Is Silence Golden?
An Empirical Analysis of Firms that Stop Giving Quarterly Earnings Guidance in the post Regulation-FD period

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Abstract:

We investigate a sample of 96 firms that publicly renounced quarterly EPS guidance in the post-FD period (10/2000 to 1/2006). We find that stoppers have poor trailing stock return performance and lower institutional ownership. We document an average negative 4.8% three-day return around the announcement to stop guidance and this reaction is associated with poor future performance. After the elimination of guidance, stock prices lead earnings less but there is no change in overall stock return volatility or analyst following. However, analyst forecast dispersion increases and forecast accuracy decreases following firms' decision to stop guiding, despite increased disclosures made in earnings press releases.

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1. Introduction

On December 13, 2002, the Coca Cola Company announced that it would stop providing quarterly and annual earnings-per-share guidance to stock analysts, stating that the company hopes the move would focus investor attention on long-run performance. Shortly afterwards, several other prominent firms such as AT&T and McDonalds made similar announcements renouncing quarterly earnings guidance. In addition, recent surveys by the National Investors Relations Institute (NIRI) suggest a trend toward firms discontinuing guidance or moving toward providing annual guidance only.[1] These changes in guidance practices coincide with calls from prominent investors such as Warren Buffett (1996), analysts such as Candace Browning (2006), head of global research at Merrill Lynch, the CFA Institute (Krehmeyer and Orsagh 2006) and academics (Fuller and Jensen 2002, Jensen, Murphy and Wruck 2004) to encourage managers to give up quarterly earnings guidance and hence avoid myopic managerial behavior caused by attempts to meet the guided earnings number. However, critics allege that poor economic conditions and the desire to de-emphasize weak performance drive these recent changes to guidance policies (e.g., Harper 2003).

In this paper, we investigate 1) the factors that prompt firms to give up quarterly guidance[2], 2) the consequences of giving up guidance, and 3) changes in subsequent disclosure

[1] A recent NIRI survey (reported in March 2005) reports that 71% of respondent firms provide some form of guidance (Thompson 2005), down from 77% in December 2003 (Thompson, 2003b). Moreover, the percentage of firms giving quarterly guidance has declined from 75% to 61% and the percent giving annual guidance only has increased – from 16% to 28%.

[2] Although prior studies have examined characteristics of firms that, as of a point in time, give guidance versus those that do not (notably, Hutton 2005), no prior study, of which we are aware, has examined the determinants of the decision to either initiate or discontinue an earnings guidance *policy*. Anilowski et al. (2005) find that guidance has, in recent years, become more consistent, suggesting that the decision to provide earnings guidance appears to be a policy decision (as opposed to a decision that is made each quarter). As a result, a cross-sectional examination of

levels. To address these issues, we focus on firms that have stopped providing quarterly guidance after the passage of Regulation FD (Reg FD). Focusing on the post FD period enables us to control for the possibility that managers renounce guidance publicly but continue to give private guidance to analysts.

Based on a detailed search of key words in press releases and conference call transcripts from 10/1/2000 (the beginning of the FD regime) to 1/31/2006, we are able to identify 72 firms that publicly announce their decision to stop providing quarterly guidance, and 24 firms that publicly announce switching from providing quarterly earnings guidance to providing annual guidance only. It is interesting to note that only a small number of firms have chosen to stop guiding the market despite calls from prominent regulators and academics encouraging firms to do so. The relatively small number of firms that have stopped providing earnings guidance perhaps points to the high perceived costs of bucking the general trend of providing guidance.

We find that firms that stopped guidance have poor trailing 12-month stock return performance. We do not find evidence that these firms have more long-horizon investors. Together these results suggest that, on average, the primary driver behind the decision to stop guidance is not to focus investors on the long-term, as many firms claim. We also find that firms with lower institutional ownership and lower analyst following are more likely to give up guidance – consistent with firms giving up guidance when demand for such guidance is lower. However, the relation between analyst following and the decision to give up guidance is non-linear – for firms with very high analyst following (in the top quartile of the distribution), analyst following is not related to the decision to stop guidance, consistent with the idea that firms with

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characteristics related to firms who do and do not give guidance in a particular quarter or year may not reveal the true underlying determinants of the decision to adopt such a disclosure *policy* (to the extent the characteristics have changed since the initial decision).

very high analyst following do not feel as much pressure to continue guidance in order to avoid losing analyst following.

We document a significant negative market reaction to the firm's announcement related to renouncing guidance. This negative reaction could either 1) suggest that stopping guidance is a signal about future performance; or 2) imply a revision in the cost of equity capital due to changes in systematic risk. In additional analysis, we find evidence supporting primarily the first explanation. A firm's future performance is positively related to the announcement period return – i.e., firms with worse future performance suffer a greater market decline when they announce the decision to stop providing guidance. We also find that firms giving up guidance experience an increase in systematic risk but we are unable to document an association between our estimated change in systematic risk and the three-day market reaction to the stoppage announcement.

We also find that the elimination of guidance results in stock prices reflecting earnings news slower than when guidance is provided (i.e., that prices lead earnings less once guidance is eliminated). Contrary to the beliefs of many proponents of earnings guidance, we do not find a significant increase in overall volatility nor do we find a decrease in analyst following after the firm stops providing guidance. We do, however, document a greater increase in analyst forecast dispersion and a greater decrease in forecast accuracy following the decision to stop guiding for our event firms relative to our control firms.

Finally, we find that firms disclose more information in their earnings announcement press releases in the quarter after the decision to stop guidance relative to the quarter before. This finding is consistent with firms substituting earnings guidance with greater qualitative disclosures about the firm – a change that is supported by groups like the CFA Institute

(Krehmeyer and Orsagh 2006).[3] However, these disclosures are not perfect substitutes for earnings guidance as forecast accuracy decreases following the decision to stop guidance. Thus, it does not appear that analysts are able to generate similar quality of information through the analysis of these additional disclosures.

Our paper contributes to the literature on voluntary disclosures along several dimensions. First, our study differs from prior disclosure studies in that we have identified a sample of firms that announce a distinct material shift in their disclosure policy. The fact that we have identified the date on which the firm announces this shift provides several advantages associated with research design. First and foremost, a distinct event date allows us to more accurately document the market reaction to this stoppage decision. Further, we are able to examine the association between the market reaction and subsequent changes in systematic risk and future performance, thereby providing further evidence on the association between disclosure and cost of equity capital. In contrast, most prior studies use some measure of the level of disclosure (for example, analyst ratings of corporate disclosure policies) and a cost of capital derived from equating analysts' forecasts of future earnings and current stock price. Studies in levels are, in general, subject to the criticism of correlated omitted variables. Using a different methodology to assess the impact of disclosure policy on cost of equity capital helps to triangulate prior results on this relation.

On a related note, identifying the exact date of a change in disclosure policy allows us to examine consequences related to stopping disclosure over relatively short windows surrounding

[3] In July 2006, the CFA Institute Centre for Financial Market Integrity and the Business Roundtable Institute for Corporate Ethics co-sponsored the "Symposium Series on Short-Termism." One of the recommendations arising out of the symposium was a reform of earnings guidance practices that called for 1) an end to the practice of providing quarterly earnings guidance and 2) support for corporate transitions to "higher quality, long-term, fundamental guidance practices, which will allow highly skilled analysts to differentiate themselves and the value they provide their clients." (Krehmeyer and Orsagh 2006).

the disclosure policy change (such as changes in stock return volatility, informativeness of earnings for stock returns, analyst following etc.). Prior studies often examine consequences of disclosure changes over longer windows, which may be subject to confounding influences unrelated to the change in disclosure levels (e.g., shifts in AIMR disclosure scores over a ten-year period as in Healy et al. 1999).

Second, our study provides further insight into the motivation behind the recent upsurge of firms discontinuing earnings guidance. Although many of these firms argue that guidance forces a short-term orientation and impedes long-term value creation,[4] our results suggest that poor prior performance and lack of demand for guidance are the primary drivers behind the decision to give up guidance. In particular, we are unable to document a positive association between the decision to renounce guidance and the level of ownership by investors with longer horizons and greater activism (public pension funds and block holder ownership). Moreover, if guidance is truly a value-decreasing proposition on account of the short-term focus imposed on managers, giving up guidance ought to be associated with positive announcement period returns. However, we find an economically and statistically negative stock market reaction around the guidance stoppage announcement.

Finally, our study should also be of interest to CFOs and investor relations professionals. Recent surveys by the National Investor Relations Institute (NIRI) indicate that a significant number of firms have considered discontinuing earnings guidance – 28% in a survey conducted in February 2003 and 19% in a survey conducted in December 2003 (NIRI 2003). Moreover, 30% of survey respondents believe that if they stopped providing guidance, analyst coverage would fall. Our study provides evidence on the consequences associated with the decision to

[4] Cheng, Subramanyam and Zhang (2005) examine whether investment policies of regular guiders differ from those of sporadic guiders and find evidence suggesting that regular guiders under-invest in R&D (which they conclude is evidence that guidance forces a short-term orientation).

give up guidance. Contrary to many managers' concerns, we do not find evidence of either a decrease in analyst following or an increase in volatility around earnings announcements. However, we do find an increase in analyst forecast dispersion and a decrease in analyst forecast accuracy, despite the fact that firms, on average, provide additional disclosures in their press releases. Thus, it appears analysts are unable to generate the same level of accuracy without explicit earnings guidance.

The remainder of the paper is organized as follows. In the next section, we discuss our sample and provide descriptive data. Section three presents our predictions and analysis of the determinants of stopping guidance. In section four we examine the consequences associated with discontinuing guidance. In section five we examine changes in firm's disclosure levels following the stoppage announcement. We conclude the paper in section six.

2. Background, sample selection, and descriptive data

Prior to the passage of Reg FD, firms could provide earnings guidance to the market either indirectly through analysts or directly via publicly announced management forecasts.[5] The purpose of engaging in earnings guidance is, arguably, to keep expectations at a level that the firm can either meet or exceed and, thereby, avoid any market penalties associated with missing analysts' expectations (Bartov et al., 2002; Skinner and Sloan 2002). Whatever the purpose, the practice of providing earnings guidance is relatively widespread. Until recently, surveys by NIRI have consistently reported that around 79% of respondents provide some form of earnings guidance (Thompson 2003a and 2003b). However, in their most recent survey, the proportion of guiders has declined to 71% (Thompson 2005). Nevertheless, the practice of providing guidance

[5] One of the most common ways managers provided guidance indirectly through analysts was by "reviewing" analysts' earnings models (Hutton 2005).

is still relatively widespread, which likely makes the decision to stop providing guidance difficult.

We focus our study on the period following the passage of Reg FD. Thus, we define earnings guidance as the practice of providing regular, quantitative forecasts of upcoming earnings either via press releases or company-sponsored conference calls. To identify firms that have changed their disclosure practice from providing quarterly earnings guidance to either providing no guidance or providing annual guidance only, we conduct a detailed search of company press releases and conference call transcripts between October 1, 2000 and January 31, 2006. We search company press releases on PR Newswire and BusinessWire (via Lexis/Nexis) and conference call transcripts on the Fair Disclosure Wire (via Factiva).

