etc.) are nearly identical.

Secondly, in Figure 2, we graph the histogram of frequency of quarters that each firm casting episode in our sample lasts. So, once a firm begins to “cast” their conference call ( $\text{RecIn} > \text{RecOut}$ ), they could continue this, in theory indefinitely. As we have 36 quarters in our sample, if the firm is present throughout the entire sample, the maximum this could be is 36, with the minimum 1 (as we are conditioning on it being a casting episode). What we see from Figure 2 is that the most common length for a casting episode is one quarter; over twice as likely as any other. This, along with the firm fixed effects not impacting the results in Table III, suggests that casting is something a wide range of firms engage in selectively at precisely those times they have strong incentives to do so, and is not a behavior concentrated in a few firms that continuously cast their calls.

Collectively, the results in this section indicate that during quarterly earnings calls, firms are more likely to call on analysts who have issued more favorable recommendations on these firms leading up to the call. Further, this type of behavior is most pronounced among firms with the strongest incentives to manage the flow of information to the market, such as firms with higher discretionary accruals, firms that barely meet/exceed earnings expectations, and firms about to issue equity, as well as those firms facing substantial uncertainty (i.e., volatile firms), and firms operating in more opaque information environments.

#### **IV. The Impact of Casting on Firms**

In this section we explore the impact on firms of the tendency to call on more

favorable analysts during earnings conference calls. We exploit cross-sectional variation in the extent to which firms engage in this type of behavior, and explore the impact on contemporaneous earnings announcement returns, future earnings surprises, future stock returns, and future earnings restatements.

#### *A. Potential Benefits: Contemporaneous Investor Response*

First we explore the potential benefits that firms receive by engaging in this type of behavior. To do so, we investigate the investor response around the earnings call in which the firm is calling on more favorable analysts. If the firm is successful in preventing the flow of negative information by avoiding negative or cynical analysts, then the stock market response around the earnings call may be relatively positive. In Table IV we test this idea by running Fama-Macbeth quarterly regressions of contemporaneous earnings announcement returns on the spread between recommendation levels of analysts in and out of the current call (RecIn-RecOut), plus a host of additional control variables including the magnitude of the earnings surprise itself. To measure earnings surprises, we compute the standardized unexpected earnings (SUE, in percentage terms) for quarter  $t$ , and to measure announcement returns, we compute the market-adjusted cumulative return (CAR, in percentage terms) from days  $t-1$  to  $t+1$  around the current earnings announcement date (in quarter  $t$ ). We also control for the following lagged firm-level variables: market capitalization; book-to-market ratio; prior year returns; share turnover over the past 12 months; analysts' forecast dispersion; and idiosyncratic volatility, institutional holdings, analyst coverage, and accruals as defined in Tables II and III.

Table IV indicates that firms have significantly more positive abnormal returns around the call when they “play the game” (i.e., call on more favorable analysts). In terms of magnitude, a one standard-deviation increase in (RecIn-RecOut) implies a 28% increase in the contemporaneous earnings announcement effect ( $CAR_t$ ). For robustness, we also compute an indicator variable equal to one if RecIn is greater than RecOut in quarter  $t$  (RecIn>RecOut), which again captures the contemporaneous effect of “playing the game” on earnings announcement returns in that same quarter  $t$ . Columns 4-6 reveals that this indicator variable yields similar results as the continuous measure used

in Columns 1-3. In fact, from Column 6, CARs are 57% higher in quarters where firms stage their conference calls (RecIn>RecOut), controlling for other determinants of earnings returns including the level of surprise itself.

Importantly, we control in these regressions for analyst forecast dispersion for the given firm with regard to the given earnings announcement. If analysts had no dispersion in opinion regarding the firm, then a firm would have no scope to selectively choose more favorable analysts (and avoid less favorable). Thus, it is necessary to have some level of difference in opinion. However, if all firms have a threshold level of forecast dispersion, then additional dispersion is not needed to delineate more favorable (from less favorable) analysts. Further, as forecast dispersion has been shown to predict future returns on its own (Diether et. al (2002)), it might be reasonable to include as a control. From Table IV, the impact of casting a call (RecIn-RecOut) on contemporaneous earnings returns is little affected by including analyst forecast dispersion (*FCSTDISP*).

### *B. Future Earnings Surprises and Earnings Announcement Returns*

If firms calling on favorable analysts are doing so in order to portray the most positive view to the market and potentially hide any negative information from coming to light, our hypothesis is that firms engaging in this type of behavior are more likely to experience negative *future* outcomes, such as negative future earnings surprises, as this news will ultimately be revealed to the market (it likely cannot be hidden forever). We test this idea by running forecasting regressions of future earnings surprises and future earnings announcement returns on the *lagged* spread between recommendation levels of analysts called on vs. those not called on (RecIn-RecOut) during the last earnings call, plus a host of additional control variables. We again measure earnings surprises using SUEs, and announcement returns using CARs, and again control for the same firm-level variables used in Table IV. We also include time (quarter) fixed effects in all of the SUE panel regressions; the CAR regressions are run as quarterly Fama-MacBeth regressions.

Columns 1-3 of Table V show that firms that call more on favorable analysts (i.e., those with higher values of RecIn-RecOut) experience more negative future earnings surprises. In terms of the magnitude of this effect, a one-standard deviation move in

(RecIn-RecOut) this period implies over an interquartile lower earnings surprise next announcement, so an economically large impact. Columns 4-6 find a similar effect for future earnings announcement returns; for example, the coefficient of -0.221 in Column 6 implies that for a one-standard deviation move in (RecIn-RecOut) this period, CARs are 35% lower at the next announcement (computed relative to the sample mean CAR of 46 basis points).

Next we test whether the announcement return effect documented in Columns 4-6 is concentrated around times when the firm “stops playing the game,” i.e., stops calling on more favorable analysts during its earnings calls. As in Table IV, we first compute an indicator variable equal to one if RecIn is greater than RecOut in quarter  $t+1$ , which captures the contemporaneous effect of “playing the game” on earnings announcement returns in that same quarter  $t+1$ . Column 7 shows that this dummy variable is again positive and significant, indicating that firms are contemporaneously rewarded in the sense that around calls where firms call on favorable analysts, their CARs around that call are positive. It is only in the *future*, when the negative news being held back by the firm at time  $t$  gets revealed to the market later, do the CARs turn negative (which is shown by the large negative coefficient on lagged RecIn-RecOut, as described earlier). Thus, to test the idea that these negative returns may be concentrated around times when the firm finally stops calling on favorable analysts, we create an interaction term between lagged RecIn-RecOut and contemporaneous RecIn>RecOut. As Column 7 shows, this interaction term is positive and significant, suggesting that announcement returns are positive as long as the firm keeps calling on favorable analysts. Only once the firm stops doing this, i.e., when the RecIn>RecOut dummy turns to zero, do the negative announcement returns materialize.

