

Are Companies Exploiting a Loophole in Reg FD?

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1. Introduction

Regulation Fair Disclosure (Reg FD) does not ban all private communication channels between firms and analysts. In fact, firms are still allowed to privately communicate with analysts in regard to analysts' earnings models. In 2010, the Securities and Exchange Commission (SEC) issued a Compliance and Disclosure Interpretation to provide clarification in regard to regulators' enforcement of Reg FD. In essence, it is still acceptable for firms to review and comment on analysts' earnings models privately without triggering Reg FD's disclosure requirements. The SEC allows firms to engage in this specific type of private interaction with analysts with the exception that the firm does not communicate material, nonpublic information. The SEC further states that if a skilled analyst combines such seemingly inconsequential, private information together with publicly available information to create *material* nonpublic information, the firm also does not violate the requirements of Reg FD. However, one potential loophole in this exception is that private conversations between firms and analysts regarding earnings models can create opportunities for firms to communicate in "code" or provide signals to analysts regarding future firm performance while still being technically in compliance with the regulation. This behavior is often associated with guiding analysts' quarterly earnings forecasts and has the same ultimate goal of earnings management which is to meet or beat earnings forecasts which can result in unethical financial reporting and misleading investors.

In general, firms are allowed to refer analysts and investors back to previously disclosed public information and comments made by managers. This process provides managers with the incentive to emphasize, or de-emphasize, any particular piece of information along the positive-negative news spectrum to guide analysts' forecasts. Since firms have, on average, increased the quantity of voluntary public disclosures in the post-Reg FD period (Bailey et al., 2003; Heflin et al., 2003; Kross and Suk, 2012), it is possible that firms use this greater amount of disclosure to expand the pool of available information from which they can reference in these conversations. On the other hand, if firms privately review analysts' earnings models solely to correct factual inaccuracies or to share seemingly inconsequential data, then all private conversations should adhere to the requirements of Reg FD as prescribed. Additionally, if firms view private conversations with analysts as inherently risky actions because of SEC enforcement, firms might take extra precaution to ensure that opportunistic behavior, such as private earnings guidance, does not occur in such exclusive communications.

To investigate this issue, we contacted the investor relations departments of firms listed in the S&P 500 Index to determine whether the firm privately communicates with analysts in regard to their earnings models. Firms which confirmed that they regularly review and comment on earnings models directly to analysts are designated as "private communicators." Firms which stated that they only review earnings models (but do not comment directly to analysts), or those which do not engage in any private conversations with analysts concerning earnings models, are labeled as "non-communicators." Out of 625 firms contacted, approximately 234 firms responded, which equates to a response rate of approximately 37%. Based on the responses and interviews, 100 firms, or 43%, are classified as private communicators while 134 firms, or 57%, are categorized as non-communicators.

Overall, the evidence shows that analysts who follow firms which are private communicators have significantly greater forecast accuracy than analysts who follow firms which are non-communicators. We also show that firms which privately communicate are more likely to engage in expectations management to walk down analysts' forecasts to meetable or beatable levels than firms which do not engage in private communication. Furthermore, the magnitude of the average walkdown from a private communicator is significantly larger than the walkdown of analysts' forecasts by a non-communicator. Additional analysis reveals that investors perceive the research outputs of analysts who follow firms which

privately communicate to be more informative than the same outputs of analysts who cover firms which do not. Specifically, there is a stronger market reaction to the earnings forecast revisions and favorable stock recommendations of analysts who follow private communicators versus non-communicators. Lastly, results show that the positive relation between private communication and forecast accuracy is driven mainly by firms with low analyst following. This result suggests that firms might be more likely to communicate privately if the firm has relatively fewer analysts' earnings models to review during the quarter.

This article contributes to the line of literature which examines the extent of private communication between firms and analysts in the post-Reg FD period. Recent literature shows that analysts who have access to managers in certain situations (e.g., broker-hosted conferences and analyst/investor days) produce more informative research than analysts without such access (Cai and Qi, 2021; Kirk and Markov, 2016; Brown et al., 2015; Green et al., 2014; Soltes, 2014). We add to this literature by showing a more direct measure of private interaction which occurs on a regular basis throughout each quarter of the year. We also contribute to the literature which examines earnings management and earnings guidance games in which managers and analysts engage during the quarter which mislead investors. Prior research in this area finds that, on average, managers tend to guide analysts' forecasts downward to meet or beat earnings targets (Seidel et al. 2020; Zhang et al., 2018; Bartov et al., 2002; Matsumoto, 2002). However, little is known about the underlying strategies managers actually use to guide analysts' forecasts downward. We show that a high percentage of large firms manage analysts' earnings expectations by communicating in a private venue which is actually acceptable under Reg FD. However, our findings suggest that even though such conversations are technically permissible, firms appear to be using them to opportunistically guide analysts' forecasts. Lastly, we contribute to the literature that examines the role that the investor relations department plays in the firm. Recent studies find that investor relations are associated with greater increases in disclosure, institutional investor ownership, media coverage, analyst following, liquidity, and market valuation (Chapman et al. 2022; Chapman et al., 2019; Kirk and Vincent, 2014; Bushee and Miller, 2012; Solomon, 2012). We show that one additional important role that investor relations plays is to communicate information to analysts to minimize information asymmetry between the firm and outside investors. Furthermore, our findings suggest that analysts' source of firm-provided information has not ceased but rather has shifted from CEOs to investor relations executives in the post-Reg FD period.

The rest of the study is organized as follows. Section 2 presents the prior literature and hypothesis development. Section 3 presents the research design and Section 4 describes the sample selection. Section 5 and Section 6 report the empirical results and the additional analyses. Section 7 concludes the articles and summarizes the overall implications of the research.

2. Prior Literature and Hypothesis Development

Analysts are important information intermediaries who participate in information search and acquisition activities in the capital market. Analysts' preferential access to management has historically been a source of analysts' informational advantage. Analysts, therefore, have incentives to issue favorable research to keep a good relationship with management and obtain valuable, private information. Consistent with this notion, prior research argues that analysts tend to produce biased (mainly more optimistic) earnings forecasts to please management (e.g., Richardson et al., 2004; Bartov et al., 2002; Matsumoto, 2002; Das et al., 1998; Francis and Philbrick, 1993). Ke and Yu (2006) find that the underlying reasons for analysts' bias is to allow them to curry favor with management and obtain better access to private information to increase their earnings forecast accuracy. Similarly, Chen and Matsumoto (2006) find that analysts who issue more favorable recommendations have a greater increase in subsequent forecast accuracy than analysts who issue less favorable recommendations. The authors argue that analysts issue more optimistic recommendations as a tool to obtain more private information from managers.

On October 23, 2000, the SEC passed Reg FD to prohibit firms from privately disclosing material information to select market participants without simultaneously disclosing the same information to all public constituents. The purpose of Reg FD has been to eliminate selective disclosure of value-relevant information to select investors so that these individuals would not profit at the expense of small investors by using this information opportunistically in capital markets trading. Prior research has shown mixed evidence of the effects of Reg FD. For example, Heflin et al. (2003) find no reliable evidence of a change in analysts' earnings forecast errors or dispersion. Bailey et al. (2003) find that Reg FD seems to increase the quantity of information available to the public while imposing greater demands on investment professionals. In addition, Kwag and Small (2007) find that the level of earnings management did not change after the implementation of Reg FD. Even though Reg FD prohibits managers from sharing material, nonpublic information with selected recipients such as analysts, there is still evidence that, in recent years, analysts continue to receive information from management. For example, Green et al. (2014) find that analyst access to management at broker-hosted investor conferences leads to more informative, more accurate and more timely research by analysts. They also show that analysts at brokerage firms which

host investor conferences, and therefore have interaction with management, have more informative recommendation changes in the following three months than other non-hosting analysts. Furthermore, Soltes (2014) analyzes the proprietary records of a large-cap NYSE-traded firm and shows that analysts' private interaction with management is an important communication channel for analysts. His evidence suggests that the benefits of private interaction include other aspects besides firm-specific forecasting news such as citing private interaction in research reports and facilitating access for buy-side clients. Most recently, survey results of equity analysts in Brown et al. (2015) show that private communication with management is a more useful input to analysts' earnings forecasts and stock recommendations than their own primary research, recent firm performance, and recent SEC filings. They also note that their evidence does not imply that analysts ignore other forms of earnings management (O'Callaghan et al. 2018; Kouaib et al. 2018; Makarem et al. 2018; Cohen et al. 2019; Hsieh and Chang 2020), but rather suggest that analysts' behavior might be associated with lower levels of earnings management.