Our main search string was "(earnings or income or loss) and ((guidance or expectation or forecast or outlook) w/5 (no longer or stop or discontinue or will not provide or will not give))." We then read the press release or conference call transcript to determine whether the statement did indeed refer to a change in the company's policy regarding the dissemination of earnings guidance.[6] Through this process, we identify 72 firms that publicly announce their decision to stop providing quarterly guidance altogether and 24 firms that switch from providing quarterly earnings guidance to providing annual guidance only.[7] For better statistical power, we

[6] Often the search string identified firms that indicate that previously issued guidance "no longer applies" or that the company has temporarily stopped guidance until "visibility improves". We do not include the latter group in the sample as we are more interested in firms who have indicated a commitment to a new disclosure policy.

[7] To determine whether these firms live up to their promise to give up guidance, we check whether these firms appear on the CIG database subsequent to their stop announcement. Twenty-three firms appear on the CIG database at least once after their announcement. Upon further investigation we discovered that in 10 cases the observations on CIG were pre-announcements (announcements of forthcoming earnings that generally occur within 2-3 weeks of the actual earnings announcement) not earnings guidance, 4 cases were "switchers" who provided annual guidance in the 4th quarter which was coded as quarterly guidance by CIG, 3 cases were firms who made one-time exceptions to their policy, 1 case was due to a lag in the initiation of their new policy (e.g., they announced the decision to stop at the end of the current year), and 1 case was an instance of "qualitative" guidance (i.e., "(the company's) return to profitability will last through the first half of 2004"). The remaining four cases represent firms that appear to have re-started guidance after announcing the decision to stop. Our main results are not affected if we eliminate these four firms from our tests.

combine these two groups of firms as both sets of firms have stopped providing regular *quarterly* guidance.[8]

An alternative approach to identifying a set of firms that stop providing regular quarterly guidance would be to identify firms who stop appearing on First Call's Company-Issued Guidance (CIG) database. There are two advantages with our approach. First, searching for firms' announcements of the decision to stop providing guidance allows us to test the market reaction to the announcement of this decision. Using the CIG database would not provide a specific date associated with the decision to stop guiding. Second, using the CIG database requires us to infer a company's disclosure policy (and any change therein) based on some pattern of appearances of management forecasts in the database (e.g., eight quarters in a row followed by no forecasts for eight quarters). This is particularly difficult given that, pre-Reg FD, firms could provide guidance privately to analysts and therefore not appear on the CIG database. This fact leaves a relatively short time-frame to both establish a pattern of guidance as well as allow sufficient time to ensure the absence of guidance. Because of this data limitation, inferring from CIG database when a firm stops guidance depends completely on a researcher's *ad hoc* definitions of both how many quarters of appearance on CIG is needed to establish a guidance pattern and how many quarters of non-appearance on CIG is long enough to constitute a 'policy change' of stopping guidance.[9] The downside to our approach is that we might miss firms that

[8] We compared the "stoppers" and "switchers" along the characteristics discussed in the next section. No differences in medians are significant at traditional levels. We also examine the 3-day market reaction surrounding the announcement of the policy change and do not find significant differences between the two groups in terms of either raw returns or cumulative abnormal returns. Thus, the two groups do not appear significantly different from another and combining the two groups seems reasonable.

[9] For example, Houston, Lev, and Tucker (2006) rely on firms' non-appearance on CIG database to infer guidance stoppage. A more serious measurement error can occur with this approach if the CIG database is incomplete (i.e., not all guidance provided by a firm is reported on the database). Though the extent of CIG's omission of management forecasts is unknown, we have noticed multiple instances where a firm issues a press release containing management forecasts but is not captured by CIG.

stop giving guidance but do not publicly announce their intention to do so. Thus, our conclusions apply only to firms who *publicly announce* the decision to stop providing guidance.

Figure 1 provides a distribution of announcement dates by month from the first announcement date. There are several interesting facts that are apparent from our sample. First, the number of firms that have publicly announced the decision to stop providing quarterly earnings guidance is relatively small.[10] This fact is, perhaps, indicative of the difficulty associated with changing accepted business practice. Anecdotal evidence suggests that companies can indeed face powerful opposition to stopping guidance, as analysts' compensation and CEOs reputation in recent years all depend to a greater extent on the rapid delivery of information from the firms.[11] Second, there were relatively few firms who stop giving guidance before January 2003. It is interesting to note that Coke's decision to stop providing guidance occurred in December 2002, immediately before the peak in announcements. Coke's announcement was highly publicized and as a large, well-respected company, likely provided companies with support for their decision. At least 13 firms explicitly cite "consistency with practice" as their reason for changing their disclosure policy. For example:

- "Datascope also announced that, along with other leading companies, it will discontinue its practice of offering earnings forecasts." (Datascope press release, 1/23/2003).
- "As many companies have done recently, we have examined our practice of providing forward-looking guidance and have made the decision to no longer provide

[10] The small sample size is consistent with prior NIRI survey results. In an April 2003 survey, 22% of the 609 respondents indicated that they do not provide guidance and, of these, 22% stopped within the last 12 months. This suggests approximately 29 respondent firms stopped giving guidance after April 2002 (609 × 22% × 22%). The response rate on the survey was 20%. Thus, if the rates of stoppage are representative of the overall rates in the NIRI membership, the number of firms stopping guidance from the NIRI membership as a whole would be approximately 145 (29 ÷ 20%). However, Hutton (2005) finds evidence consistent with respondent firms having more active investor relations groups; thus, it is possible the rate of stoppers is less within the population of non-respondents (since firms with more active investor relations groups are more likely to have a policy of giving guidance and a firm can not *stop* giving guidance if it did not initially have a policy of giving guidance). In addition, there may be firms that stop giving guidance but do not announce this decision publicly.

[11] See "The wrong focus? How the race to meet targets can throw corporate America off course," Financial Times (7/24/2006).

forward-looking guidance. We believe that our decision is consistent with emerging corporate disclosure trends, seen in financial markets today." (Frank Terence, Brightpoint CFO, Conference Call Transcript, 5/1/2003).

- "In light of changing events and emerging corporate disclosure trends seen in financial markets today, the Company has examined its practice of providing forward-looking financial guidance and has made the decision to no longer provide forward-looking financial guidance." (MediaBay, Inc. press release, 6/20/2003).

Untabulated descriptive data on the reasons given by firms for stopping the use of quarterly guidance also reveals the following: approximately 28% of firms provide no explanation for their change. Of those who do provide reasons, "difficulty in predicting/uncertainty" (25%) and "desire to focus on the long-term" (23%) are the most common reasons given.

Table 1 details the sample attrition due to data requirements for our subsequent tests. We conduct three groups of tests: 1) tests of the determinants of the decision to stop providing earnings guidance (section 3), 2) tests of the market reaction to the announcement of the stop guidance decision (section 4), and 3) tests of the consequences resulting from the decision to stop providing earnings guidance (section 4). The usable sample for each of these three tests varies from 53 to 75. In some of our market reaction tests, we control for revisions in analysts' forecasts of future earnings, which reduces our sample size to 53 (from 63). In our consequences tests, we examine changes in various factors (e.g., analyst following, volatility, volume) before and after the decision to stop providing earnings guidance. Thus, we lose firms who announced in late 2005 and early 2006 (due to lack of post-decision data at the time of drafting this paper).

In the next section, we discuss our hypotheses and tests related to the determinants of stopping earnings guidance.

3. Determinants of giving up guidance

3.1 Empirical Predictions

3.1.1 Focusing on the long-term or hiding poor performance?

Much of the current debate over earnings guidance centers around whether this practice engenders managers with a short-term focus.[12] Moreover, in justifying their decision to give up earnings guidance, many firms cite a desire to focus on long-term performance as the reason behind their decision to stop providing quarterly guidance. For example:

- "Following a series of discussions with our Board of Directors over the past year, our management team has established a policy of not providing quarterly or annual earnings guidance…we believe that establishing short-term guidance prevents a more meaningful focus on the strategic initiatives that a Company is taking to build its business and succeed over the long-run…Our share owners are best served by this because we should not run our business based on short-term 'expectations.' We are managing this business for the long-term." (Coca cola, press release, 12/13/2002).
- "Management of the Company believes that the focus placed on achieving short-term earnings estimates detracts from the Company's strategy to create long-term value for its shareholders." (DST Systems Inc, earnings release, 1/27/2004).
- "Following the recommendation of our board of directors, our management team will implement this policy to highlight the benefits of our strategy over the long term to employees and shareholders. The provision of revenue and earnings guidance encourages a short-term outlook which, in our view, is not in the best interests of our company or our shareholders." (Scientific Games, earnings release, 2/26/2004).

However, critics have suggested that the true motivation behind these firms' decision to stop providing quarterly guidance is poor performance (Harper 2003).[13] In addition, prior studies have generally found a positive association between performance and disclosure (Lang and Lundholm 1993; Miller 2002), suggesting that poor performance may at least partially explain a firm's decision to stop providing quarterly earnings guidance.[14]

[12] See "The wrong focus? How the race to meet targets can throw corporate America off course," Financial Times (7/24/2006).

[13] In addition, The Boston Globe columnist Charles Stein writes, "Look at the list of companies that have stopped issuing guidance and ask yourself: What do they have in common? The answer: They all have performed poorly, not just recently but for many years." ("Misguided Reform" The Boston Globe, 2/9/2003, C2).

[14] Although prior studies have documented a positive relation between performance and disclosure, it is possible this relation would not exist in this setting because the decision to give up guidance represents a change in a company's disclosure *policy* – one that involves a commitment to future actions (or rather the lack of future actions). It is possible that changes in performance, particularly if transient in nature, would not provide a strong enough motivation for a company to change its disclosure policy.

If the primary reason behind giving up guidance is the desire to focus on long-term performance, we would not expect a relation between past performance and the decision to stop guidance. In contrast, if the skeptics are correct in their assessment of the reason behind the decision, firms with poorer prior performance are more likely to give up guidance.

We proxy for poor performance in three ways: 1) stock price performance in the recent past, measured as market-adjusted buy-and-hold returns for the 12 months ending in month -1 (BH_1) and month -13 (BH_2), where month 0 is the event month; 2) the percentage of losses in the eight quarters proceeding the event quarter (PLOSS), where loss is defined as net income less than zero; 3) the percentage of quarters in the eight quarters proceeding the event quarter in which the firm meets or exceeds analyst consensus forecasts (PMBAF).[15]

The desire to focus on long-term performance is more likely to arise in companies whose primary shareholders have longer investment horizons and who take an active corporate governance role – exercising influence on management decisions. If focusing on long-term performance is truly a driving factor behind the decision to stop providing earnings guidance, we would expect firms who stop guidance to have shareholders with longer investment horizons and who take more active roles in corporate governance.

We focus on two types of shareholders with these qualities. First, public pension plans have often played an active role in corporate governance (Del Guercio and Hawkins 1999) and are also generally believed to be long-term investors (Cremers and Nair 2004). We measure pension plan ownership as the percentage of shares held by the 18 largest public pension funds (PO).[16] Second, blockholders (shareholders with greater than 5% ownership in a firm) are also believed to be active monitors of the firm (Cremers and Nair 2004) because they generally have a longer

[15] See notes to Table 2 for exact variable definitions.
[16] We thank K. J. Martijn Cremers and Vinay B. Nair for sharing their pension fund data with us.

investment horizon. We measure the percentage of shares held by blockholders (BO) as reported on Compact Disclosure.