### *C. Portfolio Returns*

Next we employ a portfolio approach to examine if the CAR returns documented above can be captured in simple, calendar-time portfolios. To do so, each day we sort all stocks into two groups based on RecIn-RecOut in the prior quarter. Then during the five days around their *next* earnings announcement, we long the stocks with prior

RecIn<RecOut, and short the stocks with prior RecIn>RecOut. The reason we choose the next announcement is that (from Figure 2) one quarter is by far the most common length of casting by firms. If on any given day there are less than or equal to 10 stocks on either the long or short side, we hold the 3-month Treasury bill instead. The portfolios are rebalanced daily, and aggregated up to monthly figures that are reported in Table VI. Panel A presents excess returns (in excess of the 3-month Treasury bill), 1-factor (CAPM), 3-factor Fama-French, 4-factor Carhart, and 5-factor (including the Pastor-Stambaugh liquidity factor) alphas, and Panel B presents factor loadings.

Panel A indicates that the Long/Short portfolio earns monthly abnormal returns ranging from 91 basis points ( $t=2.73$ ) to 101 basis points ( $t=3.11$ ) per month, or roughly 12 percent abnormal returns per year. Given that the mean earnings announcement month return is roughly 59 basis points per month (Frazzini and Lamont (2006)), subtracting this amount from both Long and Short sides, we see that most of the return comes from the relative underperformance of the Short portfolio in the earnings month.

Importantly, this negative information that appears to be being hidden by firms that are casting their calls could be released into the market at any point following the earnings call. Transcriptions of the calls are publicly available during our sample period usually within hours of the call itself.<sup>3</sup> Therefore, while the next earnings announcement (and conference call) provides a natural information revelation event (that is also standardized across firms in its occurrence), it is not necessarily the time at which the bad news is revealed.

In Figure 3, we thus examine event time returns following the earnings call that was cast by the firm. This figure plots the event time abnormal stock returns for the 12 months following portfolio formation of the long-short portfolio in Table VI (short firms that cast, long firms that do not cast). The figure begins charting abnormal returns (DGTW characteristically-adjusted) directly after the earnings announcement in which the firm cast (or did not cast). We see that the returns to this L-S portfolio concentrate nearly entirely around the subsequent earnings announcement (Month 3). Critically, while there is a return shock at the subsequent earnings call, we see zero reversal in these

---

<sup>3</sup> For instance, Morningstar, Inc. and Thomson Reuters offer subscription products, while Seeking Alpha and Earnings Impact offer free access to transcripts following earnings calls.



abnormal returns in the months following Month 3. This suggests that the negative information that was hidden by the firms, and is subsequently revealed, is information important for fundamental firm value.

#### *D. Future Earnings Restatements*

Given the findings on future negative earnings surprises, and the future negative stock returns associated with these casting firms, and in particular the results in Table III suggesting that casting firms tend to be those with higher discretionary accruals, a natural question is to what extent this type of behavior predicts future earnings restatements and accounting irregularities. Ultimately, in the future the market seems to realize the negative information that these firms were withholding during their prior earnings calls, and in the same manner we might expect abnormal accruals ultimately may be undone in the form of future earnings restatements. To test this conjecture, we run a predictive regression of future restatements (drawn from the Audit Analytics database) in quarter  $t+1$  on lagged RecIn-RecOut, plus the same firm-level control variables used in Tables III-V. Table VII confirms that RecIn-RecOut is a positive and significant predictor of future earnings restatements. In particular, a one standard-deviation move in (RecIn-RecOut) this period predicts a 14% increase in future restatements by the firm.

### **V. Additional Tests of Mechanism**

In this section we explore the impact on, and response of those analysts who are called on during conference calls. We also investigate the nature of the questions asked in greater depth. These tests help clarify the mechanism at work behind our main results.

#### *A. Future Analyst Accuracy*

First we examine if analysts participating on the call are more accurate in their earnings forecasts in the future. To do so, we run panel regressions of future earnings

forecast accuracy on a participation dummy, and a host of analyst- and firm-level characteristics. If an analyst was called on during a given call, the dummy equals one; otherwise the dummy is set to zero. We measure earnings forecast error in the next quarter ( $t+1$ ) in percentage terms as follows: [(actual earnings in quarter  $t+1$  minus forecasted earnings in quarter  $t+1$ ), divided by lagged quarter  $t-1$  price]. We include the same analyst- and firm-level controls as in Table II.

We run several different versions of this basic test, and report the results in Table VIII. For example, Columns 1-2 include firm-quarter fixed effects, and hence examine the relative accuracy of analysts covering the same firm (A is in stock X's call, and B is out of stock X's call). Then in Columns 3-4 we include analyst-quarter fixed effects, and hence examine the relative accuracy on stocks covered by the same analyst (A is in stock X's call, but is out of stock Y's call). Next in Columns 5-6 we include firm-quarter fixed effects, and examine the relative accuracy of analysts on the same *other* firm (A is in stock X's call, but not in stock Y's call, and B is in neither; we examine A and B's forecast accuracy for stock Y). Columns 1-4 of Table VIII indicate that analysts participating in the call are more accurate in their next earnings forecast, both relative to other analysts on the same stock who do not participate, and relative to themselves on other stocks where they themselves do not participate. This finding is consistent with the idea that analysts receive some benefit to being able to receive answers to their own private questions. In terms of magnitude, the coefficient in Column 4 of -0.039 ( $t=5.51$ ) suggests that being in the call reduces forecast error on the next earnings by 23% relative to the other firms covered by the analyst. Columns 5-6 confirm this, further showing only modest evidence that this benefit spills over to their accuracy on other stocks.

In Column 7, we also explore *changes* in forecast accuracy; we do this by computing the percentage change in quarterly earnings forecast accuracy between quarter  $t$  and quarter  $t+1$ . Column 7 reveals that there is a jump in analysts' accuracy directly after participating in the call and asking their questions to management. Specifically, being in the call increases accuracy by 15%. Thus, in sum while issuing higher recommendations will cause an analysts' *recommendation* to be less informative (as we show in Tables V-VII these firms have lower future returns, and more future restatements), this behavior does appear to have the benefit of access into the earnings

call to ask the analyst's privately valuable question, which increases that analyst's future earnings forecast accuracy.

### *B. Future Changes in Analyst Coverage*

Next we examine if there is a cost to firms of persistently casting their calls over time. Given that there is a benefit to firms in the form of higher contemporaneous earnings announcement returns, one might expect virtually all firms to engage in this behavior continuously. As shown above in Table IV, casting does predict negative future earnings surprises for the firm, but these negative returns are concentrated around times when the firm stops calling on favorable analysts, which begs the question of why firms ever stop casting. One possibility is that firms will lose analyst coverage over time, as analysts are unable to ask their own privately-valued questions (which lead to increases in future earnings accuracy as shown above), and become unwilling to cover the firm. Analyst coverage is valuable to a firm as it potentially increases liquidity in the stock (see Irvine (2003) for evidence in favor of this idea).

We test this idea in Table IX by running regressions of the change in analyst coverage on a measure of "persistent casting," defined as the average of (RecIn-RecOut) over the prior 4 quarters (or alternatively, as the fraction of quarters in which RecIn is greater than RecOut. We measure the change in coverage ("delta coverage") as the difference between "post-coverage" and "pre-coverage," where post-coverage is defined as coverage after the event year during which we measure persistent casting, and pre-coverage is defined as coverage before the event year.