Furthermore, there is evidence in the post-Reg FD period that analysts continue to receive preferential access to management on conference calls. For example, Mayew (2008) finds that managers discriminate among analysts and allow certain analysts to ask questions on conference calls if those analysts have relatively more favorable outstanding stock recommendations. He suggests that this ability to ask questions directly to management could enable the asking analyst to generate new and valuable private information. In addition, Mayew et al. (2013) show that analysts who are selected by management to participate on conference calls by asking questions to have more accurate and more timely forecasts immediately following the conference calls compared to analysts who are not selected to ask questions on the call.

On June 4, 2010, the Securities and Exchange Commission (SEC) issued a Compliance and Disclosure Interpretation to provide clarification in regard to the regulators' interpretations of Reg FD enforcement. In its interpretation, the SEC affirms that it is acceptable for firms to review and comment on analysts' earnings models privately without triggering Reg FD's disclosure requirements. Firms are allowed to engage in this type of private interaction with analysts as long as the firm does not communicate "material nonpublic information". The SEC states that firms do not violate Reg FD if they review analysts' earnings models to correct historical facts which are a matter of public record or to share "seemingly inconsequential data" about the firm's earnings. The SEC further states that if a skilled analyst combines such acceptable private information together with publicly available information to create *material* nonpublic information, the firm also does not violate the requirements of Reg FD. However, firms are not allowed to use the discussion of an analysts' earnings model to communicate material nonpublic information "either expressly or in code."

Therefore, despite the common misperception, firms are still allowed to communicate privately with analysts, to some degree, in regard to the inputs which analysts use to generate earnings forecasts. However, firms must carefully frame all discussions concerning any expected future performance around the firm's previously disclosed public information. Furthermore, firms cannot directly comment to analysts regarding the magnitude of the outputs of earnings models (e.g., that earnings forecasts are too high, too low, etc.) or firms run the risk of violating Reg FD as it pertains to selective disclosure of market-moving information. One potential unintended consequence of the SEC allowing selective private communication between firms and analysts is that it can allow for the possibility of the transfer of material nonpublic information of which analysts are not aware. Also, if the firm previously disclosed information with low prominence, and due to changing market conditions, it is expected that firm performance will be different, firms can refer analysts back to selected disclosures and emphasize, or de-emphasize, any piece of information along the materiality spectrum. In essence, it can become more difficult for regulators to distinguish between acceptable communications of public information and conversing in "code".

Prior literature finds that since the implementation of Reg FD, there has been an increase in the quantity of voluntary public disclosures from management (Bailey et al., 2003; Heflin et al., 2003). More recently, Kross and Suk (2012) show that there also has been an increase in analysts' reliance on firms' public disclosures in the post-Reg FD period. One possible outcome of this increased disclosure is that managers intentionally oversupply disclosures to the market which creates a way to speak in code with analysts by referring them back to either positive or negative information that has already been publicly disclosed. This disclosure provides a less subtle and legally compliant method to guide analysts' forecasts in a desired direction.

Anecdotal evidence is consistent with this prediction. For example, some firms proactively call analysts to ask if they are aware of guidance that was issued and whether the analysts have incorporated such guidance into their earnings models (Gryta et al. 2016). In such calls, some firms highlight all of the negative information that has been publicly disclosed, and not the positive, to convey implicit messages. For example, in April 2016, AT&T reported a positive earnings surprise after investor relations officials encouraged analysts to look back at comments made by CFO John Stephens in early March in which he suggested slowing revenue as a result of customers waiting longer to upgrade their mobile phones

(Gryta et al. 2016). In addition, many investor relations officials with whom we spoke in phone interviews confirm that they regularly review and comment on analysts' earnings models privately to analysts throughout the quarter. Several officials stated that they provide feedback to analysts whose earnings projections are significantly different from other analysts covering the firm. One of the most common reasons, they say, is because the analyst perhaps was not aware of a particular piece of important information which was previously disclosed by the company.

If firms are quietly nudging analysts' forecasts in desired directions, the question arises as to whether this private communication is adhering to the spirit of Reg FD. Essentially, if firms are using a legal "wink and nod" type of approach to manage earnings expectations, this process could provide the same unfair advantage to select market participants that Reg FD originally sought to eliminate. Therefore, if firms review and comment on analysts' earnings models to intentionally guide earnings targets, we predict that analysts will have higher forecast accuracy. Furthermore, this perspective predicts that firms which provide private feedback engage in more expectations management with the purpose of walking analysts' forecasts down to achieve a positive earnings surprise.

On the other hand, one of the primary functions of a firm's investor relations department is to manage communications between the firm's management and information intermediaries including analysts (Bushee and Miller, 2012; Solomon, 2012; Kirk and Vincent, 2014). Investor relations departments often act as an informational resource for investors and analysts as it pertains to information that has already been publicly released to the market. One of the main reasons that the SEC continues to allow private communications with analysts is to give firms the opportunity to correct inaccuracies in the information that the analyst is using. Indeed, many of the firms with which we spoke stated that they communicate with analysts about their models strictly for the purpose of correcting erroneous, or outdated, assumptions. They emphasized that all communications are in strict adherence to following the requirements of Reg FD. Furthermore, recent literature finds that approximately half of all firms which provided private earnings guidance in the pre-Reg FD period stopped issuing earnings-related, voluntary disclosures in the post-Reg FD period (Wang, 2007). As a result of these firms' new policies of nondisclosure, they experience significant deterioration in their information environments. If there has been an increase in information asymmetry for firms which have altered their disclosure practices, this increase could lead to a greater number of true inaccuracies in analysts' earnings models which firms might seek to address.

Furthermore, in recent years, the SEC has been actively enforcing Reg FD and prosecuting firms which violate its requirements. For example, in 2010, the SEC alleged that Office Depot faced the likelihood of not meeting analysts' earnings expectations and devised a strategy for advance communication to avoid completely surprising the market (SEC, 2010a). The SEC stated that Office Depot's director of investor relations made a series of one-on-one calls to analysts to refer them back to recent earnings announcements made by two comparable firms that had publicly announced results that were affected negatively by the slowing economy. In the allegation, the SEC noted that Office Depot did not regularly make these types of calls implying that these missing calls were a clear case of selective disclosure.¹ Most investor relations officials with which we spoke claim to have regular and ongoing communications with analysts in regard to earnings models within the bounds of legally complying with Reg FD.

If the purpose of such private communications is to provide unbiased, public information to analysts and to correct factual inaccuracies concerning the firm, it is not likely that the firm will intentionally attempt to opportunistically guide analysts' forecasts. Therefore, this perspective predicts there should be no difference in forecast accuracy between analysts who follow firms which communicate privately regarding earnings models and those firms which do not. Additionally, there should be no difference in the likelihood of engaging in expectations management or walking analysts' forecasts down to achieve a positive earnings surprise. Please note that both of these behaviors, opportunistically guiding analysts' forecasts and expectations management are different than traditional earnings management, and do not imply that the firm has engaged in any form of earnings management.