3.1.2 Usefulness of earnings guidance

Dye (2001) argues that managers have incentives to make voluntary accounting disclosures which investors find useful in assessing firm value. Prior research has generally found that firms with *low* value relevance of earnings are more likely to provide voluntary *supplemental* disclosures such as balance sheet information (Chen, Defond and Park 2002) or conference calls (Tasker 1998). The argument in these studies is that when earnings are a poor indicator of future cash flows, the market demands additional information to assess firm value. In our setting, however, the supplemental disclosures or guidance is about earnings itself. Hutton (2005) suggests that the market would demand more earnings guidance when earnings is a *better* indicator of firm-value i.e., *more* value relevant. Hence, we predict that firms with less value relevant earnings are more likely to give up guidance.

We measure value relevance of earnings (VALREL) as negative one times the squared residual from a regression of annual, market-adjusted returns on 1) net income scaled by beginning market-value of equity, 2) a loss dummy variable, 3) an interaction of net income and the loss dummy variable, and 4) the change in net income (as in Ashbaugh et al. 2005). Thus, higher values represent more value relevant earnings.

Earnings guidance is also more useful when firm performance is variable and harder to predict based on mandatory accounting disclosures. In other words, if market participants can easily predict future earnings based on mandatory disclosures, additional voluntary disclosures are less useful. Prior research supports this conjecture: analyst ratings of firms' disclosures are higher (Lang and Lundholm 1993) and firms are more likely to include balance sheet data with

their press releases (Chen et al. 2002) when returns are more volatile. This suggests that firms will be more likely to discontinue guidance when firm performance is less variable and easier to predict.

Our proxy for the volatility of firm performance is based on stock returns – specifically, we measure the standard deviation of daily raw returns (STDRET) during the 252 days prior to the event date. Our proxy for earnings predictability (PRED) is negative one times the root mean squared error ($\sqrt{\sigma^2(\hat{v}_j)}$ from a firm's AR1 model of regressing seasonally adjusted quarterly net income on a lagged version of such changes (Francis et al. 2004). Thus, higher values of PRED represent more predictable earnings.[17]

3.1.3 External demand for guidance

The primary beneficiaries of a firm's earnings guidance are financial analysts and institutional investors. Analysts can use firm-provided guidance to formulate and validate earnings forecasts and as a result, firms likely face pressure from analysts to provide guidance. Similarly, the buy-side can use guidance to evaluate their investment decisions. In a recent NIRI survey, 98 percent of respondents believe analysts want earnings guidance and 27 percent of respondents believed analyst coverage would drop if the firm stopped providing guidance. Thus, firms with more analyst coverage and greater institutional investor ownership likely face greater pressure to provide guidance and are less likely to discontinue the practice.

On the other hand, if a firm is prominent in its industry it will likely garner a large analyst following regardless of whether the firm provides earnings guidance. Thus, it is likely that the

[17] Note that in this hypothesis "predictability" refers to the market's ability to forecast future earnings based on mandatory disclosures (e.g., historical earnings). When this is easily done, management-provided guidance provides little value, making it more likely for the firm to give up guidance. "Predictability" here does not refer to *management's* ability to predict earnings using their private information. It is likely that the harder it is for management to predict earnings, the more likely they are to give up guidance. This effect is more likely captured by our variable PMBAF, the percentage of quarters in which the firm met or exceeded analysts' expectations in the past.

relation between analyst following and the decision to stop providing guidance is not linear – firms with very large analyst following are likely less concerned about losing analyst coverage.

We measure analyst following (AF) as the number of analysts covering the firm at the beginning of the event quarter as per IBES. If a firm is not listed on IBES, we code AF as zero. We also specify a dummy variable (HIAF) to indicate analyst following in the fourth quartile. In our main analysis, we allow the coefficient on AF to vary between the first three quartiles and the fourth quartile. The percent of institutional ownership (PINST) is measured prior to the announcement date as reported on Compact Disclosure.

3.1.4 Litigation risk

Litigation fears can reduce incentives to provide disclosure, particularly disclosures of forward-looking information (such as earnings guidance). A manager may fear the legal system would penalize forecasts (made in good faith) that are not met because it cannot effectively distinguish between unexpected forecast errors due to chance from those due to deliberate management bias (Healy and Palepu 2001). Francis, Philbrick and Schipper (1994) document that for a large sample of class action securities lawsuits between 1988 and 1992, over 80% are based on earnings.

In an interview we conducted with a financial executive of a firm that gave up earnings guidance, the executive stated “class action lawyers find it easier to sue the firm if it is unable to meet the EPS numbers promised in earnings guidance.” Thus, practitioners are potentially concerned about being sued for the accuracy of its forecasts under rule 10(b)5. Furthermore, companies are beginning to require audit committees to review any earnings guidance they give. That practice raises the possibility that audit committees could also be sued for providing

earnings guidance, thus adding further to the litigation risk (Morgan, 2003). Hence, we expect firms with greater litigation risk to be more likely to give up earnings guidance.

Our proxy for litigation risk is based on the Rogers and Stocken (2005) litigation probability model. We use the reported coefficients from their model to compute predicted values for the observations in our sample (LIT).

3.2 Empirical design and results

3.2.1 Control sample

To examine the characteristics of firms that give up earnings guidance, we identify a control sample of firms that have not discontinued guidance. We identify all firms available on the First Call CIG database that provided a quarterly management forecast within +/- 90 days of each event firm's announcement date and who also issued at least one quarterly forecast in the previous and subsequent quarters (quarters q-1 and q+1).[18] A control firm can only appear once in the sample but can serve as a control for more than one event firm. In addition, we allow multiple control firms for each event firm. This process results in 901 control firms. For the measurement of variables, the 'event' date for control firms is the date the management forecast is issued in quarter q.

3.2.2 Univariate statistics

Table 2, Panel A presents descriptive statistics for the variables used in our analyses, partitioned by event and control firms. We include three control variables in our analysis: 1) LNMV, the natural log of the market value of equity as of the fiscal quarter end preceding the event date; 2) MB, the natural log of the market-to-book ratio at the beginning of the quarter, and

[18] Ideally, our comparison group should be regular guidance givers who continue to give guidance. Requiring our control sample to have forecasts in quarters q-1 and q+1 provides some assurance that these firms have a pattern of giving guidance in the past and continue to give guidance in the future. The mean number of quarterly forecasts made by these firms through quarter q-1 is 17.58 and over 70% of the firms have made more than 10 quarterly forecasts.

3) LNCT, the natural log of (1+CT), where CT is the number of management quarterly EPS forecasts made through quarter t-1 (as reported on the CIG database). Prior research has shown both size and growth to be related to disclosure practices. In addition, firms with a longer prior history of providing earnings guidance likely find it more difficult to abandon the practice.

We report t-tests and Wilcoxon z-tests for differences in means and medians between the two sets of firms. Several differences are statistically significant. Firms stopping guidance exhibit poorer recent performance than control firms – lower stock returns over the past year (BH_1), a higher percent of prior quarterly losses (PLOSS), and a lower percent of prior quarters where firms met or exceeded analyst forecasts (PMBAF). Also, firms who stop guidance have fewer analysts following the firm (AF) and a lower percent of institutional investors (PINST). We also find that firms that give up guidance have a shorter history of giving guidance (LNCT). When comparing means, the probability of litigation (LIT) is significantly smaller for firms that stop giving guidance (contrary to our predictions) but is significantly larger when comparing medians (consistent with our predictions). We also find some differences that are significant in means but not in medians (PRED) and vice versa (VALREL and MB). Thus, it appears that extreme observations drive some of these differences. We address the issue of extreme observations in the next section by running our regression using ranked values.

In addition, there are several variables that are highly correlated with each other. Table 2, Panel B presents a correlation matrix of the variables used in this study. Firm size (LNMV) is highly correlated with volatility of returns (STD_{ret}) (Pearson correlation coefficient ρ=-0.46) and analyst following (ρ= 0.67). Poor performance (as measured by prior losses, PLOSS) is also highly correlated with volatility of returns (ρ=0.59). Given the high degree of correlation between many of our variables, our primary tests rely on multivariate relations that consider

together all factors that we hypothesize to be associated with the likelihood of guidance stoppage. We discuss these tests next.

3.2.3 Logistic regression

We test our hypotheses by estimating the coefficients in the following logistic regression:

$$\begin{aligned} STOP = {} & \beta_0 + \beta_1 BH\_1 + \beta_2 BH\_2 + \beta_3 PLOSS + \beta_4 PMBAF + \beta_5 VALREL + \beta_6 STD_{ret} \\ & + \beta_7 PRED + \beta_8 AF + \beta_9 HIAF \times AF + \beta_{10} PINST + \beta_{11} LIT + \beta_{12} D_b + \beta_{13} D_b \times BO \\ & + \beta_{14} D_p + \beta_{15} D_p \times PO + \beta_{16} LNMV + \beta_{17} MB + \beta_{18} LNCT + \varepsilon \end{aligned} \quad (1)$$

STOP is a dummy variable equal to one for event firms and zero for control firms.[19] Because we do not have pension fund and blockholder ownership data for our entire sample of firms, we code the ownership variables (BO and PO) as zero for firms without available data and interact these variables with a dummy variable (D_b and D_p) that is equal to one for firms with data available and zero otherwise. This specification, called modified zero-order regression (Greene 1993), addresses the selection bias related to coverage of the two data sources while maintaining sample size.

We estimate our regression in both raw values as well as ranked values for the independent variables, as the univariate comparisons suggest the presence of extreme values for some variables. Table 2, Panel C presents the results from estimating equation (1).

Firm performance appears to be a significant determinant of the decision to stop guidance, consistent with our first hypothesis. Firms who stop guiding have lower lagged one-year buy-and-hold returns (p's <0.01 for both raw and ranked values). These firms also show

[19] As discussed in the previous section, we do not find significant differences between the "stoppers" and the "switchers" and therefore, combine these two groups. If we instead run an ordered logistic regression coding control firms as 0, switchers as 1, and stoppers as 2, we find similar significance levels on the coefficients. However, Greene (1997, p. 929) points out that in ordered logistic regressions, the sign of the change in probability associated with changes in the independent variables are unambiguous only for the first and last ordered group; the direction of the effect for the middle group depends on the shape of the density function. Given the difficulty of interpreting coefficients from these models and the similarity between the two groups, we do not report the results from the ordered logistic regression.

some evidence of poorer prior earnings performance – using raw values, they exhibit a lower percent of prior quarters that met or exceeded analysts' expectations (p=0.07) and using ranked values, they exhibit a higher percent of prior quarterly losses (p=0.06). In contrast, we do not find a significant relation between shareholder horizon and the decision to stop providing earnings guidance – coefficients on both $D_b \times PO$ and $D_p \times BO$ are insignificant. The combined evidence suggests that poor performance is the primary driver behind the decision to stop providing earnings guidance – contrary to claims that firms have stopped guidance in order to focus shareholder attention on long-run performance.