Table IX shows that persistent casting predicts a significant decline in coverage. In terms of magnitude, the estimates in Column 4 (which uses the fraction of quarters in which RecIn>RecOut to define persistence) imply that an additional quarter of casting is associated with a 0.14 drop in analyst coverage the following year. Columns 5 and 6 report regressions with post-coverage on the left-hand side, and show that controlling for pre-coverage, persistent casting again has a negative impact on future coverage. Collectively, the results in Table IX reinforce the idea that persistent casting is not without costs, as eventually it is associated with declines in analyst coverage for the

casting firms.

### *C. Types of Questions Asked*

Next we attempt to analyze the aggressiveness of the questions asked, to further assess the degree to which firms manage the information environment of the call by calling on favorable analysts. If firms truly are trying to conceal negative information by calling on analysts less likely to uncover problematic information through their questioning, one might expect to see that the questions posed by favorable analysts are more favorable or less probing in some way. Gauging the difficulty of a question is obviously a nontrivial exercise without understanding the context in which a question is asked. We use two straightforward measures. First, how “positive” the question is; we use the number of positive relative to negative words in an analyst’s question using the Loughran and McDonald (2011) dictionary, which is constructed for financial contexts. Second, with respect to management’s response, we use the number of words in the answer given to the analyst’s question.

Table X shows the results examining this issue. Columns 1 and 2 have as dependent variable the ratio of positive words relative to total coded words (positive+negative). Columns 3 and 4 use a slightly different specification, with the dependent variable being the log difference between the number of positive and negative words in the question. Columns 5 and 6 then focus on management’s response to the question, with dependent variable being the log number of words in the response to the question. Columns 1-4 of Table X give a consistent message: those analysts who are called on during the call that are more favorable ask significantly more positive questions. In terms of magnitude, the coefficient of 0.138 ( $t=5.61$ ) implies that analysts with one notch higher recommendation (e.g., Buy vs. Hold), have 14% more positive words in their questions. Columns 5 and 6 show that managers also answer the questions of favorable analysts with significantly shorter responses - an increase in one recommendation notch shortens the answer length by 8% (relative to a mean of about 200 words). In sum, Table X shows that more favorable analysts ask significantly more positive questions which are answered with significantly shorter responses from management.

## VI. Conclusion

We explore a subtle, but economically important way in which firms shape their information environments, namely through their specific organization and choreographing of earnings conference calls. Our analysis rests on a simple premise: firms have an information advantage, and they understand this and have the ability to be strategic in its release. Our key finding is that firms that manipulate their conference calls by calling on those analysts with the most optimistic views on the firm appear to be hiding bad news, which ultimately leaks out in the future. Specifically, we show that casting firms experience higher contemporaneous returns on the (manipulated) call in question, but negative returns in the future. These negative future returns are concentrated around future calls where they stop this casting behavior, and hence allow negative information to be revealed to the market. A long-short portfolio that goes long the non-casting firms and short the casting firms around their subsequent calls earns abnormal returns ranging from 91 basis points ( $t=2.73$ ) to 101 basis points ( $t=3.11$ ) per month, or over 12 percent per year.

We also find evidence that firms with an ex-ante larger incentive to cast their calls, namely firms with higher discretionary accruals, firms that barely meet/exceed earnings expectations, and firms about to issue equity, are all significantly more likely to do so (i.e., call on analysts with more optimistic views of the firm). Further, firms in less transparent information environments, in which it is likely easier to withhold information, engage in significantly more casting. For instance, firms with fewer analysts and less institutional ownership are significantly more likely to cast their calls.

Lastly, we show evidence suggesting that analysts gain an advantage by having the opportunity to ask questions in conference calls. Specifically, analysts who are able to ask questions during the conference call have significantly more accurate earnings forecast in the future (while those analysts who do not see no commensurate increase in accuracy). However, it is not costless for firms to engage in casting their calls: firms who are frequent casters of their calls, see significant future drops in analyst coverage.

In sum, we show new evidence on a channel through which firms influence

information disclosure even in level-playing-field information environments. And while we have focused on a specific set of firm behaviors, there are likely many other ways in which firms seek to control information flow to the market. For instance, firms may bundle good and bad information together (e.g., by revealing a bad news announcement during a call announcing record-breaking profits), or may attempt to reveal bad information at times when they predict it will receive less attention. Indeed, Hirshleifer et al. (2009), DellaVigna and Pollet (2009), and Neissner (2013) all give evidence that managers attempt to time disclosures around times of low perceived investor attention. Our paper suggests that exploring these subtle but important mechanisms through which firms manipulate their information environments is a promising avenue for future research.

## References

- Agrawal, Anup, Sahiba Chadha and Mark A. Chen, 2006, Who is afraid of Reg FD? The behavior and performance of sell-side analysts following the SEC's Fair Disclosure Rules, *Journal of Business* 79, 2811-2834.
- Chen, S., and D. Matsumoto. 2006. "Favorable versus unfavorable recommendations: The impact on analyst access to management-provided information." *Journal of Accounting Research* 40 (4): 657-689.
- Cohen, Lauren, Andrea Frazzini, and Christopher Malloy, Sell side school ties, *Journal of Finance* 65, 1409-1437.
- DellaVigna, Stefano, and Joshua Pollet, 2009, Investor inattention and Friday earnings announcements, *Journal of Finance* 64, 109-749.
- Gintschel, A. and S. Markov. 2004. The Effectiveness of Regulation FD. *Journal of Accounting and Economics* 37: 293-314.
- Groysberg, Boris, Paul Healy, Craig Chapman, Devin Shanthikumar, and Yang Gui (2007), Do buy-side analysts out-perform the sell-side?, Working paper, Harvard University.
- Hobson, Jessen, William J. Mayew, and Mohan Venkatachalam. 2012. "Analyzing Speech to Detect Financial Misreporting" *Journal of Accounting Research*, 50 (2): 349-392.
- Hollander, Stephan, Maarten Pronk, and Erik Roelofsen, 2010, Does Silence Speak? An Empirical Analysis of Disclosure Choices During Conference Calls, *Journal of Accounting Research*, Vol. 48, Issue 3, pp. 531-563.
- Hirshleifer, David, Sonya Lim, and Siew Hong Teoh, 2009, Driven to distraction: Extraneous events and underreaction to earnings news, *Journal of Finance* 64, 2289-2325.
- Hong, Harrison, and Jeffrey D. Kubik, 2003, Analyzing the analysts: Career concerns and biased forecasts, *Journal of Finance* 58, 313-351.
- Larcker, David, and Anastasia Zakolyukina, 2012, Detecting Deceptive Discussions in Conference Calls, *Journal of Accounting Research*, Vol. 50, Issue 2, pp. 495-540.
- Lin, Hsiou-wei and Maureen F. McNichols, 1998, Underwriting relationships, analysts' earnings forecasts and investment recommendations, *Journal of Accounting and Economics* 25, 101-127.
- Lin, Hsiou-wei, Maureen F. McNichols, and Patricia O'Brien, 2005, Analyst impartiality and investment banking relationships, *Journal of Accounting Research* 43, 623-650.