3. Research Design

This section outlines the method used to test for differences in forecast accuracy between analysts who cover firms which communicate privately and those firms which do not engage in any form of private communication with analysts. The following cross-sectional regression framework is used to test the relation between forecast accuracy and private communicators while controlling for analyst, brokerage, and firm-level characteristics:

¹ Other examples of recent Reg FD investigations include: (1) In 2009, the SEC filed charges against American Commercial Lines, Inc. for selectively disclosing material nonpublic information regarding the company's earnings forecasts to a limited number of analysts, (2) In 2010, the SEC charged Presstek, Inc. with selectively disclosing material nonpublic information regarding the company's financial performance to a registered investment advisor (SEC, 2009; SEC, 2010b).

$$\begin{aligned}
ACCURACY = & \alpha_0 + \alpha_1 PRIVATE + \alpha_2 LAG_ACCURACY + \alpha_3 FREQ + \alpha_4 FIRMEXP \\
& + \alpha_5 GENEXP + \alpha_6 HORIZON + \alpha_7 BSIZE + \alpha_8 NFIRMS + \alpha_9 COV + \alpha_{10} SIZE + \alpha_{11} EVOL + \alpha_{12} BM + \\
& \alpha_{13} ROA + \alpha_{14} LEV + \alpha_{15} ATO + \alpha_{16} INST + \alpha_{17} VOL \\
& + \alpha_{18} BETA + \varepsilon
\end{aligned} \tag{1}$$

PRIVATE is set equal to 1 if the firm reviews *and* comments on analysts' earnings models privately to analysts, and 0 otherwise.² Following Hong and Kubik (2003), the analyst's standardized forecast accuracy ranking, *ACCURACY*, is measured relative to the other analysts who follow the same company in the same quarter of the current year. First, each analyst's absolute forecast error in the current quarter is calculated. Second, all analysts are ranked based on the absolute forecast errors in each quarter for each covered firm. Therefore, the most accurate analyst is assigned a rank of 1, and the least accurate analyst is assigned the highest rank. If any analysts have the same accuracy, these analysts are assigned the midpoint of the ranks which they occupy. Lastly, a ranking score is created that takes into account differences in analyst coverage across different companies. Thus, the standardized accuracy variable ranges from 0 to 100 using the following equation:

$$ACCURACY = 100 - \frac{rank-1}{number\ of\ analysts-1} \times 100 \tag{2}$$

To control for differences in forecast accuracy at the broker and analyst-level, appropriate control variables following prior literature are included (Mikhail et al. 1997, Clement 1999, Jacob et al. 1999). Specifically, forecast frequency (*FREQ*) controls for the effects of analyst effort because increases in effort should increase forecast accuracy. To the extent that accuracy is explained by forecasting experience, *GENEXP* controls for an analyst's general experience and *FIRMEXP* controls for an analyst's experience specifically with a firm. This result is because as both types of forecasting experience increase, forecast accuracy also should increase. *HORIZON* controls for the timing effects because forecasts that are staler (recent), should lead to a decrease (increase) in forecast accuracy. The size of the brokerage firm (*BSIZE*) serves as a proxy to control for the level of resources to which an analyst has access which can increase accuracy. The number of firms an analyst follows (*NFIRMS*) controls for the complexity of an analyst's portfolio because if the analyst is following few (many) firms, forecast accuracy should increase (decrease). Analyst following (*COV*) controls for the level of information asymmetry in the market because as the number of analysts following a firm increase, information asymmetry should decrease, and overall accuracy should increase. In addition to analyst and broker characteristics, we also control for firm-level characteristics which could affect levels of forecast accuracy during the quarter following the prior literature (Kumar, 2010; Gu et al., 2013; Hsu and Hilary, 2013; Billings et al., 2014; Green et al., 2014). Please see Appendix A for variable definitions.

Next, we examine the likelihood that providing direct feedback on analysts' earnings models is associated with managing analysts' earnings expectations. We first analyze the extent to which these firms engage in expectations management to walk down analysts' forecasts to achieve positive (or non-negative) earnings surprises consistent with prior literature (Bartov et al., 2002; Matsumoto, 2002).³ Second, we examine the magnitude of the walkdown for private communicators versus non-communicators. The following two cross-sectional regression frameworks are used to test the relation between expectations management and private communication while controlling for firm-level characteristics:

$$\begin{aligned}
EXM = & \beta_0 + \beta_1 PRIVATE + \beta_2 SIZE + \beta_3 EVOL + \beta_4 BM + \beta_5 ROA \\
& + \beta_6 LEV + \beta_7 ATO + \beta_8 INST + \beta_9 VOL + \beta_{10} BETA + \varepsilon
\end{aligned} \tag{3}$$

$$\begin{aligned}
WALKDOWN = & \gamma_0 + \gamma_1 PRIVATE + \gamma_2 SIZE + \gamma_3 EVOL + \gamma_4 BM + \gamma_5 ROA \\
& + \gamma_6 LEV + \gamma_7 ATO + \gamma_8 INST + \gamma_9 VOL + \gamma_{10} BETA + \varepsilon
\end{aligned} \tag{4}$$

The two proxies used to measure private earnings guidance are *EXM* and *WALKDOWN*. *EXM* equals 1 if the firm has a positive (or non-negative) earnings surprise based on the last individual analyst earnings forecast and a negative earnings surprise based on the first individual analyst earnings forecast, and 0 otherwise. This measure captures initial forecast optimism followed by forecast pessimism immediately before the earnings announcement which results in the firm meeting or beating the earnings benchmark. *WALKDOWN* equals the first individual analyst earnings forecast minus the

² The source of analysts' information is assumed to be investor relations executives since the investor relations departments confirm whether they do, or do not, review and confirm earnings models privately to analysts.

³ Other important papers which examine the likelihood of expectations management include Richardson et al. (2004), Baik and Jiang (2006), Cotter et al. (2006), Brown and Pinello (2007), Koh et al. (2008), Bartov and Cohen (2009), Das et al. (2011), and Zhang et al. (2018).

last individual analyst earnings forecast. Therefore, *WALKDOWN* is a measure of the downward change in an analyst's forecast and captures the magnitude of any private earnings guidance between the analyst and the firm's management. The size of the firm (*SIZE*) controls for larger firms having less optimistic biases in analysts' forecasts and earnings volatility (*EVOL*) controls for uncertainty in the forecasting environment causing a lower probability of expectations management when uncertainty is high (Matsumoto 2002). Book-to-market ratio (*BM*) is included because prior research finds that low book-to-market firms are more sensitive to earnings fluctuations and have stronger incentives to manage earnings (Skinner and Sloan 2002). Therefore, low book-to-market firms also might have more incentive to engage in expectations management. Return on assets (*ROA*), leverage (*LEV*), and asset turnover (*ATO*) control for firm-level, performance-related characteristics which could affect the extent to which firms engage in expectations management. Institutional ownership (*INST*) controls for firms with higher institutional ownership being more likely to take actions to avoid negative earnings surprises (Matsumoto 2002). Trading volume (*VOL*) is included because optimistically biased analyst research is associated with greater trading volume (Gu et al. 2013). Lastly, we control for beta (*BETA*) since it is correlated with other firm-level performance measures which are determinants of expectations management.