We also find evidence that firms with lower demand for guidance are more likely to give up guidance. Specifically, firms with lower analyst coverage and lower percent of institutional investors are more likely to give up guidance – the coefficients on AF and PINST are statistically negative using both raw and ranked values. However, this relation is attenuated for firms with very high analyst following – the coefficient on HIAF×AF is significantly positive. This evidence suggests that firms with very high analyst following are less concerned about analysts' demands for earnings guidance.

We also find some evidence that firms are more likely to stop guidance when their earnings guidance is less useful – firms who stop guiding have lower value relevance of earnings and less volatile performance but these variables are only significant in the ranked regression. Similarly, there is some evidence that firms with higher litigation risk are more likely to give up guidance but the coefficient on LIT is only significant in the ranked regression.

Turning to the control variables, firms with longer histories of providing earnings guidance are less likely to give up guidance. Using raw values, we also find that larger firms are more likely to give up guidance but this relation does not exist using ranked values.

Overall, our results most strongly support the hypotheses that poor performance and external demand for guidance drive the decision to stop providing earnings guidance. Thus, while many firms provide virtuous reasons for no longer providing guidance (e.g., desire to focus on the long-term), we do not find that firms who renounce guidance have greater ownership by long-horizon, active investors.

4. Consequences of giving up guidance

4.1 Market reaction to announcement of stoppage

In this section, we investigate whether firms that stop providing earnings guidance experience abnormal returns when they announce their intentions. On the one hand, firms often claim that the reason for giving up guidance is to avoid focusing investor as well as managerial attention on the short-run performance of the company. If guidance is truly a value-decreasing proposition and the market realizes this, announcement period returns should be positive. However, prior research suggests a negative relation between disclosure and cost of capital (Botosan 1997; Healy, Hutton, and Palepu, 1999), which would suggest that a firm stopping guidance would experience a negative stock price reaction.[20]

One potential complication is that many firms (54 out of 73) announce the decision to stop guidance in conjunction with their announcement of quarterly earnings. Thus, the announcement period return will capture the effect of both the stoppage announcement as well as the earnings announcement.[21]

[20] Botosan and Plumlee (2002), however, find a positive relation between cost of capital and disclosure scores related to "other publications," which include "quarterly and other published information not required." Assuming guidance falls in this category of disclosure, their findings would suggest that guidance increases cost of capital and firms who stop guiding should experience a positive market reaction (due to a lower cost of capital).

[21] Some firms' earnings announcements also include guidance (generally downward) for the upcoming quarter or year (with a statement indicating that the firm will not be providing guidance going forward). In this case, a negative market reaction could be attributed to revised expectations about future earnings. In subsequent analyses, we examine whether the market reaction is related to revisions in future earnings expectations.

Table 3, Panel A provides descriptive statistics on the three-day (centered on the announcement date) cumulative abnormal returns (CAR) as well as cumulative raw returns (RET), for firms that announce the stoppage in conjunction with their quarterly earnings announcement (D_{ea}=1) and those that announce the stoppage independently (D_{ea}=0). Both sets of firms experience a statistically significant negative three-day abnormal return as well as a three-day raw return. More importantly, the three-day return is not statistically different between the two groups. Overall, the three-day return is negative for roughly 66% of the sample.

To formally control for the news in the earnings announcement, we run the following regression

$$CAR_{-1,+1} = \alpha + \beta_1 D_{ea} + \beta_2 (D_{ea} \times UE) + \varepsilon \qquad (2)$$

In this model, α captures the average three-day market reaction to the stoppage announcement, D_{ea} captures any differential market reaction for the group announcing earnings in conjunction with the stoppage announcement, and $D_{ea} \times$ UE captures the market response to the earnings surprise. The results are reported in Table 3, Panel B. The intercept indicates that the average market reaction, after controlling for the surprise in earnings, is a statistically significant negative return of –4.8% ($p<0.01$).[22]

The negative market reaction indicates that the market penalizes firms for stopping guidance, suggesting that investors value earnings guidance. This result is consistent with prior research that finds a negative relation between the level of voluntary disclosure and the cost of equity capital. If disclosure reduces the cost of equity capital then a firm's decision to eliminate

[22] Given the significant amount of clustering in announcement dates (as shown in Figure 1), we also ran firm specific regressions and tested the significance of the average intercept term. Specifically, we ran the following regression: $RET_{it} = \alpha_i + \beta_i MRET_t + \gamma_i EVENT_{it} + \varepsilon_{it}$, where RET_{it} is firm i's daily stock return; MRET is the value-weighted daily market return, including dividends; $EVENT_i$ is an indicator variable equal to 1 for firm i's stoppage announcement, and 0 otherwise, and t denotes each of the 252 trading days in the calendar year of the stoppage announcement. The mean coefficient γ_i across the 73 event firms is –0.012 and is statistically significant at $p<0.01$. Thus, our results do not appear to be significantly affected by cross-sectional correlation.

earnings guidance, one form of disclosure, would increase the firm's cost of capital and result in a negative price reaction at the time of the announcement.

To further investigate this possibility, we examine changes in the systematic risk of the firm before and after the announcement to stop providing guidance. We estimate the market model using monthly returns including a dummy variable, POST, which is equal to one for months subsequent to the stop guidance announcement. Specifically, we estimate the following regression for each event and control firm:

$$R_{it} - R_{ft} = \alpha + \alpha_{post} POST_i + \beta_i [R_{mt} - R_{ft}] + \beta_{post} POST_i \times [R_{mt} - R_{ft}] + \varepsilon_{it} \qquad (3)$$

$R_{i,t}$ is the monthly stock return for firm i, $R_{f,t}$ is the monthly risk-free rate, and $R_{m,t}$ is the monthly return on the NYSE-AMEX-NASDAQ value-weighted market portfolio. POST is an indicator variable coded as 1 for the months after the stop-guidance announcement, and 0 otherwise. We include months up to month -60 prior to stopping and all available months after stopping, eliminating firms with less than six months of returns in the post stoppage period. [23]

We report the mean and median values of β_{POST} for the event and control samples in Table 4, Panel A. The mean and median values of β_{POST} are greater than zero (p's < 0.01, one-tailed) suggesting an increase in systematic risk for event firms. However, β_{POST} is also significantly greater than zero for the control group, though the difference between the two

[23] This design is similar to that used to estimate changes in risk surrounding the announcement of dividend changes (Grullon, Michaely, and Swaminathan, 2002) and open market share repurchase programs (Grullon and Michaely 2004). We do not use the Fama and French (1993) three-factor model for two reasons. First, estimating factor loadings on SMB and HML on a firm-specific basis is empirically noisy but there is a long tradition of estimating one factor CAPM models on a firm-specific basis in accounting and finance research. Note that Fama and French (1993) estimate three factor loadings on a portfolio basis. Second, the three factor Fama French model in place of the one factor CAPM model, even on a portfolio basis, runs into an asset spanning problem in that the loading on the CAPM market factor can be potentially distributed over all three factors of the Fama-French model. Hence, the researcher can potentially encounter increases in one or two factor loadings (e.g., loading on the market factor and SMB) and a decrease in another factor loading (say HML), thus rendering interpretation difficult. In contrast, the direction of change in the loading on one of the three factors has a relatively unambiguous interpretation.

groups is significant: for event firms beta increases more after the guidance stop announcement than for control firms.

However, because firms may begin with different levels of systematic risk, we also consider the percent change in CAPM beta, CBETA, defined as $\beta_{POST} \div \beta_i$. These results are presented in the last two columns of Panel A, Table 4. Event firms show a highly significant percentage increase in CAPM beta using both means and medians. Control firms show a significant increase in medians but a decrease in means. We also find a significantly greater CBETA for event firms relative to control firms when comparing both means (t=1.85) and medians (z=2.41). Thus, we have preliminary evidence that the negative market reaction to the stop guidance announcement is, at least partially, related to a shift in risk.

An alternative explanation for the decline in market price is that the market interprets the decision to stop guiding as a signal about future performance – in other words, the market revises downward its expectations about future cash flows of firms that renounce guidance. To provide some evidence on this possibility, we run the regression in Equation 2, controlling for changes in expectations of future earnings (ΔFEARN). Specifically, we calculate the revision in analysts' earnings forecasts for quarter q+1 made after the stop guidance announcement. If the negative market reaction is due to revisions in future expected cash flows, the coefficient on ΔFEARN should be positive – that is, firms with greater declines in expected future performance should have more negative market reactions at the time of announcement.

The results of this analysis are presented in the first column of Panel B of Table 4. The coefficient on ΔFEARN is positive and statistically significant (t=3.83, p<0.01), indicating that firms with more negative revisions in expected future performance are penalized with a more negative market reaction at the time of the announcement. However, the intercept is still

significantly negative (t=-2.14, p= 0.05), suggesting that changes in risk may also be an incremental explanation for the negative reaction.[24]

We further examine the role of changes in cost of capital in explaining the negative reaction by including the decile values of our measure of changes in systematic risk, RCBETA, in equation 2.[25] If the negative reaction is due to expected changes in systematic risk, the coefficient on RCBETA should be negative. Results of this analysis are presented in column 2 of Table 4, Panel B. The coefficient on RCBETA is insignificant. If we include both ΔFEARN and RCBETA into the model simultaneously (column 3), the coefficient on ΔFEARN remains positive and significant and the coefficient on RCBETA remains insignificant.

Finally, we run the above analysis after including proxies for the following 1) prior performance, 2) demand for information, 3) the company-reported reason for stopping, and 4) firm size. Our prior analysis finds that prior performance is an important determinant of the decision to stop providing earnings guidance. Thus, we include prior returns (BH_1) and the percent of prior quarters in which the firm met or exceeded analyst expectations (PMBAF) to control for any systematic difference between firms with prior poor performance and announcement period returns. Our determinant tests also find that demand for information is another driver of a firm's decision to stop giving guidance, thus we include analyst following (AF) and institutional holdings (PINST) in the model. We also include indicator variables designating firms whose self-reported reason for stopping guidance was due to 1) the unpredictability of performance (LOPRED) and 2) the desire to focus on the long-run performance of the company (LTFOCUS). It is possible the market reaction is related to the

[24] It is possible that the reaction is due to revisions in longer run performance. However, the availability of long-term forecasts in IBES is limited. Given our relatively small sample of event firms, we are unable to examine changes in long-term forecasts.

[25] We use decile values of CBETA to abstract away from large outlier changes in CBETA. Our inferences remain unchanged when we use actual values of CBETA in the analyses.

reason provided by the company. Finally, we include the log of market value of equity to control for firm size.