- Matsumoto, Dawn, Maarten Pronk, and Erik Roelofsen, 2011, What Makes Conference Calls Useful? The Information Content of Managers' Presentations and Analysts' Discussion Sessions. *The Accounting Review*: July 2011, Vol. 86, No. 4, pp. 1383-1414.
- Mayew, W. 2008. Evidence of Management Discrimination Among Analysts During Earnings Conference Calls. *Journal of Accounting Research* 46 (3): 627-659.
- Mayew, William J., and Mohan Venkatachalam. 2012. "The Power of Voice: Managerial Affective States and Future Firm Performance" *Journal of Finance*, 67 (1): 1-43.
- Mayew, W., N. Sharp, and M. Venkatachalam, 2012, Using Earnings Conference Calls to Identify Analysts with Superior Private Information, *Review of Accounting Studies* (forthcoming).
- Michael, Roni, and Kent L. Womack, 1999, Conflict of interest and the credibility of underwriter analyst recommendations, *Review of Financial Studies* 12, 653-686.
- Mohanran, Partha and Shyam V. Sunder, 2006, How has Regulation FD affected the operations of financial analysts?, *Contemporary Accounting Research* 23, 491-52
- Niessner, Marina, 2013, Strategic disclosure timing and insider trading, Working paper, Yale University.



Table I: Summary Statistics

This table reports the summary statistics of our sample that spans the period 2003-2011. Panel A reports the average number of analysts that get an opportunity ask questions in a conference call (in analysts), and the number of analysts that do not have the opportunity to ask questions (out analysts). Panel B reports the recommendations issued by analysts in the conference call vs. those not in the conference call. Specifically,  $RECD_{in}$  is the recommendation issued by an in analyst, and  $RECD_{out}$  is the recommendation issued by an out analyst.  $RECD(IN)$  is the average recommendation by all the in analysts, while  $RECD(OUT)$  is the average recommendation by all the out analysts. Panel C reports the earnings forecast error of analysts in the conference call vs. those not in the conference call. Panel D reports the standardized earnings surprise, defined as difference between the actual earnings and consensus forecast scaled by lagged stock price, and the cumulative abnormal return in the five-day window surrounding the earnings announcement. Finally, Panel E reports some firm characteristics.  $MKTCAP$  is the log of market capitalization,  $BM$  is the book-to-market ratio, while  $INSTOWN$  is the fraction of shares outstanding owned by institutional investors.

	No. Obs	Mean	Std Dev	Min	Q1	Median	Q3	Max
<i>Panel A: Number of analysts</i>								
#(IN)	69,604	4.26	2.78	1	2	4	6	23
#(OUT)	69,604	7.19	6.15	1	3	5	10	61
<i>Panel B: Analyst recommendations</i>								
$RECD_{in}$	296,875	3.73	0.93	1	3	4	5	5
$RECD_{out}$	500,348	3.53	0.95	1	3	3	4	5
$RECD(IN) - RECD(OUT)$	69,604	0.19	0.73	-4	-0.25	0.17	0.61	4
<i>Panel C: Earnings forecast accuracy</i>								
$FCE_{in}$	164,382	0.0054	0.0146	0.0000	0.0005	0.0015	0.0041	0.1233
$FCE_{out}$	505,614	0.0065	0.0172	0.0000	0.0006	0.0016	0.0046	0.1233
<i>Panel D: Earnings surprise and announcement day returns</i>								
SUE	58,590	-0.0004	0.0164	-0.1550	-0.0005	0.0006	0.0023	0.0551
CAR	63,383	0.0046	0.0949	-0.7454	-0.0399	0.0023	0.0478	2.7500
<i>Panel E: Other firm characteristics</i>								
$MKTCAP$	69,502	5.38	19.04	0.00	0.37	1.04	3.19	487.14
$BM$	61,751	0.60	0.59	0.03	0.29	0.47	0.73	11.18
$INSTOWN$	63,670	0.67	0.22	0.00	0.53	0.72	0.85	1.00

Table II: Firm Behavior on Conference Calls

This table examines the recommendations issued by analysts that ask questions in the conference call vs. those that do not ask questions. Columns 1-4 conduct a panel regression, where the dependent variable is the recommendation issued prior to the conference call by each analyst covering the firm. Columns 5 and 6 conduct a logit regression where the dependent variable is an indicator that equals one if the analyst asks a question in the conference call and zero otherwise. The main independent variable is the *IN* dummy (in columns 1-4) and the recommendation issued by the analyst relative to the consensus recommendation (*RECD<sup>adj</sup>*) (in columns 5 and 6). Analyst level controls include: the number of years the analyst has covered the firm (*LENGTH*), the number of years the analyst has been in the IBES database (*CAREER*), the number of stocks covered by the analyst, the number of stocks covered by the broker, and whether the analyst is an all-star analyst. Firm level controls include: market capitalization, book to market ratio, lagged one year stock returns, the monthly share turnover in the previous year, the idiosyncratic volatility in the previous year, the number of analysts covering the firm, institutional ownership, and the discretionary accruals. Columns 1 and 2 include firm-quarter fixed effects, and columns 3 and 4 include analyst-quarter fixed effects. Standard errors, clustered at the quarterly level, are shown in parenthesis. \*, \*\*, \*\*\* denote significance at the 90%, 95%, and 99% level, respectively.

	<i>RECD<sub>i,j,t</sub></i>	<i>RECD<sub>i,j,t</sub></i>	<i>RECD<sub>i,j,t</sub></i>	<i>RECD<sub>i,j,t</sub></i>	<i>IN<sub>i,j,t</sub></i>	<i>IN<sub>i,j,t</sub></i>
	[1]	[2]	[3]	[4]	[5]	[6]
<i>IN<sub>i,j,t</sub></i>	0.184*** (0.032)	0.202*** (0.033)	0.282*** (0.042)	0.280*** (0.043)		
<i>RECD<sub>i,j,t</sub><sup>adj</sup></i>					0.210*** (0.044)	0.252*** (0.044)
<i>LENGTH<sub>j,t</sub></i>		0.026** (0.010)				-0.159** (0.079)
<i>CAREER<sub>j,t</sub></i>		0.031*** (0.006)				0.054*** (0.011)
<i>#STOCK<sub>j,t</sub><sup>analyst</sup></i>		-0.006*** (0.002)				-0.014*** (0.004)
<i>#STOCK<sub>j,t</sub><sup>broker</sup></i>		-0.031** (0.013)				0.002** (0.001)
<i>ALLSTAR<sub>j,t</sub></i>		-0.081*** (0.024)				0.373*** (0.066)
Fixed Effect	Firm-Qtr	Firm-Qtr	Anlst-Qtr	Anlst-Qtr		
Firm Controls	No	No	No	Yes	Yes	Yes
No Obs.	730,646	730,646	730,646	730,646	730,646	730,646
Adj/Pseudo R <sup>2</sup>	0.14	0.16	0.19	0.22	0.01	0.02



Table IV: Contemporaneous Investor Response

This table conducts Fama-MacBeth regressions of earnings announcement day returns on the difference in recommendations between analysts that ask questions in the conference call vs. those that do not ask questions. The dependent variable is the cumulative abnormal return in the five day window around the quarterly earnings announcement. The main independent variable in columns 1-3 is the difference in recommendations between the in analysts and out analysts, while that in columns 4-6 is a dummy variable that equals one if the average recommendation issued by the in analysts is higher than that issued by out analysts, and zero otherwise. Other control variables include: the standardized unexpected earnings ( $SUE$ ), analyst forecast dispersion, institutional ownership, number of analysts covering the firm, market capitalization, book to market ratio, lagged one year stock returns, lagged one year monthly share turnover, lagged one year idiosyncratic volatility, and discretionary accruals. Standard errors, with Newey-West adjustments of four lags, are shown in parenthesis. \*, \*\*, \*\*\* denote significance at the 90%, 95%, and 99% level, respectively.