4. Sample Selection

The sample for this study consists of all firms which have been listed in the S&P 500 Index at any point during the period 2002 to 2014. All S&P 500 firms which have been acquired by, or merged into, a different firm, and firms which have gone private have been excluded from the sample to ensure consistency in each firm's characteristics over time. Inclusion of these firms could lead to biased results due to changes in firm characteristics unrelated to a firm's communication of private information to analysts. We contacted the investor relations departments of all firms to ascertain whether the firm communicates privately with analysts in regard to their earnings models. They were asked two questions by the authors. First, we asked whether their company "reviews" analysts' earnings models. Second, we asked whether their company "comments" on analysts' earnings models directly to analysts. Firms which review *and* comment on analysts' earnings models directly to analysts are designated as "communicators." Likewise, firms which do not engage in any private conversations with analysts concerning earnings models are labeled as "non-communicators." Firms which state that they review earnings models but do not *comment* on them are also categorized as non-communicators.

We contacted investor relations executives through the email address or phone number listed on the website of the firm's investor relations department. The contents of the email sent consisted of an introduction of the authors (name and university), purpose of the email (i.e., the research question of this study), and the two questions outlined above. Investor relations directors who replied to our email that they wished to remain anonymous or who did not want to discuss sensitive issues over email were contacted directly through telephone calls to discuss the question confidentially. Approximately 234 firms responded via email or telephone, out of 625 firms initially contacted, which corresponds to a response rate of approximately 37%. Of the 625 firms initially contacted, 516 were contacted by email and 109 by telephone. Based on the responses and interviews, about 43%, or 100 firms, are classified as private communicators while 57%, or 134 firms, are categorized as non-communicators. Unless firms specifically stated that private communication has occurred only in certain years, private communicators remain in this classification for the entire sample period under investigation. After merging the data with I/B/E/S detailed earnings forecasts, CRSP, Compustat quarterly, and Thomson-Reuters Institutional Holdings database, there are 17,993 observations for private communicators and 25,917 observations for non-communicators, resulting in a final sample of 43,910 observations. All continuous variables are winsorized at the 1st and 99th percentiles.

5. Results

Panel A of Table 1 shows the descriptive statistics for responders versus non-responders. Responders are firms who confirmed whether or not they communicate privately with analysts while non-responders did not reply to any emails that were sent or answer any phone calls which were placed. Analysts who follow non-responders issue forecasts that are significantly more accurate (*ACCURACY* = 56.077) than analysts who follow responders (*ACCURACY* = 55.222). Analysts who cover responder firms issue significantly more frequent forecasts during the quarter (*FREQ* = 3.800), have more general forecasting experience (*GENEXP* = 9.610), issue forecasts over shorter horizons (*HORIZON* = 33.389), work at larger brokerage firms (*BSIZE* = 75.565), and follow more firms (*NFIRMS* = 17.690) compared to analysts who cover non-responder firms (*FREQ* = 3.668, *GENEXP* = 9.449, *HORIZON* = 34.809, *BSIZE* = 74.567, and *NFIRMS* = 17.530 respectively). Responder firms have lower analyst following (*COV* = 24.766), are larger firms (*SIZE* = 9.330), have lower earnings volatility (*EVOL* = 0.015), have higher return on assets (*ROA* = 0.015), have higher leverage (*LEV* = 0.595), have lower institutional ownership (*INST* = 0.833), and have higher total trading volume (*VOL* = 19.315), compared to non-responder firms (*COV* = 24.929, *SIZE* = 9.172, *EVOL* = 0.018, *ROA* = 0.013, *LEV* = 0.585, *INST* = 0.876, and *VOL* = 19.255 respectively).

Panel B of Table 1 presents the descriptive statistics for private communicators versus non-communicators. Analysts who follow firms which are private communicators issue forecasts that are significantly more accurate ($ACCURACY = 59.355$) than analysts who follow non-communicators ($ACCURACY = 58.699$). This univariate finding suggests that analysts benefit from the information shared in private interactions with firms concerning future firm performance. In regard to analyst characteristics, analysts who cover private communicators issue significantly more frequent forecasts during the quarter ($FREQ = 3.792$), have more general forecasting experience ($GENEXP = 9.266$), and issue forecasts over shorter horizons ($HORIZON = 32.902$), as compared to analysts who cover non-communicators ($FREQ = 3.729$, $GENEXP = 8.865$, and $HORIZON = 33.303$, respectively). Firms which communicate privately with analysts tend to have fewer analyst following ($COV = 23.326$), are smaller firms ($SIZE = 9.265$), have higher earnings volatility ($EVOL = 0.018$), have higher book-to-market ratios ($BM = 0.474$), and have lower return on assets ($ROA = 0.014$) as compared to firms which do not communicate privately ($COV = 25.045$, $SIZE = 9.285$, $EVOL = 0.016$, $BM = 0.448$, and $ROA = 0.016$, respectively). Furthermore, firms which are private communicators have significantly higher leverage ($LEV = 0.606$), lower asset turnover ($ATO = 0.195$), lower institutional ownership ($INST = 0.594$), lower total trading volume ($VOL = 19.259$), and lower beta ($BETA = 0.698$) versus firms which are non-communicators ($LEV = 0.585$, $ATO = 0.240$, $INST = 0.660$, $VOL = 19.313$, and $BETA = 1.119$, respectively).

Table 2 provides the industry classification of firms which are categorized as private communicators. Overall, there are six industries which capture approximately 41% of the observations for private communicators. Specifically, the primary industries in which firms engage in private communications with analysts include Banking (7%), Automobiles and Trucks (7%), Electronic Equipment (7%), Petroleum and Natural Gas (7%), Insurance (6%), and Utilities (6%). In Table 3, we present the Pearson correlation coefficients for private communicators versus non-communicators. There is a positive correlation between *PRIVATE* and *ACCURACY* of 0.01 which is significant at the 1% level. *PRIVATE* is also positively and significantly correlated with forecast frequency (*FREQ*), general forecasting experience (*GENEXP*), earnings volatility (*EVOL*), book-to-market ratio (*BM*), and total leverage (*LEV*). However, we document a significantly negative correlation between *PRIVATE* and forecast horizon (*HORIZON*), analyst following (*COV*), size of the firm (*SIZE*), return on assets (*ROA*), asset turnover (*ATO*), institutional ownership (*INST*), total trading volume (*VOL*), and beta (*BETA*). Since the majority of the analyst characteristic and firm characteristic variables have Pearson correlations which are significant, we control for these variables in the multiple regressions that follow.

Table 4 shows the results of the relation between private communication and analysts' forecast accuracy. In column 1, the coefficient of *PRIVATE* is 0.0063 and is positive and significant at the 1% level after controlling for analyst characteristic variables. This result provides support for the prediction that firms communicate privately with analysts to engage in opportunistic earnings guidance. Analysts are more likely to have greater forecast accuracy when they have greater forecast accuracy in the prior quarter ($LAG_ACCURACY = 0.0010$), when they issue less frequent forecasts during the quarter ($FREQ = -0.0307$), when they have longer forecast horizons ($HORIZON = 0.0139$), and when they follow a greater number of firms ($NFIRMS = 0.0074$). In column 2, controls are added for firm characteristics. We continue to find that analysts who follow firms which engage in private communication have greater forecast accuracy than analysts who follow non-communicators ($PRIVATE = 0.0070$). Overall, these results suggest that analysts impound more value-relevant information into their forecasts when they receive more feedback from management concerning analysts' earnings models.

Table 5 presents the findings of the relation between private communication and expectations management as well as the walk-down of analysts' forecasts to meet or beat earnings benchmarks. In the first column, we find that private communicators are more likely to engage in expectations management behavior than non-communicators ($PRIVATE = 0.0186$). This result signifies that firms use private communication to walk down analysts' forecasts to meetable or beatable levels to positively surprise the market. The second column shows that private communicators walk analysts down to a greater extent during the quarter than do non-communicators ($PRIVATE = 0.0231$). This result provides additional evidence that firms appear to be using private conversations with analysts to opportunistically guide earnings targets downward with the objective of meeting or beating earnings targets.