Column 4 of Table 4, Panel B reports the results of adding only the prior performance and demand for information variables as additional controls and Column 5 reports the results of including all the above variables. Similar to our prior results, revisions in expectations about future performance (ΔFEARN) are positively associated with announcement period returns while changes in systematic risk (RCBETA) are not. In terms of the control variables, PMBAF is positive and significant, indicating that firms with a history of meeting or beating analysts' expectations fare better, in terms of market reactions, when announcing their decision to stop providing guidance. Prior returns, analyst following and institutional ownership do not appear to influence the market's reaction to the announcement. However, it is interesting to note that the coefficient on LTFOCUS is positive and significant ($t=2.27$, $p<0.03$, one-tailed), suggesting that firms who state that their reason for giving up guidance is to focus investor attention on the long-term are penalized less severely.[26]

Overall, our results suggest that the negative reaction is related primarily to revisions in expected future performance. While we find evidence of an increase in systematic risk following the decision to give up guidance, this change is not correlated with market returns at the time of the announcement. One possibility is that firm-specific measures of changes in systematic risk are too noisy, resulting in a low power test.

4.2 Other consequences

Our last set of tests investigates other potential consequences of giving up guidance. We group these consequences into three categories: 1) effects on the timing of earnings news, 2)

[26] Untabulated results show that proxies for long-horizon investors (block and pension fund ownership) are unrelated to the cross-sectional distribution of CARs.

effects on volatility and trading volume, 3) and effects on analyst-related factors. For all these tests, we designate the quarter prior to the stoppage announcement as the "pre-stoppage" quarter and designate the quarter following the announcement as the "post-stoppage" quarter. We test for differences between the pre- and post-stoppage quarters for both the event and control samples. Thus, our basic research design is a "control group design with pre-test and post-test", which has fewer validity threats than a "pre-test only" design (Cook and Campbell, 1979). In addition, we include the Inverse Mills Ratio (IMR) obtained from the determinants test to control for potential self-selection bias inherent in our research setting.

4.2.1 Timing of earnings news

We first examine the timing of earnings news to the market. One potential benefit of earnings guidance is that the market receives information about upcoming earnings surprises earlier in the quarter. When a firm stops giving guidance, less (more) of the earnings information will be incorporated in price before (during) the earnings announcement period. We thus examine changes in the relation between 1) total earnings news released during the quarter and returns prior to the earnings announcement date (EAD) (equation 4a) and 2) total earnings news and returns during the earnings announcement window (equation 4b):

$$CAR_{j,q}^{[+2,-2]} = \alpha_0 + \alpha_1 POST_j + \alpha_2 UE_{j,q} + \alpha_3 (POST_j \times UE_{j,q}) + \alpha_4 IMR_{j,q-1} + \varepsilon_{j,q} \quad (4a)$$

$$CAR_{j,q,EAD}^{[-1,+1]} = \alpha_0 + \alpha_1 POST_j + \alpha_2 UE_{j,q} + \alpha_3 (POST_j \times UE_{j,q}) + \alpha_4 IMR_{j,q-1} + \varepsilon_{j,q} \quad (4b)$$

In both equations, UE is the seasonally differenced EPS (Compustat quarterly #19), scaled by stock price at the beginning of the pre-stoppage quarter, and POST is a dummy variable equal to 1 for the post-stoppage quarter. We measure UE relative to the same quarter in

the prior year as we are attempting to capture *total* earnings news released during the quarter.[27] IMR is the Inverse Mills Ratio obtained from the determinant test as specified in Equation (1). We include IMR to control for any potential self-selection bias arising from omitted firm characteristics that are correlated with the decision to stop giving guidance.

In equation 4a, $CAR_{j,q}^{[+2,-2]}$ is the cumulative abnormal return from +2 days following the prior quarter's earnings announcement to -2 days before the current quarter's earnings announcement date (i.e., the earnings announcement of UE). See Figure 2 for a depiction of the variable measurement for this test. Thus, in this equation the coefficient on α_2 captures the amount of the total earnings news that is revealed *prior* to the earnings announcement date and α_3 captures the change in this anticipation after the firm stops guiding. If, after stopping guidance, less of the total earnings news is revealed prior to the earnings announcement, then the coefficient on α_3 should be negative.

In equation 4b, $CAR_{j,q,EAD}^{[-1,+1]}$ is the cumulative abnormal return for the 3-days surrounding the earnings announcement to which UE relates. Thus, α_2 captures the amount of total earnings news that is revealed *during the earnings announcement period* and α_3 captures the change in this relation post-stoppage. If without guidance, investors learn less about the upcoming earnings surprise prior to the earnings announcement then, presumably, the information content of the earnings announcement should increase and α_3 should be positive.

The results of equation 4a are presented in Table 5, Panel A. For the event sample, the coefficient on UE is positive and significant, suggesting that the market learns about the upcoming earnings surprise prior to the earnings announcement. However, after the firm stops providing

[27] An alternative would be to measure UE relative to the first forecast issued by an analyst at the beginning of the quarter. However, this data requirement would further reduce our sample.

guidance, this "learning" is significantly reduced (α_3 is significantly negative, t=-4.75). Moreover, for the control sample, we do not find a difference for the "post" quarters. The decline in "learning" is significantly greater for the event sample than for the control sample (t=-5.32).

The results for equation 4b are presented in Table 5, Panel B. Overall, we do not find a statistically significant change in the information content of the earnings announcement for either our event or control firms, nor do we find any difference between these two groups of firms.

4.2.2 Volatility and trading volume

The prior results suggest that the information content of earnings announcements increases once firms stop providing guidance. An alternative way to measure information content is the volatility of returns and trading volume. We compute Beaver (1968)'s U-statistic for stock returns and volume around earnings announcements [-1, 0, +1 window] in the pre versus post guidance windows. Beaver's (1968) U-statistic is the ratio of the average daily stock return volatility for the 3 days surrounding the earnings announcement relative to the average daily stock return volatility in non-earnings announcement periods in the quarter. Also, as per Beaver (1968), we measure abnormal trading volume (TVOL) as the mean 3-day earnings announcement trading volume scaled by non-announcement period mean trading volume. The TVOL measure must be positive, by construction. TVOL measures less than one are indicative of smaller than non-announcement period volatility while TVOL measures greater than one suggest that the volatility during the announcement period is larger relative to non-announcement periods.

Table 6, Panel A reports univariate statistics for these two measures (as well as other variables examined and discussed in the next sub-sections). Panel B reports the results of a regression analysis using a similar design as that used for our previous analysis (in section 4.2.1).

We again include the Inverse Mills Ratio (IMR) to control for the self-selection bias in our research setting. For a more parsimonious presentation, we report only the coefficient on POST, which represents the change in the statistic after the firm stops providing guidance. Contrary to the results in Table 5, Panel B, we find a significant coefficient on POST for the U-statistic for our event firms (t-stat=1.79), suggesting an increase in the abnormal announcement period volatility after a firms stops guidance. This increase is marginally significantly greater than the increase for the control sample (t=1.52). However, we do not find a similar increase for trading volume.

We also examine changes in the overall volatility of returns. One could argue that uncertainty about the firm's future prospects, a key driver behind the stoppage decision, would result in higher volatility in stock returns. However, some firms that give up guidance have counter-argued that stopping guidance drives away transient investors such as hedge funds who bet against the guided earnings number and thus results in lower stock return volatility (NIRI 2004). To examine this issue, we examine changes in overall return volatility before and after the stoppage announcement. Specifically, for the pre-event volatility we measure the standard deviation of returns in the window -90 to -2 days relative to the stoppage announcement and for the post event volatility we measure the standard deviation of returns in the window +2 to +90 days (STD90).

Results of these tests are also reported in Table 6. We do not find a significant decline in overall return volatility for the event group (t-stat on POST = -0.77). The control group does exhibit a significant decline in volatility (t-stat on POST of -3.80) but the difference between the two groups is not significant. Thus, we do not find any evidence of an unusual change in return volatility for firms that announce the decision to stop providing earnings guidance.

4.2.3 Analyst following, dispersion and accuracy

Finally, we examine changes in three analyst-related factors: 1) analyst following, 2) dispersion in analyst forecasts, and 3) analyst forecast accuracy. We measure analyst following (AF) as the number of analysts issuing forecasts in the pre- and post-stoppage quarters. If the elimination of guidance increases the analyst's cost of covering a firm, analyst following should fall for our event firms. Analyst dispersion (DISP) is measured as the standard deviation of analysts' forecasts scaled by the absolute value of the corresponding mean forecast. Since earnings guidance likely increases the amount of public information about a firm, the elimination of guidance should lead to an increase in forecast dispersion (Barron, Kim, Lim and Stevens, 1998). Moreover, managers often express concerns over increased dispersion as a reason for maintaining the practice of giving earnings guidance.[28] Forecast error (|FE|) is the absolute value of actual earnings per share less the mean analyst forecast (scaled by the mean analyst forecast) in the pre- and post-stoppage quarters. If earnings guidance increases the analysts' information set, we would expect forecast error to increase for our event firms after the elimination of guidance. On the other hand, if analysts replace the lack of guidance with greater analysis and therefore, generate additional private information, then the lack of guidance will not result in a decline in forecast accuracy.

Table 6 presents the results of our analysis. Univariate statistics are presented at the bottom of Panel A and regression results are presented at the bottom of Panel B. Contrary to concerns expressed by managers, we do not find a statistically significant decline in analyst following after the stoppage of guidance for our event firms. However, we do find that the

[28] For example, "Some market observers argue that lack of specific EPS or net income guidance will heighten volatility because a wider range of analyst estimates will result" (Harper 2003). Also a NIRI Update article entitled "The Lighthouse: Earnings Guidance" (NIRI, December 2004) cites one reason behind Tyson Foods decision to provide quarterly guidance as, "…giving guidance…leads to a tighter range of analysts' estimates, which in turn can result in more accurate valuation."

increase in dispersion and forecast error in the POST period experienced by event firms is significantly greater than that experienced by control firms (t=2.56 and t= 2.08 for dispersion and accuracy respectively). Thus, it appears analysts are not able to independently generate similar levels of information in the absence of guidance, resulting in a greater decrease in forecasting accuracy among analysts of our event firms relative to our control firms.

5. Evidence of changes in other disclosures

As a final test, we examine whether firms change their level of disclosure following their decision to stop providing guidance. Firms often claim that they will replace specific earnings guidance with greater qualitative disclosures about the company's future plans and strategies. Such a substitution is consistent with calls from industry groups for changes to the practice of providing quarterly earnings guidance (Krehmeyer and Orsagh 2006).

However, our prior evidence of 1) a negative market reaction to the stoppage announcement and 2) the increase in forecast dispersion and decrease in forecast accuracy, suggests that firms have not replaced earnings guidance with adequate qualitative disclosures. To provide some evidence on this question, we gather the company's earnings announcement press release in the quarter prior to the stoppage announcement (q-1) and the quarter following the stoppage announcement (q+1). We count the number of words in the press release (DISC) as a measure of the level of disclosure. We then calculate the percent change (%ΔDISC) in the level of disclosure as $(DISC_{q+1}-DISC_{q-1})/DISC_{q-1}$. Of our original sample of 96 firms, we are able to calculate %ΔDISC for 86 firms.