	Dependent Variable = $CAR_{i,t}$					
	[1]	[2]	[3]	[4]	[5]	[6]
$RECD(IN)_{i,t} -$	0.168***	0.176***	0.178***			
$RECD(OUT)_{i,t}$	(0.042)	(0.041)	(0.042)			
$RECD(IN)_{i,t} >$				0.242***	0.267***	0.263***
$RECD(OUT)_{i,t}$				(0.063)	(0.064)	(0.063)
$SUE_{i,t}$	3.069***	3.139***	3.091***	3.071***	3.143***	3.095***
	(0.524)	(0.519)	(0.511)	(0.525)	(0.521)	(0.512)
$FCSTDISP_{i,t}$		0.329	0.249		0.337	0.259
		(0.537)	(0.515)		(0.538)	(0.515)
$INSTOWN_{i,t}$		0.315	0.601**		0.325	0.605
		(0.201)	(0.299)		(0.207)	(0.305)
$NUMEST_{i,t}$		-0.025***	0.016		-0.026***	0.015
		(0.009)	(0.017)		(0.009)	(0.018)
$MKTCAP_{i,t}$			-0.187**			-0.189**
			(0.076)			(0.077)
$BM_{i,t}$			0.124			0.112
			(0.218)			(0.221)
$RET12_{i,t}$			0.145			0.147
			(0.172)			(0.176)
$TURNOVER_{i,t}$			-0.112***			-0.111***
			(0.036)			(0.036)
$IDIOVOL_{i,t}$			-0.186			-0.185
			(0.151)			(0.151)
$ACCRUAL_{i,t}$			-1.014			-1.037
			(1.130)			(1.140)
F-M # Qtrs	36	36	36	36	36	36
No Obs.	45,110	45,110	45,110	45,110	45,110	45,110
Adj-R <sup>2</sup>	0.04	0.05	0.07	0.04	0.05	0.07

Table V: Forecasting Future Earnings Surprises and Earnings Announcement Returns

This table reports forecasting regressions of earnings surprises and earnings announcement day returns on lagged difference in recommendations between analysts that ask questions in the conference call vs. those that do not ask questions. The dependent variable in columns 1-3 is the standardized unexpected earnings (*SUE*) and that in columns 4-7 is the cumulative abnormal return in the five day window around the quarterly earnings announcement. The main independent variable is the lagged difference in stock recommendations between the in and out analysts. In the last column, we also include a dummy variable that equals one if the average recommendation issued by the in analysts is higher than that issued by out analysts in the contemporaneous period, and zero otherwise, as well as an interaction between this dummy variable and the lagged recommendation differential between in and out analysts. Other control variables include: analyst forecast dispersion, institutional ownership, number of analysts covering the firm, market capitalization, book to market ratio, lagged one year stock returns, lagged one year monthly share turnover, lagged one year idiosyncratic volatility, and discretionary accruals. The first three columns conduct a panel regression with quarter fixed effects where the standard errors are clustered at the quarterly level. The next four columns conduct Fama-MacBeth regressions where the standard errors are Newey-West adjusted with four lags. \*, \*\*, \*\*\* denote significance at the 90%, 95%, and 99% level, respectively.

	<i>SUE</i> <sub><i>t</i>+1</sub>	<i>SUE</i> <sub><i>t</i>+1</sub>	<i>SUE</i> <sub><i>t</i>+1</sub>	<i>CAR</i> <sub><i>t</i>+1</sub>	<i>CAR</i> <sub><i>t</i>+1</sub>	<i>CAR</i> <sub><i>t</i>+1</sub>	<i>CAR</i> <sub><i>t</i>+1</sub>
	[1]	[2]	[3]	[4]	[5]	[6]	[7]
<i>RECD(IN)</i> <sub><i>i,t</i></sub> −	-0.025**	-0.030**	-0.024**	-0.244***	-0.234***	-0.221***	-0.270***
<i>RECD(OUT)</i> <sub><i>i,t</i></sub>	(0.010)	(0.012)	(0.011)	(0.070)	(0.066)	(0.069)	(0.076)
<i>RECD(IN)</i> <sub><i>i,t</i>+1</sub> >							0.197**
<i>RECD(OUT)</i> <sub><i>i,t</i>+1</sub>							(0.100)
<i>INTERACT</i> <sub><i>i,t</i></sub>							0.303**
							(0.121)
<i>FCSTDISP</i> <sub><i>i,t</i></sub>		-0.193**	-0.188**		-0.795**	-0.809***	-0.792***
		(0.083)	(0.085)		(0.287)	(0.270)	(0.229)
<i>INSTOWN</i> <sub><i>i,t</i></sub>		0.138***	0.164***		1.487***	1.691***	1.663***
		(0.039)	(0.042)		(0.378)	(0.441)	(0.464)
<i>NUMEST</i> <sub><i>i,t</i></sub>		-0.004**	-0.004**		-0.017*	0.009	0.010
		(0.002)	(0.002)		(0.009)	(0.011)	(0.013)
<i>MKTCAP</i> <sub><i>i,t</i></sub>			0.062**			-0.072	-0.081
			(0.028)			(0.090)	(0.079)
<i>BM</i> <sub><i>i,t</i></sub>			-0.111***			0.134	0.125
			(0.045)			(0.147)	(0.135)
<i>RET12</i> <sub><i>i,t</i></sub>			0.033**			0.263	0.262
			(0.014)			(0.195)	(0.180)
<i>TURNOVER</i> <sub><i>i,t</i></sub>			0.003			-0.107**	-0.095**
			(0.004)			(0.056)	(0.041)
<i>IDIOVOL</i> <sub><i>i,t</i></sub>			-0.008			-0.047	-0.034
			(0.009)			(0.065)	(0.058)
<i>ACCRUAL</i> <sub><i>i,t</i></sub>			0.234**			-0.236	-0.299
			(0.100)			(0.206)	(0.279)
Fixed Effects	Quarter	Quarter	Quarter				
F-M # Qtrs				36	36	36	36
No Obs.	35,943	35,943	35,943	42,777	42,777	42,777	42,777
Adj-R <sup>2</sup>	0.01	0.03	0.04	0.02	0.04	0.06	0.07

Table VI: Portfolio Approach

This table reports monthly returns to a calendar-time portfolio that exploits the return predictability of recommendation differentials between analysts that ask question and those that do not in the conference call. Specifically, in the five days around quarterly earnings announcements, we go long in stocks whose  $RECD(IN)$  is below  $RECD(OUT)$  in the previous quarter's conference call, and go short in stocks whose  $RECD(IN)$  is above  $RECD(OUT)$  in the previous quarter's conference call. If on any given day, there are less than 10 stocks in either the long or short side of the strategy, we hold the 30-day Treasury bill instead (this is the case for less than 10% of the trading days). We then aggregate these daily returns to the long short portfolio to the monthly level. Panel A reports the monthly returns to this long short portfolio after adjusting for various known risk factors, while Panel B reports the risk exposures of this strategy. In the full specification, we control for the Carhart four factors (including momentum) and the liquidity factor. Standard errors, with Newey-West adjustments of four lags, are shown in parenthesis. Estimates significant at the 5% level are indicated in bold.