6. Additional Analysis

6.1 Market Reaction to Earnings Forecast Revisions

This section analyzes whether investors perceive the earnings forecasts and stock recommendations of analysts to be more informative when they follow firms which engage in private communication. In Table 6, we first compare the market reaction to forecast revisions from analysts following private communicators to the reaction to revisions from analysts which cover non-communicators. The coefficient on earnings forecast revisions (*REV*) is negative (-0.0249) and significant at the 1% level. This result indicates that, on average, the market has an immediate negative reaction to the forecast revisions of non-communicators. However, the coefficient for the interaction term for the earnings forecast

revisions of private communicators ($PRIVATE \times REV$) is significantly positive and of larger magnitude (0.0784). Furthermore, the sum of the coefficients for private communicators ($REV + PRIVATE \times REV = 0.0535$) is also positive and significant at the 1% level. This result signifies that the positive relation between contemporaneous stock returns and forecast revisions is driven by firms which privately communicate with analysts concerning earnings models. This result also indicates that the market recognizes that certain analysts' forecasts contain more information because of private feedback directly from the firm.

6.2 Market Reaction to Stock Recommendations

Prior research finds that analysts who issue more accurate earnings forecasts are more likely to generate more profitable stock recommendations (Loh and Mian, 2006; Ertimur et al., 2007). Therefore, this section extends the market analysis to examine whether investors perceive the stock recommendations of analysts who follow private communicators to be more informative than the recommendations of analysts who cover non-communicators. Column 1 of Table 7 shows that there is a positive market reaction to buy recommendations ($BUY = 0.0076$), hold recommendations ($HOLD = 0.0069$), and sell recommendations ($SELL = 0.0087$) of analysts following non-communicators. The positive reaction to the sell recommendations indicates that investors do not agree with analysts who follow non-communicators possibly due to these analysts' lack of private interaction with management. We also document an incremental positive market reaction to the buy recommendations of analysts who follow private communicators ($PRIVATE \times BUY = 0.0025$). This result indicates that investors treat favorable recommendations of analysts who engage in private communication with firms as containing more information than the same recommendations from analysts who have no such interaction. Lastly, we also find a positive market reaction to the hold recommendations of analysts who cover private communicators ($PRIVATE \times HOLD = 0.0023$). Overall, the additional analyses show that investors perceive the research output of analysts following private communicators to contain substantially more information than the outputs of analysts who do not benefit from private conversations.

6.3 The Effect of Analyst Following

When firms have a larger number of analysts following the firm, it is possible that one or more analysts during the quarter will fail to incorporate all public, company-issued guidance into their earnings models. The presence of analyst outliers could create an incentive for firms to privately correspond with such analysts to remind them of previously issued public disclosures. Numerous investor relations departments with which we spoke, which are private communicators, confirmed that this scenario is common, and often happens when analysts are either less experienced or are new to covering the firm. On the other hand, if the firm has a small analyst following, the firm might be more likely to privately communicate with analysts since there are a fewer number of earnings models to review. Table 8 examines whether the effect of private communication on forecast accuracy differs for firms with low and high analyst coverage. We find that the coefficient on the interaction term pertaining to low analyst coverage for private communicators is positive and significant ($PRIVATE \times LOW_COV = 0.0074$). However, the interaction of high analyst coverage and private communicators is insignificant ($PRIVATE \times HIGH_COV = 0.0048$). This result suggests that analysts following private communicators with low levels of coverage receive relatively higher quality private information than analysts following private communicators with high levels of coverage.

7. Conclusion

Research has shown that Reg FD has been effective in stopping selective disclosure of material nonpublic information to analysts. However, many investors are not aware that the SEC continues to allow firms to review and comment on analysts' earnings models privately to analysts. In essence, firms do not trigger Reg FD's disclosure requirements if, in such private interactions, they refer analysts to previously disclosed public information, correct erroneous information in models, or share seemingly inconsequential information. However, this channel of exclusive communication can provide an opportunistic incentive to guide analysts' earnings forecasts through signals while still, technically, abiding by the rules of disclosure. This type of managerial behavior can be a deliberate attempt to game the system by providing winks and nods to analysts with an intentional disclosure of material information.

We find that analysts who follow firms which communicate privately in regard to earnings models have significantly greater accuracy than analysts who follow firms which do not communicate privately. Firms which communicate with analysts privately also are more likely to engage in expectations management to walk analysts' forecasts down to meetable or beatable levels than firms which do not participate in such communications. In additional analysis, we also show that there is a stronger market reaction to the earnings forecast revisions and favorable stock recommendations of analysts who follow firms which privately communicate versus those which do not. In summary, our findings suggest

that firms might be exploiting a specific exemption in Reg FD by providing market-moving information to analysts and opportunistically guiding analysts' forecasts to positively surprise the market.

The results of this study add to the mixed evidence of the effects of Reg FD and are consistent with the findings of prior literature of increased voluntary public disclosures from management after Reg FD. One potential explanation for this increased disclosure is that managers are oversupplying disclosures to the market so that they can refer analysts back to either positive or negative, previously disclosed information. One limitation of this study is that firms were asked only whether they reviewed and commented on analysts' earnings models but not the amount of reviewing and commenting in which they engage. Therefore, it is possible that the relation will change at different levels of firm-analyst communication. Another limitation of the paper is that the time period of the data selection ends in 2014. Therefore, it is possible that the relation between private communication and forecast accuracy differs in years following this time period. Lastly, a limitation of the study is that superior forecasters are selected a priori by companies because they are more responsive and accordingly more accurate, and it is possible that their superior performance would be evident whether companies were discussing forecasting models and methods with those analysts.

These results have important implications for regulators since firms could be taking advantage of an exception to a broader set of rules which have the opposite desired objective on firm behavior. Our findings also have implications for firms which might be participating in private communications with analysts and are unknowingly, or unintentionally, engaging in earnings guidance and selective disclosure of material information. Lastly, this article has key implications for analysts since violations of Reg FD can adversely affect analysts' careers and reputations if the SEC can prove that both parties are complicit in any such collusion.

Appendix A

<i>PRIVATE</i>	equal to 1 if the firm reviews and comments on analysts' earnings models privately to analysts, and 0 otherwise.
<i>ACCURACY</i>	analyst's standardized forecast accuracy ranking relative to other analysts who follow the same company in the same quarter of the current year.
<i>LAG_ACCURACY</i>	analysts forecast accuracy in the prior quarter.
<i>FREQ</i>	log of the number of recommendations that the analyst has issued for the firm during the quarter.
<i>GENEXP</i>	log of the total number of years through the current year that the analyst has issued at least one forecast for any firm.
<i>FIRMEXP</i>	log of the number of years through the current year for which the analyst has supplied a forecast for the firm.
<i>HORIZON</i>	log of the number of days between the analyst's forecast date and the end of the quarter.
<i>BSIZE</i>	log of the number of analysts employed at the brokerage firm in the current quarter.
<i>NFIRMS</i>	log of the number of firms for which the analyst has issued at least one forecast during the quarter.
<i>COV</i>	log of the number of analysts who issue forecasts for the firm during the quarter.
<i>SIZE</i>	market value of equity at the end of the prior quarter.
<i>EVOL</i>	standard deviation of return on assets over the prior 5 quarters.
<i>BM</i>	ratio of book value of equity to market value of equity at the end of the prior quarter
<i>ROA</i>	net income divided by total assets at the end of the prior quarter.
<i>LEV</i>	total liabilities divided by total assets at the end of the prior quarter.
<i>ATO</i>	asset turnover measured as sales revenue divided by total assets at the end of the prior quarter.
<i>INST</i>	institutional ownership measured as the proportion of shares held by institutions at the end of the prior quarter.
<i>VOL</i>	trading volume measured as the log of the total trading volume at the end of the prior quarter.
<i>BETA</i>	estimated using firm-specific regressions of the firm's daily returns on the value-weighted market returns using all trading days in the prior year.
<i>EXM</i>	equal to 1 if the firm has a positive (or non-negative) earnings surprise based on the last individual analyst earnings forecast and a negative earnings surprise based on the first individual analyst earnings forecast, and 0 otherwise.
<i>WALKDOWN</i>	equals the first individual analyst earnings forecast minus the last individual analyst earnings forecast.