Panel A of Table 7 provides descriptive statistics on %ΔDISC. Both the mean and median values are significantly greater than zero, suggesting that firms, on average, have

increased their level of disclosure in the quarter following the stoppage announcement. Approximately 55.8% of firms show an increase in the DISC, while 44.2% show a decrease. However, two factors potentially impact this comparison. First, the length of a company's earnings announcement press release likely changes as the fiscal year progresses. In particular, firms likely disclose *more* in later fiscal quarters (Matsumoto, Pronk, and Roelofsen 2006). Since a large number of firms announced the decision to stop providing earnings guidance in the first quarter of 2003, it is likely that a disproportionate number of pre-stoppage quarters are fourth fiscal quarters and post-stoppage quarters are second fiscal quarters. To the extent the length of press releases in the fourth fiscal quarter is longer than in the second fiscal quarter, %ΔDISC will be biased downward. In addition, firms also likely disclose more when reporting poor earnings performance (D'Souza, Ramesh and Shen 2006, Matsumoto et al., 2006). If firm performance is deteriorating over time, the increase in DISC may be due to performance rather than the stop guidance decision.

To control for these possible effects, we run the following regression:

$$\%\Delta DISC = \beta_0 + \beta_1 \Delta QTR + \beta_2 \Delta LOSS + \beta_3 \Delta MISS + \varepsilon \quad (5)$$

ΔQTR is the difference between the q+1 fiscal quarter and the q-1 fiscal quarter. If the post stoppage quarter is earlier (later) in the fiscal year than the pre stoppage quarter ΔQTR will be negative (positive). Assuming firms issue longer earnings press releases later in the fiscal year, the coefficient on ΔQTR should be positive. LOSS is a dummy variable equal to 1 if earnings before extraordinary items (Quarterly Compustat #8) is less than zero, and zero otherwise. ΔLOSS is LOSS in quarter q+1 less LOSS in quarter q-1. MISS is a dummy variable equal to 1 if actual earnings is less than the mean consensus analyst forecasts (both per IBES), and zero otherwise. Similar to ΔLOSS, ΔMISS is MISS in quarter q+1 less MISS in quarter q-1.

If firms issue longer earnings press releases when reporting losses or when they miss analysts' forecasts, the coefficient on ΔLOSS and ΔMISS should be positive. A significantly positive coefficient on the intercept would indicate that disclosure levels have increased following the decision to stop guidance, even after controlling for the effect of fiscal quarters and firm performance,

Panel A of Table 7 presents descriptive statistics on these variables. As we suspected, ΔQTR is significantly negative, indicating that post-stoppage quarters tend to be earlier in the fiscal year than the pre-stoppage quarters. ΔLOSS and ΔMISS are both significantly positive indicating that firms report losses and miss analysts' expectations more frequently in the post-stoppage quarter versus the pre-stoppage quarter. The results of estimating equation 5 are presented in Panel B of Table 7. We first run the regression including only ΔQTR, as data requirements to calculate ΔLOSS and ΔMISS reduce our sample size to 53. In both specifications, the coefficient on ΔQTR is significantly positive, indicating that firms disclose more in later fiscal quarters. We also find that firms disclose more when reporting losses – the coefficient on ΔLOSS is significantly positive. Finally, in both specifications we find a significantly positive intercept, indicating that disclosure levels have indeed increased after controlling for fiscal quarter effects and firm performance. However, given our findings of increased analyst forecast dispersion and decreased analyst forecast accuracy, it appears this increased disclosure is not a direct substitute for forecast guidance.[29]

[29] We repeat this analysis replacing ΔLOSS with the change in earnings between the pre and post quarters, scaled by total assets. The intercept remains significantly positive (the coefficient on the change in earnings is insignificant).

6. Conclusions

The well-publicized decision by the Coca-Cola Company to stop providing earnings guidance to the market, followed by a number of other companies issuing similar statements, raises questions about the motives behind these companies' actions as well as the consequences of their decision. We investigate these issues using a sample of firms that publicly announce their decision to stop providing quarterly earnings guidance.

Our results suggest that poorly performing firms and firms with low external demand for guidance are more likely to renounce guidance. However, we do not find evidence that firms stop guiding when they have a high concentration of investors with longer investment horizons. Thus, while many firms provide altruistic reasons for no longer providing guidance (e.g., desire to focus on the long-term), it appears that for many firms the driving factor is poor performance.

We also find that the market reacts negatively to the news that a firm will no longer be providing earnings guidance. There are two possible explanations for this negative price reaction: 1) the market interprets the act of stopping as a signal about future performance and therefore revises downward its expectation about future cash flows or 2) the act of guidance reduces systematic risk that decreases the cost of equity capital and therefore, the elimination of guidance increases the firm's cost of capital. In additional analysis, we find support primarily for the first explanation – that is, firms with worse future performance suffer a greater market decline when they announce the decision to stop providing guidance. We find evidence that firms stopping guidance experience an increase in systematic risk but this change is not associated with the announcement period return.

Finally, we find that after a firm stops providing guidance, less earnings news is revealed to the market prior to the earnings announcement date. However, the act of renouncing guidance

does not appear to increase return volatility or lower analyst following, contrary to the concerns often expressed about the costs of foregoing guidance. We also find an increase in analyst forecast dispersion and analyst forecast error after stoppage of guidance for our event firms relative to our control firms, despite the fact that, on average, firms disclose more information after stopping guidance. These findings suggest that explicit guidance is valuable to analysts and that they are not able to independently generate similar levels of information through private information acquisition or the interpretation of additional qualitative managerial disclosures.

Overall, our results suggest that guidance is valuable to investors and analysts. It increases analyst forecast accuracy, reduces dispersion and may even reduce systematic risk. Managers may want to consider these benefits to guidance when evaluating the decision to stop providing guidance. Given the documented costs to giving up guidance, one might wonder why firms made this decision. There are two potential reasons. First, managers may not have realized the cost associated with discontinuing guidance. Given the flurry of announcements shortly after Coke's announcement, there may not have been sufficient time for managers to realize the consequences of their decision. Second, we do not (and cannot) document the consequences the firm *would have* experienced had they continued to provide guidance. For example, Graham, Harvey and Rajgopal (2005, 42) find that Chief Financial Officers consider failing to meet or beat a guided earnings target to be worse than not providing earnings guidance in the first place. It is thus possible that the consequences of continuing with earnings guidance outweigh the consequences the firm experienced from its decision to discontinue guidance.

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Figure 1
Distribution of Announcement Dates for Stop Guidance Sample

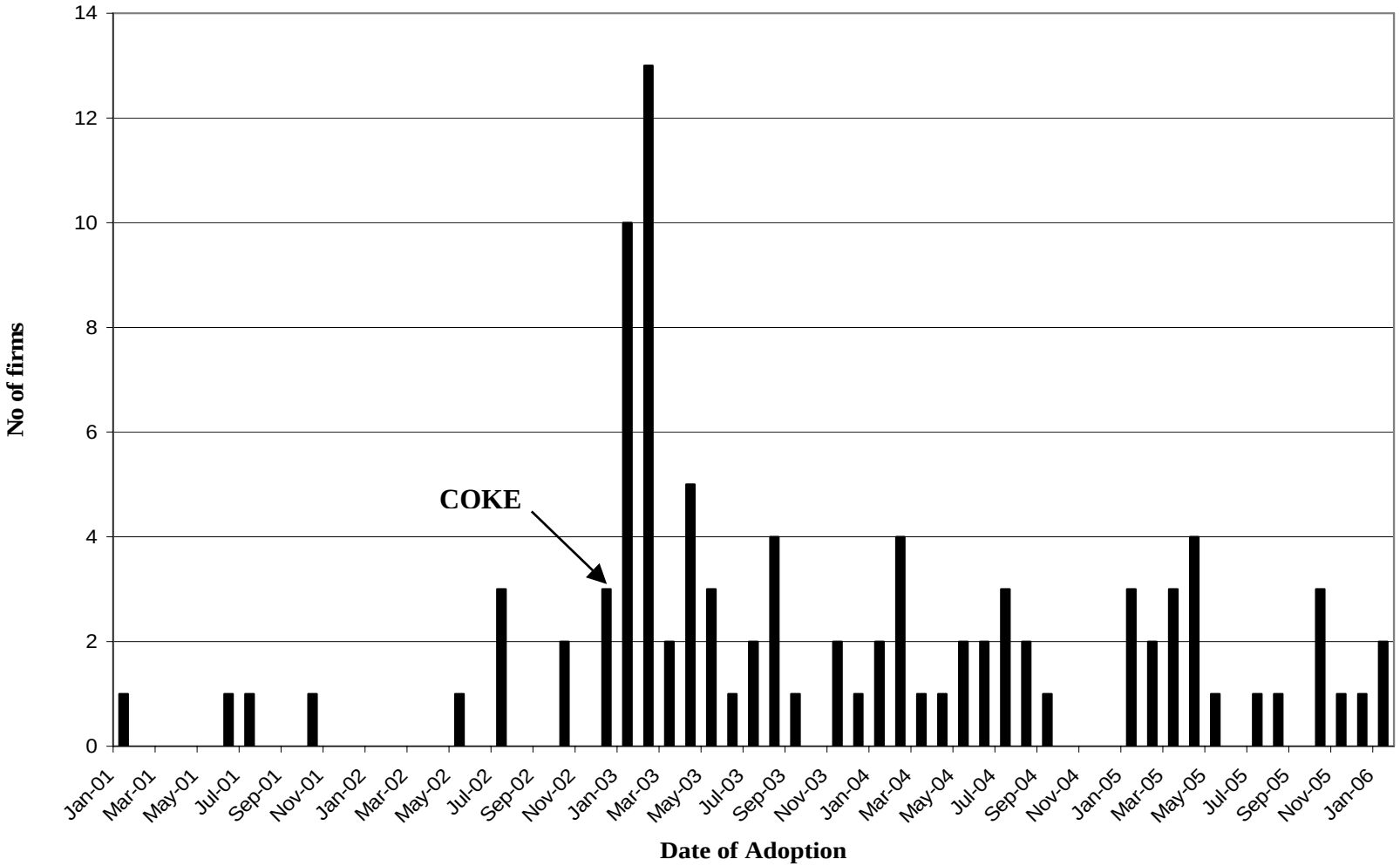

Figure 2
Time Line for Defining Variables used in Future ERC Tests
(Panel A of Table 5)