Panel A: Portfolio Returns					
Decile	Excess Returns	1-Factor Alpha	3-Factor Alpha	4-Factor Alpha	5-Factor Alpha
S	0.65%	0.25%	0.04%	0.04%	-0.01%
	[1.04]	[0.52]	[0.10]	[0.10]	[-0.01]
L	<b>1.56%</b>	<b>1.25%</b>	<b>1.01%</b>	<b>1.00%</b>	1.00%
	[2.48]	[2.23]	[2.21]	[2.26]	[1.81]
L/S	<b>0.91%</b>	<b>1.00%</b>	<b>0.97%</b>	<b>0.96%</b>	<b>1.01%</b>
	[2.73]	[2.99]	[2.84]	[2.94]	[3.11]

Panel B: Factor Loadings							
	XRet	Alpha	MKT	SMB	HML	UMD	LIQ
S	0.65%	-0.01%	<b>0.506</b>	<b>0.496</b>	<b>0.454</b>	-0.017	0.047
	[1.04]	[-0.01]	[2.88]	[2.27]	[2.59]	[-0.20]	[0.33]
L	<b>1.56%</b>	1.00%	0.247	<b>0.577</b>	<b>0.568</b>	-0.126	0.001
	[2.48]	[1.81]	[1.03]	[2.10]	[2.83]	[-1.18]	[0.00]
L/S	<b>0.91%</b>	<b>1.01%</b>	<b>-0.259</b>	0.081	0.114	-0.109	-0.046
	[2.73]	[3.11]	[-2.27]	[0.40]	[0.74]	[-1.47]	[-0.54]

Table VII: Forecasting Future Earnings Restatements

This table reports forecasting regressions of earnings restatements on lagged difference in recommendations between analysts that ask questions in the conference call vs. those that do not ask questions. The dependent variable in all columns is a *RESTATE* dummy that equals one if the firm restates its earnings in the following quarter and zero otherwise. The main independent variable is the lagged difference in recommendations between the in analysts and out analysts. Other control variables include: analyst forecast dispersion, institutional ownership, number of analysts covering the firm, market capitalization, book to market ratio, lagged one year stock returns, lagged one year monthly share turnover, lagged one year idiosyncratic volatility, and discretionary accruals. The first three columns conduct a logit regression, while the next three columns conduct a panel OLS regression with quarter fixed effects. Standard errors, clustered at the quarterly level, are reported in parenthesis. \*, \*\*, \*\*\* denote significance at the 90%, 95%, and 99% level, respectively.

	Dependent Variable = <i>RESTATE</i> <sub>t+1</sub>					
	[1]	[2]	[3]	[4]	[5]	[6]
<i>RECD(IN)</i> <sub>i,t</sub> –	0.101**	0.100**	0.099**	0.003**	0.003**	0.002*
<i>RECD(OUT)</i> <sub>i,t</sub>	(0.047)	(0.051)	(0.049)	(0.001)	(0.001)	(0.001)
<i>FCSTDISP</i> <sub>i,t</sub>		-0.034 (0.028)	-0.064 (0.057)		-0.051 (0.063)	-0.091 (0.085)
<i>INSTOWN</i> <sub>i,t</sub>		0.171 (0.129)	0.079 (0.162)		0.013 (0.009)	0.008 (0.006)
<i>NUMEST</i> <sub>i,t</sub>		-0.015* (0.008)	0.019 (0.012)		-0.002* (0.001)	0.001 (0.001)
<i>MKTCAP</i> <sub>i,t</sub>			-0.220*** (0.053)			-0.005** (0.002)
<i>BM</i> <sub>i,t</sub>			-0.012 (0.072)			0.004** (0.002)
<i>RET12</i> <sub>i,t</sub>			0.166** (0.069)			0.003* (0.002)
<i>TURNOVER</i> <sub>i,t</sub>			0.014 (0.015)			0.002** (0.001)
<i>IDIOVOL</i> <sub>i,t</sub>			-0.002 (0.004)			0.004*** (0.001)
<i>ACCRUAL</i> <sub>i,t</sub>			-0.916* (0.530)			-0.023* (0.014)
Fixed Effects				Quarter	Quarter	Quarter
No Obs.	43,387	43,387	43,387	43,387	43,387	43,387
Pseudo/Adj-R <sup>2</sup>	0.01	0.02	0.02	0.01	0.02	0.02

Table VIII: Analyst Earnings Forecast Errors

This table examines the earnings forecast accuracy of analysts that ask questions in the conference call vs. those that do not ask questions. The dependent variable in columns 1-6 is the earnings forecast error in the following quarter, while that in column 7 is the quarterly change in earnings forecast error. The main independent variable is the *IN* dummy that takes the value of one if the analyst asks a question in the conference call in the current quarter and zero otherwise. Analyst level controls include: the number of years the analyst has covered the firm (*LENGTH*), the number of years the analyst has been in the IBES database (*CAREER*), the number of stocks covered by the analyst, the number of stocks covered by the broker, and whether the analyst is an all-star analyst. Firm level controls include: market capitalization, book to market ratio, lagged one year stock returns, the monthly share turnover in the previous year, the idiosyncratic volatility in the previous year, the number of analysts covering the firm, institutional ownership, and the discretionary accruals. Columns 1, 2, and 7 include firm-quarter fixed effects and examine the relative accuracy of in analysts and out analysts covering the same firm. Columns 3 and 4 include analyst-quarter fixed effects and examine the relative accuracy of in stocks and out stocks covered by the same analyst. Finally, Columns 5 and 6 include firm-quarter fixed effects and examine the relative accuracy of in analysts (of at least one conference call) and out analysts covering the same firm where neither of the two analysts are in the conference call in question. Standard errors, clustered at the quarterly level, are shown in parenthesis. \*, \*\*, \*\*\* denote significance at the 90%, 95%, and 99% level, respectively.