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Table 1
Descriptive Statistics

Panel A: Responders versus Non-Responders

Variable	Responders			Non-Responders			Difference (Mean)
	Mean	Standard Deviation	Median	Mean	Standard Deviation	Median	
ACCURACY	55.222	25.203	55.172	56.077	25.007	56.452	-0.855 ***
FREQ	3.800	2.484	3.000	3.668	2.379	3.000	0.132 ***
FIRMEXP	4.313	3.071	3.000	4.282	3.061	3.000	0.032 *
GENEXP	9.610	5.829	9.000	9.449	5.854	9.000	0.161 ***
HORIZON	33.389	19.402	33.000	34.809	19.217	37.000	-1.420 ***
BSIZE	75.565	51.698	72.000	74.567	51.913	70.000	0.998 ***
NFIRMS	17.690	8.556	17.000	17.530	8.542	16.000	0.160 ***
COV	24.766	10.847	23.000	24.929	10.210	24.000	-0.164 ***
SIZE	9.330	1.109	9.326	9.172	1.101	9.148	0.158 ***
EVOL	0.015	0.034	0.008	0.018	0.029	0.010	-0.003 ***
BM	0.425	1.355	0.366	0.427	0.994	0.357	-0.002
ROA	0.015	0.030	0.014	0.013	0.034	0.014	0.002 ***
LEV	0.595	0.232	0.602	0.585	0.219	0.569	0.010 ***
ATO	0.224	0.187	0.182	0.223	0.186	0.171	0.001
INST	0.833	0.209	0.835	0.876	0.219	0.880	-0.043 ***
VOL	19.315	1.013	19.367	19.255	0.995	19.324	0.060 ***
n		56,186			96,449		

Table 1 (cont.)
Descriptive Statistics

Panel B: Private Communicators versus Non-Private Communicators

Variable	Communicators			Non-Communicators			Difference (Mean)
	Mean	Standard Deviation	Median	Mean	Standard Deviation	Median	
ACCURACY	59.355	24.220	60.000	58.699	23.516	59.375	0.656 ***
FREQ	3.792	2.505	3.000	3.729	2.432	3.000	0.063 ***
FIRMEXP	4.185	3.060	3.000	4.175	3.094	3.000	0.010
GENEXP	9.266	5.859	8.000	8.865	5.528	8.000	0.401 ***
HORIZON	32.902	19.334	32.000	33.303	19.473	32.000	-0.401 **
BSIZE	73.263	49.948	69.000	72.559	49.146	69.000	0.704
NFIRMS	17.702	8.636	17.000	17.686	8.797	17.000	0.016
COV	23.326	10.357	21.000	25.045	11.126	23.000	-1.719 ***
SIZE	9.265	1.093	9.252	9.285	1.384	9.279	-0.021 *
EVOL	0.018	0.025	0.011	0.016	0.035	0.009	0.002 ***
BM	0.474	0.534	0.386	0.448	0.741	0.361	0.027 ***
ROA	0.014	0.027	0.013	0.016	0.027	0.015	-0.002 ***
LEV	0.606	0.227	0.609	0.585	0.228	0.595	0.020 ***
ATO	0.195	0.132	0.177	0.240	0.202	0.190	-0.045 ***
INST	0.846	0.327	0.844	0.825	0.261	0.827	0.021 ***
VOL	19.259	1.106	19.292	19.313	1.068	19.375	-0.055 ***
<i>n</i>		22,564			33,622		

***, **, * indicate significance at the 1%, 5%, and 10% level. PRIVATE equal to 1 if the firm reviews and comments on analysts' earnings models privately to analysts, and 0 otherwise. ACCURACY is the standardized forecast accuracy ranking of the analyst relative to other analysts who follow the same company in the same year. FREQ is the number of forecasts that the analyst issues for the company during the year. FIRMEXP is the number of years that the analyst has issued a forecast for the company. GENEXP is the number of years that the analyst has issued a forecast for any company. HORIZON is the number of days between the forecast announcement date and the fiscal year end. BSIZE is the number of analysts who are employed by the analyst's brokerage firm. NFIRMS is the number of companies for which the analyst has issued at least one forecast during the year. COV is the number of analysts which are following the company during the year. SIZE is the log of the market value of equity. EVOL, earnings volatility, is the standard deviation of return on assets over the prior 5 years. BM is the book value of equity divided by the market value of equity at the end of the prior quarter. ROA is net income divided by total assets at the end of the prior quarter. LEV is total liabilities divided by total assets at the end of the prior quarter. ATO, asset turnover, is sales revenue divided by total assets at the end of the prior quarter. INST is the proportion of shares held by institutions at the end of the prior quarter. VOL is log of the total trading volume during the year.

TABLE 2
Industry Classification of Private Communicators

<i>Industry</i>	<i>Communicators</i>		<i>Non-Communicators</i>	
Petroleum and Natural Gas	1,936	9%	1,025	3%
Banking	1,670	7%	2,188	7%
Business Services	1,597	7%	2,183	6%
Electronic Equipment	1,559	7%	3,803	11%
Automobiles and Trucks	1,555	7%	254	1%
Insurance	1,399	6%	3,130	9%
Utilities	1,386	6%	1,730	5%
Trading	1,116	5%	516	2%
Machinery	1,048	5%	1,169	3%
Retail	993	4%	2,512	7%
Chemicals	958	4%	206	1%
Communication	955	4%	508	2%
Construction	888	4%	590	2%
Business Supplies	736	3%	471	1%
Wholesale	590	3%	652	2%
Restaurants, Hotels, Motels	550	2%	0	0%
Computers	397	2%	1,443	4%
Beer and Liquor	363	2%	313	1%
Consumer Goods	321	1%	1,383	4%
Printing and Publishing	262	1%	0	0%
Pharmaceutical Products	256	1%	775	2%
Precious Metals	239	1%	0	0%
Other	231	1%	218	1%
Aircraft	230	1%	158	0%
Entertainment	206	1%	0	0%
Healthcare	195	1%	743	2%
Measuring and Control Equipment	184	1%	583	2%
Shipping Containers	146	1%	1	0%
Non-Metallic and Industrial Metal Mining	127	1%	0	0%
Real Estate	125	1%	0	0%
Construction Materials	115	1%	475	1%
Medical Equipment	111	0%	650	2%
Food Products	79	0%	1,146	3%
Transportation	41	0%	2,075	6%
Apparel	0	0%	154	0%
Defense	0	0%	148	0%
Electrical Equipment	0	0%	920	3%
Personal Services	0	0%	488	1%
Rubber and Plastic Products	0	0%	131	0%
Steel Works	0	0%	415	1%
Textiles	0	0%	348	1%
Tobacco Products	0	0%	118	0%
Total	22,564	100%	33,622	100%

Industry distribution is based on Fama and French 48 industry portfolios classification.