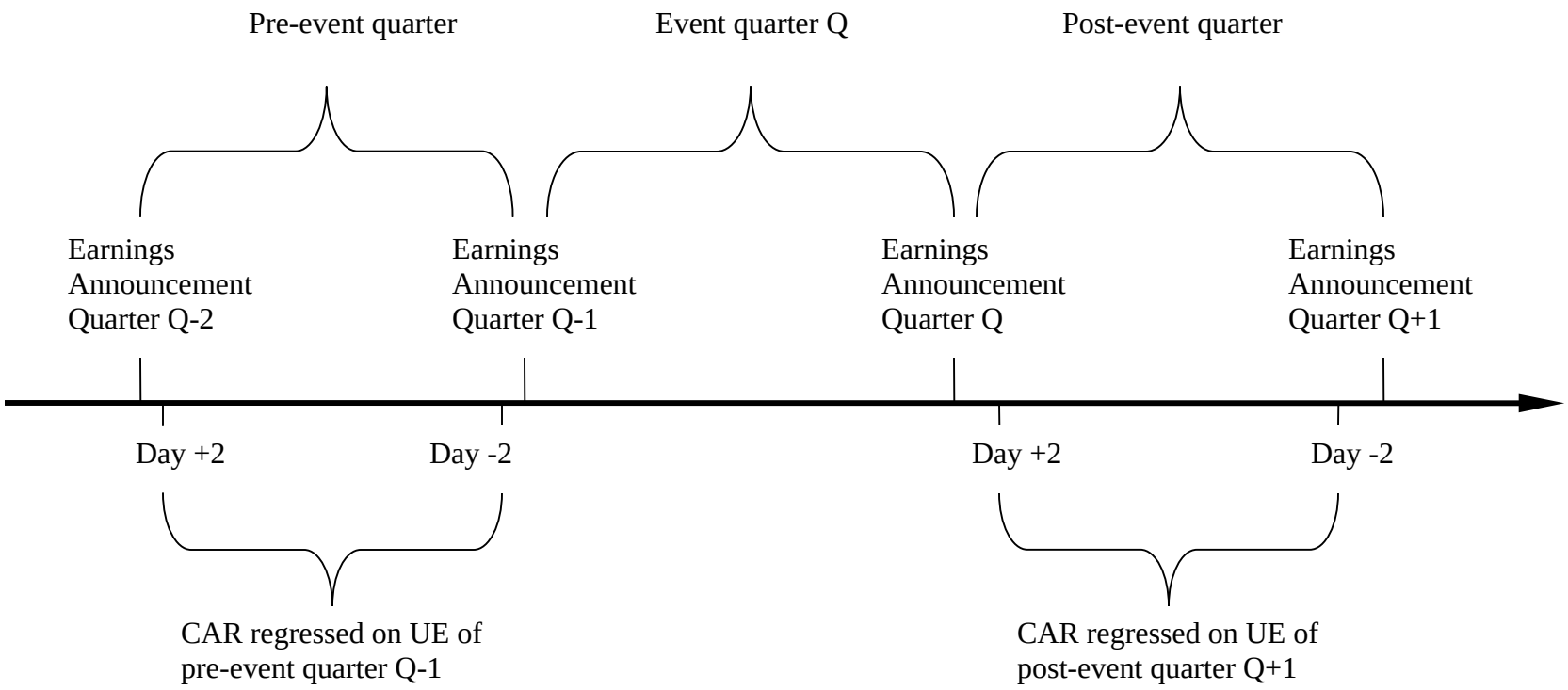

Table 1
Sample Attrition for Firms that Stop Quarterly Guidance

Sample Selection Criteria	Number of observations left		
	Test of Determinants	**Test of Market Reaction**	**Test of Consequences**
Initial Sample	96 firms	96 firms	96 firms
Less: 6 firms not on CRSP (5 of which are foreign firms)	90 firms	90 firms	90 firms
Less: 4 firms deleted from CRSP before announcement date	86 firms	86 firms	86 firms
Less: 2 firms without CRSP data on BH_1, BH_2, STD_{ret}	84 firms	84 firms	84 firms
Less: 4 firms without Compustat data on PMBH, PLOSS, LNMV_1, and MB	80 firms	80 firms	80 firms
Less: 5 firm without Compustat and CRSP data on PRED, VALREL, and litigation probability LIT	75 firms	75 firms	75 firms
Less: 2 firms with no data on consensus analyst forecast before stop announcement dates on IBES		73 firms	
Less: firms with no CRSP data for estimation of change in beta and no IBES forecast data for calculating analyst forecast revision		53-63 firms	
Less: firms without requisite IBES, Compustat and/or CRSP data (due to further restriction on having quarter Q+1 data)			53-66 firms

Table 2
Determinants of the Decision to Stop Quarterly Guidance

Panel A: Univariate Statistics

	Mean		Median		Test of Difference	
	Event (n=75)	Control (n=901)	Event (n=75)	Control (n=901)	t-statistics	z-statistics
BH_1	-0.10	0.17	-0.13	0.04	**-3.77*** **	**-5.23*** **
BH_2	0.32	0.26	0.06	0.15	0.56	-1.06
PLOSS	0.30	0.23	0.13	0.13	**1.99** **	**2.03** **
PMBAF	0.80	0.84	0.88	0.88	**-1.99** **	**-1.91** **
VALREL	-0.20	-0.16	-0.06	-0.03	-0.56	**-3.33*** **
STD_{ret}	0.03	0.03	0.03	0.03	0.84	-0.02
PRED	-0.05	-0.48	-0.02	-0.02	**-1.83** **	-0.42
AF	7.48	9.18	5	8	**-2.05** **	**-2.58*** **
PINST	57.96	68.46	64.10	72.88	**-3.39*** **	**-3.50*** **
LIT	0.02	0.05	0.002	0.002	**-1.88** **	**1.84** **
D_b	0.91	0.88	0	1	0.55	0.55
BO[a]	37.58	39.21	32.19	37.03	-0.58	-0.58
D_p	0.50	0.57	1	1	-1.06	-1.07
PO[b]	2.82	2.94	2.83	2.98	-0.68	-0.21
LNMV	6.86	6.99	6.53	6.84	-0.55	-1.11
MB	2.69	2.68	1.76	2.31	0.01	-2.56***
LNCT	2.13	2.73	2.48	2.77	-4.50***	-4.04***

Table 2
Determinants of the Decision to Stop Quarterly Guidance
(continued)

Panel B: Correlation Matrix for Test Variables. Pearson Correlation Coefficients above the Diagonal and Spearman Rank Correlation Coefficients below the Diagonal

	BH_1	BH_2	PLOSS	PMBAF	VALREL	STD_{ret}	PRED	AF	PINST	LIT	BO	PO	LNMV	MB	LNCT
BH_1		0.01	-0.01	0.06**	-0.09***	0.02	0.01	-0.15***	-0.19***	-0.10***	0.04	-0.05	-0.05*	0.06**	-0.02
BH_2	-0.09***		-0.14***	0.17***	-0.16***	0.05	0.00	-0.12***	-0.05	0.05	0.02	0.01	-0.10***	0.02	-0.03
PLOSS	-0.13***	-0.28***		-0.14***	-0.11***	0.59***	0.02	-0.12***	-0.16***	0.00	-0.04	-0.17***	-0.32***	-0.02	-0.17***
PMBAF	0.07**	0.18***	-0.09***		0.02	-0.04	0.06*	0.05*	0.03	0.03	-0.07**	-0.06**	0.06*	0.07**	0.04
VALREL	0.01	0.04	-0.13***	0.00		-0.20***	0.00	0.07**	0.13***	-0.10***	-0.01	0.07**	0.11***	0.01	0.13***
STD_{ret}	-0.15***	-0.08***	0.52***	-0.02	-0.26***		0.02	-0.11***	-0.20***	0.20***	-0.05*	-0.21***	-0.46***	-0.02	-0.22***
PRED	0.02	0.09***	-0.45***	0.01	0.10***	-0.30***		-0.04	-0.07**	0.01	0.02	-0.00	-0.06**	0.00	-0.09***
AF	-0.11***	-0.09***	-0.13***	0.06*	0.07**	-0.15***	0.19***		0.26***	0.11***	0.04	0.13***	0.67***	0.04	0.26***
PINST	-0.05	0.07**	-0.13***	0.07*	0.11***	-0.18***	0.08**	0.31***		0.05*	0.03	0.06**	0.28***	-0.04	0.28***
LIT	-0.44***	0.07**	0.06**	0.04	-0.12***	0.32***	0.05	0.54***	0.24***		0.02	-0.06**	0.03	0.00	-0.04
BO	0.04	-0.00	-0.04	-0.05	0.08**	-0.05*	-0.00	0.02	0.05	-0.01		0.15***	0.03	0.04	0.03
PO	-0.01	0.09***	-0.19***	-0.08**	0.05	-0.23***	-0.07**	0.14***	0.08**	0.03	0.16***		0.21***	-0.04	0.14***
LNMV	0.09***	-0.03	-0.33***	0.04	0.11***	-0.50***	0.30***	0.71***	0.28***	0.36***	0.06*	0.25***		0.07**	0.28***
MB	0.31***	0.07**	-0.27***	0.13***	-0.00	-0.22***	0.24***	0.33***	0.08**	0.14***	0.01	-0.02	0.48***		-0.04
LNCT	0.00	0.03	-0.12***	0.05	0.13***	-0.22***	0.03	0.29***	0.24***	0.09***	0.05	0.16***	0.32***	0.06*	

Table 2
Determinants of the Decision to Stop Guidance Quarterly Guidance
(continued)

Panel C: Logistic Regressions[c]

Dependent variable = 1 if the firm announces stopping guidance (n=75) 0 for control firms (n=901).

Model:

$$STOP = \beta_0 + \beta_1 BH\_1 + \beta_2 BH\_2 + \beta_3 PLOSS + \beta_4 PMEET + \beta_5 VALREL + \beta_6 STD_{ret} + \beta_7 PRED + \beta_8 AF$$
$$+ \beta_9 HIAF \times AF + \beta_{10} PINST + \beta_{11} LIT + \beta_{12} D_b + \beta_{13} D_b \times BO + \beta_{14} D_p + \beta_{15} D_p \times PO + \beta_{16} LNMV + \beta_{17} MB + \beta_{18} LNCT + \varepsilon$$

Independent variables	**Predicted sign**	**Raw Values for RHS variables**		**Ranked Values for RHS variables**	
		Coefficients	p-values	Coefficients	p-values
BH_1	–	**-1.68**	**<0.01**	**-2.11**	**<0.01**
BH_2	–	0.05	0.24	-0.55	0.14
PLOSS	+	0.49	0.19	**1.01**	**0.06**
PMBAF	–	**-1.07**	**0.07**	-0.52	0.14
VALREL	–	-0.03	0.45	**-1.45**	**<0.01**
STD_{ret}	–	-1.98	0.45	**-2.67**	**<0.01**
PRED	+	0.48	0.34	-0.09	0.15
AF	–	**-0.16**	**<0.01**	**-2.62**	**<0.01**
HI×AF	+	**0.08**	**0.02**	**1.54**	**0.07**
PINST	–	**-1.26**	**0.03**	**-1.31**	**<0.01**
LIT	+	-0.84	0.68	**1.85**	**<0.01**
D_b	?	1.19	0.04	0.98	0.08
D_b×BO	+	-0.58	0.64	-0.26	0.38
D_p	?	0.02	0.98	-0.18	0.76
D_p×PO	+	-0.17	0.68	-0.60	0.44
LNMV	?	**0.38**	**<0.01**	0.71	0.44
MB	?	-0.00	0.98	-0.45	0.42
LNCT	-	**-1.09**	**<0.01**	**-1.51**	**<0.01**
Pseduo-R^2		19.13		17.86	

Table 2
Determinants of the Decision to Stop Quarterly Guidance
(continued)

Notes to Table 2:
*, **, ***: significant at 10%, 5%, 1% (two-sided p-values) for Panel B correlation matrix.
[a] For the BO variable we report the mean and median values only for observations with requisite data from Compact Disclosure. The sample sizes are 68 for the event observations and 798 for the control observations.

[b] For the PO variable we report the mean and median values only for observations with requisite data from Cremers and Nair (2004). The sample sizes are 38 for the event observations and 514 for the control observations.