	$FCE_{t+1}$	$FCE_{t+1}$	$FCE_{t+1}$	$FCE_{t+1}$	$FCE_{t+1}$	$FCE_{t+1}$	$\Delta FCE_{t+1}$
	[1]	[2]	[3]	[4]	[5]	[6]	[7]
$IN_{i,j,t}$	-0.029*** (0.006)	-0.030*** (0.006)	-0.063*** (0.013)	-0.039*** (0.007)	-0.011** (0.005)	-0.008 (0.005)	-0.019*** (0.007)
$LENGTH_{j,t}$		-0.001 (0.003)				-0.001 (0.003)	0.002 (0.005)
$CAREER_{j,t}$		-0.005* (0.003)				-0.006* (0.004)	-0.002 (0.005)
$\#STOCK_{j,t}^{analyst}$		0.002** (0.001)				0.002** (0.001)	0.001 (0.001)
$\#STOCK_{j,t}^{broker}$		-0.001 (0.001)				-0.001 (0.001)	-0.001 (0.001)
$ALLSTAR_{j,t}$		-0.013* (0.007)				-0.015* (0.008)	-0.004 (0.010)
Fixed Effect	Firm-Qtr	Firm-Qtr	Anlst-Qtr	Anlst-Qtr	Firm-Qtr	Firm-Qtr	Firm-Qtr
Firm Controls	No	No	No	Yes	No	No	Yes
No Obs.	400,257	400,257	308,727	308,727	483,169	483,169	245,091
Adj-R <sup>2</sup>	0.65	0.65	0.18	0.27	0.64	0.64	0.53



Table IX: Drop in Analyst Coverage

This table reports forecasting regressions of changes in analyst coverage on lagged recommendation differentials between analysts that ask questions in the conference call vs. those that do not ask questions. The dependent variable in columns 1-2 and 4-5 is the change in analyst coverage in the following year, and that in columns 3 and 6 is the number of analysts covering the stock in the following year. The main independent variable is *CAST*: it is equal to the average recommendation differential between in analysts and out analysts in the previous four quarters in columns 1-3, and is equal to the fraction of quarters in which *RECD(IN)* is above *RECD(OUT)* in the previous year in columns 4-6. Other control variables include: analyst forecast dispersion, institutional ownership, number of analysts covering the firm, market capitalization, book to market ratio, lagged one year stock returns, lagged one year monthly share turnover, lagged one year idiosyncratic volatility, and discretionary accruals. Standard errors, clustered at the quarterly level, are reported in parenthesis. \*, \*\*, \*\*\* denote significance at the 90%, 95%, and 99% level, respectively.

	$\Delta NUMEST_{t+1}$	$\Delta NUMEST_{t+1}$	$NUMEST_{t+1}$	$\Delta NUMEST_{t+1}$	$\Delta NUMEST_{t+1}$	$NUMEST_{t+1}$
	[1]	[2]	[3]	[4]	[5]	[6]
<i>CAST</i> <sub>t</sub>	-0.377*** (0.090)	-0.423*** (0.083)	-0.396*** (0.081)	-0.396*** (0.102)	-0.401*** (0.105)	-0.433*** (0.106)
<i>NUMEST</i> <sub>t</sub>			0.637*** (0.056)			0.637*** (0.056)
<i>FCSTDISP</i> <sub>i,t</sub>		-0.240*** (0.083)	-0.212*** (0.073)		-0.241*** (0.083)	-0.212*** (0.073)
<i>INSTOWN</i> <sub>i,t</sub>		0.019*** (0.008)	0.023*** (0.008)		0.019*** (0.008)	0.023*** (0.008)
<i>MKTCAP</i> <sub>i,t</sub>		-0.140 (0.156)	0.011 (0.002)		-0.134 (0.155)	0.011 (0.002)
<i>BM</i> <sub>i,t</sub>		-0.021*** (0.004)	-0.022*** (0.004)		-0.021*** (0.004)	-0.022*** (0.004)
<i>RET12</i> <sub>i,t</sub>		0.017* (0.010)	0.010 (0.011)		0.017* (0.010)	0.010 (0.011)
<i>TURNOVER</i> <sub>i,t</sub>		-0.372** (0.188)	-0.154 (0.172)		-0.369** (0.188)	-0.153 (0.171)
<i>IDIOVOL</i> <sub>i,t</sub>		0.855*** (0.293)	1.194*** (0.342)		0.857*** (0.294)	1.195*** (0.342)
<i>ACCRUAL</i> <sub>i,t</sub>		0.025** (0.012)	0.100 (0.102)		0.025** (0.012)	0.102 (0.102)
Addl. Controls	Yes	Yes	Yes	Yes	Yes	Yes
No Obs.	44,939	44,939	44,939	44,939	44,939	44,939
Adj-R <sup>2</sup>	0.01	0.07	0.50	0.01	0.07	0.50

Table X: Textual Analysis

This table examines the tone of the analyst's questions and the length of the manager's answers. The dependent variable in columns 1-2 is the number of positive words minus that of negative words in the question scaled by the total number of words in the question ( $POSRATIO^Q$ , expressed in %), where positive and negative words are defined in Loughran and McDonald (2011). The dependent variable in columns 3 and 4 is the log difference between the number of positive and negative words in the question (i.e.,  $POSTONE^Q = \log((poswords + 1)/(negwords + 1))$ ). Finally, the dependent variable in columns 5 and 6 is the log number of words in the manager's response ( $WORD^A$ ). The main independent variable is the recommendation issued by the analyst prior to the conference call. Other control variables include: the analyst's place in the conference call (e.g., 2<sup>nd</sup> in line to ask a question,  $PLACE$ ), the number of years the analyst has covered the firm ( $LENGTH$ ), the number of years the analyst has been in the IBES database ( $CAREER$ ), the number of stocks covered by the analyst, the number of stocks covered by the broker, and whether the analyst is an all-star analyst. All specifications include firm-quarter fixed effects. Standard errors, clustered at the quarterly level, are shown in parenthesis. \*, \*\*, \*\*\* denote significance at the 90%, 95%, and 99% level, respectively.

	$POSRATIO_{i,j,t}^Q$	$POSRATIO_{i,j,t}^Q$	$POSTONE_{i,j,t}^Q$	$POSTONE_{i,j,t}^Q$	$WORD_{i,j,t}^A$	$WORD_{i,j,t}^A$
	[1]	[2]	[3]	[4]	[5]	[6]
$RECD_{i,j,t}$	0.147*** (0.024)	0.138*** (0.024)	0.019*** (0.004)	0.017*** (0.004)	-0.060*** (0.009)	-0.058*** (0.009)
$PLACE_{i,j,t}$	-0.228*** (0.021)	-0.229*** (0.020)	-0.020*** (0.004)	-0.020*** (0.004)	-0.108*** (0.015)	-0.098*** (0.015)
$LENGTH_{j,t}$		0.243*** (0.042)		0.006* (0.003)		-0.040*** (0.012)
$CAREER_{j,t}$		-0.337*** (0.046)		-0.018*** (0.003)		0.002 (0.012)
$\#STOCK_{j,t}^{analyst}$		0.020*** (0.004)		0.002*** (0.000)		0.003*** (0.001)
$\#STOCK_{j,t}^{broker}$		-0.001*** (0.000)		-0.001*** (0.000)		0.001*** (0.000)
$ALLSTAR_{j,t}$		-0.066 (0.075)		-0.016** (0.007)		-0.068*** (0.016)
Fixed Effect	Firm-Qtr	Firm-Qtr	Firm-Qtr	Firm-Qtr	Firm-Qtr	Firm-Qtr
No Obs.	281,426	281,426	281,426	281,426	281,426	281,426
Adj-R <sup>2</sup>	0.12	0.12	0.27	0.27	0.18	0.19

## Figure 1: Sealed Air Corporation Q1 2007 Conference Call

This figure gives excerpts from Sealed Air Corporation's Q1 2007 earnings conference call, which occurred on April 25, 2007.