Table 3
Pearson Correlations for Private Communicators

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
(1) PRIVATE																	
(2) ACCURAC	0.01																
(3) FREQ	0.01~	-0.09															
(4) FIRMEXP	0.00#	-0.01'	0.08														
(5) GENEXP	0.03	0.01#	0.00#	0.54													
(6) HORIZON	-0.01^	0.06	-0.26	0.04	0.03												
(7) BSIZE	0.01#	0.00#	0.00#	-0.08	-0.02	-0.05											
(8) NFIRMS	0.00#	0.02	0.03	0.08	0.18	0.01#	0.07										
(9) COV	-0.07	-0.03	0.22	0.04	-0.02	-0.14	-0.12	-0.02									
(10) SIZE	-0.01~	-0.01'	0.10	0.11	0.05	-0.05	-0.04	-0.04	0.50								
(11) EVOL	0.05	0.00#	0.01#	-0.06	-0.04	0.04	-0.03	-0.03	0.10	-0.08							
(12) BM	0.02	0.00#	0.02	0.00#	0.01~	-0.03	0.02	0.01#	-0.06	-0.09	-0.05						
(13) ROA	-0.03	0.00#	0.00#	0.01^	0.01	0.02	-0.05	-0.01	0.18	0.24	-0.02	-0.14					
(14) LEV	0.04	0.00#	-0.03	0.06	0.06	-0.03	0.07	0.04	-0.35	-0.14	-0.13	0.05	-0.35				
(15) ATO	-0.13	0.01#	-0.05	0.03	0.04	0.09	-0.01#	-0.05	-0.06	-0.08	-0.01#	-0.16	0.19	-0.14			
(16) INST	-0.11	-0.01'	0.03	0.08	0.03	0.06	-0.02	0.00#	0.04	-0.03	-0.01#	-0.03	0.06	-0.03	0.08		
(17) VOL	-0.02	-0.03	0.19	0.17	0.05	-0.08	-0.09	-0.03	0.61	0.78	0.03	-0.06	0.16	-0.18	-0.08	0.01#	
(18) BETA	-0.02	-0.01	0.03	0.01^	0.00#	-0.01^	-0.02	-0.01#	0.00#	-0.01	0.00#	0.03	0.00#	0.02	-0.01#	-0.01'	0.02

All correlations are significant at the 1% level except for those denoted by "^" and "~" which are significant at the 5% and 10% level, respectively. Correlations which are insignificant are denoted by "#". PRIVATE equal to 1 if the firm reviews and comments on analysts' earnings models privately to analysts, and 0 otherwise. ACCURACY is the standardized forecast accuracy ranking of the analyst relative to other analysts who follow the same company in the same quarter. FREQ is the number of forecasts that the analyst issues for the company during the quarter. FIRMEXP is the number of years that the analyst has issued a forecast for the company. GENEXP is the number of years that the analyst has issued a forecast for any company. HORIZON is the number of days between the forecast announcement date and the end of the quarter. BSIZE is the number of analysts who are employed by the analyst's brokerage firm during the quarter. NFIRMS is the number of companies for which the analyst has issued at least one forecast during the quarter. COV is the number of analysts which are following the company during the quarter. SIZE is the log of the market value of equity. EVOL, earnings volatility, is the standard deviation of return on assets over the prior 5 quarters. BM is the book value of equity divided by the market value of equity at the end of the prior quarter. ROA is net income divided by total assets at the end of the prior quarter. LEV is total liabilities divided by total assets at the end of the prior quarter. ATO, asset turnover, is sales revenue divided by total assets at the end of the prior quarter. INST is the proportion of shares held by institutions at the end of the prior quarter. VOL is log of the total trading volume at the end of the prior quarter. BETA is estimated using firm-specific regressions of the firm's daily returns on the value-weighted market returns using all trading days in the prior year.

Table 4
Analysts' Forecast Accuracy and Private Communication

Dependent variable = ACCURACY				
	Coefficient	t-statistic	Coefficient	t-statistic
Intercept	0.4897 ***	29.08	0.5424 ***	17.31
PRIVATE	0.0063 ***	2.71	0.0070 ***	2.97
LAG_ACCURACY	0.0010 ***	22.10	0.0010 ***	21.99
FREQ	-0.0307 ***	-16.46	-0.0302 ***	-16.12
FIRMEXP	-0.0015	-0.76	-0.0006	-0.29
GENEXP	0.0017	0.80	0.0013	0.60
HORIZON	0.0139 ***	5.39	0.0142 ***	5.41
BSIZE	0.0004	0.36	0.0003	0.25
NFIRMS	0.0074 ***	2.83	0.0073 ***	2.82
COV	-0.0028	-1.09	-0.0019	-0.55
SIZE			0.0021	1.30
EVOL			-0.0150	-0.38
BM			0.0004	0.25
ROA			0.0073	0.15
LEV			-0.0093	-1.62
ATO			0.0028	0.41
INST			-0.0108 ***	-2.60
VOL			-0.0038 *	-1.88
BETA			-0.0002 **	-2.29
n	43,910		43,910	
Adj. R ²	2.09%		2.12%	

***, **, * indicate significance at the 1%, 5%, and 10% level. PRIVATE equal to 1 if the firm reviews and comments on analysts' earnings models privately to analysts, and 0 otherwise. ACCURACY is the standardized forecast accuracy ranking of the analyst relative to other analysts who follow the same company in the same quarter. FREQ is the number of forecasts that the analyst issues for the company during the quarter. FIRMEXP is the number of years that the analyst has issued a forecast for the company. GENEXP is the number of years that the analyst has issued a forecast for any company. HORIZON is the number of days between the forecast announcement date and the end of the quarter. BSIZE is the number of analysts who are employed by the analyst's brokerage firm during the quarter. NFIRMS is the number of companies for which the analyst has issued at least one forecast during the quarter. COV is the number of analysts which are following the company during the quarter. SIZE is the log of the market value of equity. EVOL, earnings volatility, is the standard deviation of return on assets over the prior 5 quarters. BM is the book value of equity divided by the market value of equity at the end of the prior quarter. ROA is net income divided by total assets at the end of the prior quarter. LEV is total liabilities divided by total assets at the end of the prior quarter. ATO, asset turnover, is sales revenue divided by total assets at the end of the prior quarter. INST is the proportion of shares held by institutions at the end of the prior quarter. VOL is log of the total trading volume at the end of the prior quarter. BETA is estimated using firm-specific regressions of the firm's daily returns on the value-weighted market returns using all trading days in the prior year.

Table 5
Expectations Management and the Walk-Down to Positive Earnings Surprises

Dependent variable =	EXM		WALKDOWN	
	Coefficient	t-statistic	Coefficient	t-statistic
Intercept	-0.5424 ***	-12.22	-0.1583 **	-2.05
PRIVATE	0.0186 ***	4.13	0.0231 **	2.95
SIZE	-0.0318 ***	-12.15	-0.0102 **	-2.24
EVOL	-0.1361 **	-2.18	-0.1708	-1.57
BM	0.0321 ***	11.20	0.0234 ***	4.68
ROA	-1.3966 ***	-14.20	-0.8607 ***	-5.03
LEV	0.0712 ***	6.51	0.0317 *	1.67
ATO	0.0332 **	2.49	0.0613 ***	2.65
INST	-0.0131 *	-1.83	-0.0059	-0.47
VOL	0.0458 ***	15.13	0.0223 ***	4.23
BETA	0.0003 *	1.72	0.0002	0.70
n	10,016		10,016	
Adj. R ²	7.57%		0.97%	

***, **, * indicate significance at the 1%, 5%, and 10% level, respectively. EXM equals 1 if the firm has a positive (or non-negative) earnings surprise based on the last individual analyst earnings forecast and a negative earnings surprise based on the first individual analyst earnings forecast. WALKDOWN equals the first individual analyst earnings forecast minus the last individual analyst earnings forecast. PRIVATE equals 1 if the firm reviews and comments on analysts' earnings models privately to analysts, and 0 otherwise. SIZE is the log of the market value of equity. EVOL, earnings volatility, is the standard deviation of return on assets over the prior 5 quarters. BM is the book value of equity divided by the market value of equity at the end of the prior quarter. ROA is net income divided by total assets at the end of the prior quarter. LEV is total liabilities divided by total assets at the end of the prior quarter. ATO, asset turnover, is sales revenue divided by total assets at the end of the prior quarter. INST is the proportion of shares held by institutions at the end of the prior quarter. VOL is log of the total trading volume at the end of the prior quarter. BETA is estimated using firm-specific regressions of the firm's daily returns on the value-weighted market returns using all trading days in the prior year.

Table 6
Market Reaction to Forecast Revisions and Private Communication

Dependent variable = CAR				
	Coefficient	t-statistic	Coefficient	t-statistic
Intercept	0.0008 ***	6.37	-0.0005	-0.23
PRIVATE	0.0006 ***	2.86	0.0005 **	2.40
REV	-0.0249 **	-2.35	-0.0224 **	-2.03
PRIVATE×REV	0.0784 ***	4.44	0.0810 ***	4.56
SIZE			0.0004 ***	3.10
EVOL			0.0054	1.64
BM			-0.0007 ***	-5.73
ROA			-0.0098 **	-2.35
LEV			0.0022 ***	4.71
ATO			-0.0004	-0.69
INST			0.0010 ***	2.82
VOL			-0.0002	-1.40
BETA			0.0000 *	1.78
n	43,811		43,811	

***, **, * indicate significance at the 1%, 5%, and 10% level, respectively. Standard errors are clustered by analyst. CAR is the three-day, size-adjusted stock return (-1, +1) surrounding the announcement of the analyst's forecast revision. PRIVATE equals 1 if the firm reviews and comments on analysts' earnings models privately to analysts, and 0 otherwise. REV equals the analyst's forecast minus the most recent consensus earnings forecast divided by stock price. SIZE is the log of the market value of equity. EVOL, earnings volatility, is the standard deviation of return on assets over the prior 5 quarters. BM is the book value of equity divided by the market value of equity at the end of the prior quarter. ROA is net income divided by total assets at the end of the prior quarter. LEV is total liabilities divided by total assets at the end of the prior quarter. ATO, asset turnover, is sales revenue divided by total assets at the end of the prior quarter. INST is the proportion of shares held by institutions at the end of the prior quarter. VOL is log of the total trading volume at the end of the prior quarter. BETA is estimated using firm-specific regressions of the firm's daily returns on the value-weighted market returns using all trading days in the prior year.

Table 7
Market Reaction to Stock Recommendations and Private Communication

Dependent variable = CAR

	Coefficient	t-statistic	Coefficient	t-statistic
BUY	0.0076 ***	13.71	0.0158 **	2.53
HOLD	0.0069 ***	12.18	0.0153 **	2.45
SELL	0.0087 ***	6.86	0.0174 ***	2.75
PRIVATE×BUY	0.0025 ***	2.81	0.0024 ***	2.62
PRIVATE×HOLD	0.0023 **	2.52	0.0020 **	2.17
PRIVATE×SELL	-0.0032	-1.60	-0.0036 *	-1.83
SIZE			0.0002	0.61
EVOL			0.0014	0.20
BM			0.0003	0.67
ROA			0.0190 *	1.87
LEV			-0.0019	-1.35
ATO			-0.0001	-0.05
INST			0.0053 ***	5.45
VOL			-0.0004	-0.92
BETA			0.0001	1.53
n	34,938		34,938	

***, **, * indicate significance at the 1%, 5%, and 10% level, respectively. Standard errors are clustered by analyst. CAR is the three-day, size-adjusted stock return (-1, +1) surrounding the announcement of the analyst's stock recommendation. PRIVATE equals 1 if the firm reviews and comments on analysts' earnings models privately to analysts, and 0 otherwise. REV equals the analyst's forecast minus the most recent consensus earnings forecast divided by stock price. SIZE is the log of the market value of equity. EVOL, earnings volatility, is the standard deviation of return on assets over the prior 5 quarters. BM is the book value of equity divided by the market value of equity at the end of the prior quarter. ROA is net income divided by total assets at the end of the prior quarter. LEV is total liabilities divided by total assets at the end of the prior quarter. ATO, asset turnover, is sales revenue divided by total assets at the end of the prior quarter. INST is the proportion of shares held by institutions at the end of the prior quarter. VOL is log of the total trading volume at the end of the prior quarter. BETA is estimated using firm-specific regressions of the firm's daily returns on the value-weighted market returns using all trading days in the prior year.

Table 8
*The Effect of Analyst Following on Forecast Accuracy
and Private Communication*

Dependent variable = ACCURACY

	Coefficient	t-statistic	Coefficient	t-statistic
LOW_COV	0.0049 ***	29.49	0.0058 ***	18.14
HIGH_COV	0.0050 ***	29.02	0.0059 ***	18.22
PRIVATE×LOW_COV	0.0074 **	2.47	0.0102 ***	3.33
PRIVATE×HIGH_COV	0.0048	1.33	0.0060	1.63
LAG_ACCURACY	0.0010 ***	22.18	0.0010 ***	21.89
FREQ	-0.0307 ***	-16.77	-0.0296 ***	-15.81
FIRMEXP	-0.0015	-0.75	0.0004	0.17
GENEXP	0.0021	1.05	0.0009	0.46
HORIZON	0.0148 ***	5.77	0.0153 ***	5.81
BSIZE	0.0003	0.28	0.0001	0.08
NFIRMS	0.0073 ***	2.86	0.0071 ***	2.71
COV	-0.0059 **	-2.04	-0.0049	-1.35
SIZE			0.0067 ***	3.66
EVOL			0.0120	0.30
BM			0.0022	1.47
ROA			-0.0074	-0.15
LEV			-0.0089	-1.56
ATO			0.0077	1.13
INST			-0.0089 **	-2.14
VOL			-0.0078 ***	-3.60
BETA			-0.0002 **	-2.16
n	43,910		43,910	

***, **, * indicate significance at the 1%, 5%, and 10% level, respectively. Standard errors are clustered by analyst. PRIVATE equal to 1 if the firm reviews and comments on analysts' earnings models privately to analysts, and 0 otherwise. ACCURACY is the standardized forecast accuracy ranking of the analyst relative to other analysts who follow the same company in the same quarter. FREQ is the number of forecasts that the analyst issues for the company during the quarter. FIRMEXP is the number of years that the analyst has issued a forecast for the company. GENEXP is the number of years that the analyst has issued a forecast for any company. HORIZON is the number of days between the forecast announcement date and the end of the quarter. BSIZE is the number of analysts who are employed by the analyst's brokerage firm during the quarter. NFIRMS is the number of companies for which the analyst has issued at least one forecast during the quarter. COV is the number of analysts which are following the company during the quarter. SIZE is the log of the market value of equity. EVOL, earnings volatility, is the standard deviation of return on assets over the prior 5 quarters. BM is the book value of equity divided by the market value of equity at the end of the prior quarter. ROA is net income divided by total assets at the end of the prior quarter. LEV is total liabilities divided by total assets at the end of the prior quarter. ATO, asset turnover, is sales revenue divided by total assets at the end of the prior quarter. INST is the proportion of shares held by institutions at the end of the prior quarter. VOL is log of the total trading volume at the end of the prior quarter. BETA is estimated using firm-specific regressions of the firm's daily returns on the value-weighted market returns using all trading days in the prior year.