### Panel A: Joking and complimenting cash usage

**Operator**

Yes, we'll be going back to George Staphos with Banc Of America Securities.

**Bill Hickey - Sealed Air - President, CEO**

George, we missed you.

**George Staphos - Banc Of America Securities - Analyst**

Oh, well, I had another conference call, as well. I apologize. Their result weren't nearly as good as yours, Bill. I'll let you know that.

**Bill Hickey - Sealed Air - President, CEO**

Thank you, I appreciate that. I appreciate that you went to where you had to go. Somewhere you'd like to go. [laughter]

**George Staphos - Banc Of America Securities - Analyst**

Sometimes order isn't priorities...

\*\*\*\*\*

**Edings Thibault - Morgan Stanley - Analyst**

Thank you very much, Bill. I was hoping we could return to this issue of cash usage, because you guys are starting to turn out some pretty good cash flow here...

**Bill Hickey - Sealed Air - President, CEO**

Yes, well it's an interesting challenge...we haven't sort of made any conclusions as to what to do with the extra cash we have right now. But I hope you can count on us. I'm sure you can count on us to spend it wisely.

### Panel B: Familiarity and analyst pointing out successful strategy (with no real question)

**Operator**

Next we'll hear from Tim Burns with Cranial Capital.

**Tim Burns - Cranial Capital - Analyst**

Good morning from London, Bill, how are you?

**Bill Hickey - Sealed Air - President, CEO**

Tim, haven't heard from you in ages.

**Tim Burns - Cranial Capital - Analyst**

I'm ready to jump that river any time...but even beyond that is the question of, your best plants in the right areas to be able to accommodate that and growth, I guess.

**Bill Hickey - Sealed Air - President, CEO**

Yes, Tim, we're in that process...So we're in the right place with the right product at the right cost at the right time.

You've actually hit the objective of our manufacturing strategy, which we've been talking about, Tim, so thank you for reminding everyone.

**Tim Burns - Cranial Capital - Analyst**

Sure. Thanks.

Panel C: More complimenting along with analyst publishing a pre-call report regarding question

**Operator**

We'll now take a follow-up question from Ross Galardi with Merrill Lynch.

**Ross Galardi - Merrill Lynch - Analyst**

Thank you. I was just wondering, Bill, if you could elaborate on the strong price mix that you had in the U.S. this quarter. It actually looks like it was better than international. What's driving that?

**Bill Hickey - Sealed Air - President, CEO**

Primarily focus on profitability. We -- I mean, market share has never been a Sealed Air focus. We essentially focus on selling the right mix of products at profitable -- that are profitable to us and cost savings to our customers. And that focus really came through in the first quarter.

\*\*\*\*\*  
**Operator**

Next we'll hear from Claudia Shank with JPMorgan.

**Claudia Shank - JPMorgan - Analyst**

Hi, thanks a lot. Good morning. I just wanted to shift back to emerging markets and obviously the volume growth was very impressive. And I just wondered what the competitive landscape is like there? Are you seeing increased competition? How are margins holding up in that region?

**Bill Hickey - Sealed Air - President, CEO**

Sure, Claudia. In fact, you were the only one that published a pre-call report, so I appreciate that, I was prepared for it. Thank you.

Figure 2: Histogram of the Distribution of Casting Episode Length

This figure shows the number of quarters that each casting episode lasts in our sample—i.e., situations where a firm calls on ex-ante more favorable analysts in the earnings call ( $RECD(IN) > RECD(OUT)$ ). So, for instance, over 40% of the cases of casting by firms are for a single quarter.

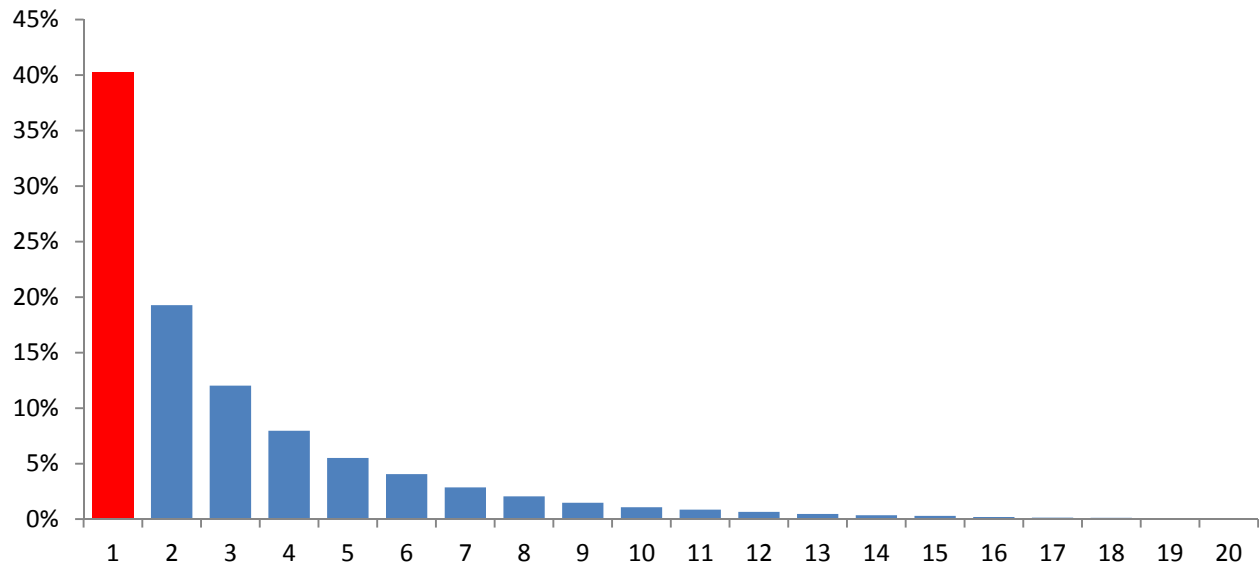


Figure 3: Event-time Cumulative Abnormal Returns

This figure plots the event-time stock returns for the 12 months following portfolio formation of the long-short portfolio described in Table VI. Specifically, the portfolio exploits the return predictability of recommendation differentials between analysts that ask question and those that do not in the conference call: we go long in stocks whose  $RECD(IN)$  is below  $RECD(OUT)$  in the earnings call, and go short in stocks whose  $RECD(IN)$  is above  $RECD(OUT)$  in the previous earnings call. The figure presents DGTW characteristic adjusted returns to the (L-S) portfolio, starting directly after the call for the 12 months following it. The next earnings call occurs in month 3 following the announcement.