[c] P-values for Panels A and C are one-sided p-values for variables with directional predictions. We boldface coefficients with p-values less than 10%. We report (1-p) values for coefficients that assume a sign opposite to the one predicted.

Definition of variables:

BH_1 = market-adjusted buy-and-hold returns for the 12 months beginning from month -12 ending month -1, with month 0 being the announcement month.
BH_2 = market-adjusted buy-and-hold returns for the 12 months beginning from month -24 ending month -13, with month 0 being the announcement month.
PLOSS = percentage of losses in the 8 quarters proceeding the announcement quarter. Loss is coded as 1 if net income (Compustat quarterly #19) is negative. We require at least 4 quarters of non-missing net income on Compustat to compute this variable.
PMBAF = percentage of meeting or beating earnings expectations in the 8 quarters preceding the announcement quarter. Expected earnings is measured as consensus analyst forecasts before earnings announcements from IBES. We require at least 4 quarters of non-missing net income on Compustat to compute this variable.
VALREL = value relevance proxy, measured as negative one times the squared residual from the following regression: $RET = \beta_0 + \beta_1 NIBE + \beta_2 LOSS + \beta_3 NIBE * LOSS + \beta_4 \Delta NIBE + \varepsilon$. The regression is estimated by three, two, or one-digit SIC code conditional on having at least 10 firms in each group. RET = market adjusted return over the fiscal year preceding guidance stoppage; NIBE = net income before extraordinary items (Compustat annual data18) scaled by the beginning market value of equity (Compustat annual #25*Compustat annual #199); LOSS =1 if NIBE is negative, zero otherwise; ΔNIBE = the change in net income before extra-ordinary items scaled by beginning market value of equity. Since we multiply by -1 larger values of VALREL indicates greater value relevance. NIBE is computed over the fiscal year preceding guidance stoppage.
STDret = standard deviation of daily raw returns during 252 days prior to the stop-guidance announcement date for event observations and the management forecast date for control observations.
PRED = predictability of earnings, measured as negative one times the square root of the error variance from firm j's AR(1) model: $\Delta NI_q = \alpha + \beta \Delta NI_{q-1} + \varepsilon$, where ΔNI_q is seasonally adjusted net income (Compustat quarterly #69 scaled by beginning market value of equity). We require at least 8 observations per firm in estimating PRED. Since we multiply by -1 larger values of PRED indicates greater predictability. NI comes from fiscal periods preceding quarter of guidance stoppage.
AF = number of analysts following the firm, measured as the number of analysts covering the firm at the beginning of the event quarter per IBES. If a firm is not on IBES, we code AF as zero. The window over the 252 days preceding to the stop-guidance announcement (management forecast) date for event (control) firms.

Table 2
Determinants of the Decision to Stop Quarterly Guidance
(continued)

HIAF = an indicator variable for the 4th quartile of AF.

PINST = percentage institutional ownership measured prior to the announcement date as reported on Compact Disclosure.

LIT = proxy for litigation risk, calculated using the Rogers and Stocken (2005) litigation probability model coefficients estimates. Larger values indicate greater probability of litigation. Specifically, probability (litigation=1) = G(-5.378+0.141*SIZE + 0.284*TURNOVER + 0.012*BETA -0.237*RETURNS - 1.340*STDRET -0.011*SKEWNESS -3.161*MINRET -0.025*BIOTECH + 0.378* HARDWARE + 0.075*ELECTRONICS -0.034*RETAIL + 0.211*SOFTWARE, where G is the standard normal cumulative distribution function. The estimation of all the independent variables (except for the industry dummies) use the window over 252 days preceding the stop guidance announcement (management forecast) date for event (control firms). Note that SIZE = the natural log of the average market value of equity; TURNOVER = average daily share volume divided the average shares outstanding; BETA = the slope coefficient from regressing firm's daily returns on CRSP Value-Weighted Index; RETURNS = the cumulative daily raw stock returns; SKEWNESS = the skewness of daily returns; MINRET = the minimum of daily returns. The high risk industry dummies represent Biotech (SIC 2833 to 2836), Computer Hardware (SIC 3570 to 3577), Electronics (SIC 3600to 3674), Retailing (SIC 2500 to 5961) and Computer Software (SIC 7371 to 7379). For presentation purposes we multiply the estimated probability by 10^2.

D_b = indicator variable coded as 1 if the firm has 5% blockholder ownership data from Compact Disclosure.

BO = percentage 5% blockholder ownership of the firm prior to stop-guidance announcement from Compact Disclosure.

$D_b \times BO$ = interaction variable between D_b and BO.

D_p = indicator variable coded as 1 if the firm has pension ownership data.

PO = percentage pension ownership of the firm prior to stop-guidance announcement. Data source: Cremers and Nair (2004).

$D_p \times PO$ = interaction variable between Dp and PO.

LNMV = natural log of the beginning of event quarter market value of equity (Compustat quarterly #14*#61).

MB= natural log of the beginning of event quarter market to book ratio.

LNCT = natural log of (1+ CT), where CT is the number of management quarterly EPS forecasts up till quarter t–1.

Table 3
Market Reaction to Announcement of Stopping Quarterly Guidance (N=73)

Panel A: Univariate Statistics

		MEAN			MEDIAN		
	% negative	D_{ea}= 1 (n=54)	D_{ea}= 0 (n=19)	t-stat for mean difference	D_{ea}= 1 (n=54)	D_{ea}= 0 (n=19)	z-stat for median difference
UE	30.1%	-0.013	N/A	N/A	0.000	N/A	N/A
$CAR_{-1,1}$	65.8%	-0.027	-0.048	-0.87	-0.020	-0.028	-0.87
$RET_{-1,1}$	65.8%	-0.028	-0.052	-0.92	-0.017	-0.024	-0.91

Panel B: OLS Regression: $CAR_{-1,1} = \alpha + \beta_1(D_{ea}) + \beta_2(D_{ea} \times UE) + \varepsilon$

Independent variables	Coefficients	t-statistic
Intercept	-0.048	-2.31
D_{ea}	0.024	0.97
D_{ea}×UE	0.187	1.21
Adjusted R^2	3.16%	

Notes to Table 3:

Definition of variables:

D_{ea}=indicator variable coded as 1 if an earnings announcement falls in [-1,+1] window centered on the stop-guidance announcement date, 0 otherwise.
UE = unexpected earnings, defined as actual EPS minus the most recent preceding consensus analyst forecast on IBES, scaled by price two days before the earnings announcement date.
$CAR_{-1,1}$ = three-day cumulative abnormal returns centered on the stop-guidance announcement date.
$RET_{-1,1}$ = three-day cumulative raw returns centered on the stop-guidance announcement date.

Table 4
Further Analysis of Market Reaction – Cost of Capital vs. Future Performance

Panel A: Test of shift in CAPM beta

Model $R_{it} - R_{ft} = \alpha + \alpha_{post} POST_i + \beta_i [R_{mt} - R_{ft}] + \beta_{post} POST_i \times [R_{mt} - R_{ft}] + \varepsilon_{it}$

	β_{post}		$CBETA = [\beta_{post} POST_i \div \beta_i]$	
	Mean	Median	Mean	Median
Event	0.552 (p<0.01)	0.455 (p<0.001)	2.582 (p<0.01)	0.408 (p<0.001)
Control	0.171 (p<0.001)	0.247 (p< 0.001)	-0.512 (p<0.001)	0.157 (p<0.001)
Test of Difference	t = 2.40	z = 2.11	t = 1.85	z = 2.41

Panel B: Determinants of market reaction to announcement of stopping guidance

$$CAR_{-1,1} = \alpha + \beta_1(D_{ea}) + \beta_2(D_{ea} \times UE) + \beta_3 \Delta FEARN + \beta_4 RCBETA + \beta_5 BH\_1 + \beta_6 PMBAF + \beta_7 AF + \beta_8 PINST + \beta_9 LOPRED + \beta_{10} LTFOCUS + \beta_{11} SIZE + \varepsilon$$

Independent variables	**Model (1)**	**Model (2)**	**Model (3)**	**Model (4)**	**Model (5)**
Intercept	-0.048	-0.057	-0.046	-0.154	-0.109
	(-2.14)	(-1.81)	(-1.60)	(-2.19)	(-1.17)
D_{ea}	0.064	0.026	0.065	0.069	0.057
	(2.43)	(0.96)	(2.38)	(2.53)	(2.12)
$D_{ea} \times$UE	1.975	0.178	1.978	1.905	1.802
	(1.53)	(1.09)	(1.52)	(1.46)	(1.43)
ΔFEARN	2.719		2.719	2.579	2.371
	(3.83)		(3.79)	(3.29)	(2.72)
RCBETA		0.002	-0.000	0.000	0.000
		(0.39)	(0.08)	(0.19)	(0.01)
BH_1				-0.016	-0.019
				(-0.72)	(-0.92)
PMBAF				0.130	0.118
				(2.20)	(2.08)
AF				-0.000	-0.000
				(-0.95)	(-0.41)
PINST				0.013	0.005
				(0.28)	(0.10)
LOPRED					-0.023
					(-0.92)
LTFOCUS					0.057
					(2.27)
SIZE					-0.005
					(-0.52)
N	53	63	53	53	53
Adjusted R^2	32.85%	3.98%	31.46%	33.56%	39.63%

Table 4
Further Analysis of Market Reaction – Cost of Capital vs. Future Performance (continued)

Notes to Table 4:

Definition of variables:

Panel A:

R_{it} = monthly stock returns for firm i. Firms with less than 6 months of return data after the event date are dropped.

R_{ft} = monthly risk-free rates

R_{mt} = monthly return on the NYSE-AMEX-NASDAQ value-weighted market portfolio

POST = indicator variable coded as 1 for the months after the stop-guidance announcement date, and 0 otherwise.

Panel B:

D_{ea}=indicator variable coded as 1 if an earnings announcement falls in [-1,+1] window centered on the stop-guidance announcement date, 0 otherwise.

UE = unexpected earnings, defined as actual EPS minus the most recent preceding consensus analyst forecast on IBES, scaled by price two days before the earnings announcement date.

$CAR_{-1,1}$ = three-day cumulative abnormal returns centered on the stop-guidance announcement date.

$RET_{-1,1}$ = three-day cumulative raw returns centered on the stop-guidance announcement date.

ΔFEARN = measure of expected future earnings, calculated as analyst forecast revision for quarter Q+1 (analyst EPS forecast for quarter Q+1 made in quarter Q+1, minus analyst EPS forecast for quarter Q+1 made in quarter Q-1, scaled by price at the end of the quarter before stop-guidance announcement (Q-1).

CBETA= % change in β estimated as β_{post} / β from firm-specific CAPM model:

$R_{jt} - R_{ft} = \alpha + \alpha_{post} POST + \beta[R_{mt} - R_{ft}] + \beta_{post} POST \times [R_{mt} - R_{ft}] + \varepsilon_{jt}$, where R_{jt} is firm's daily stock returns, and R_{it}, R_{ft}, R_{mt}, and POST are defined as above in notes to Panel A.

RCBETA= decile values of CBETA

BH_1 = market-adjusted buy-and-hold returns for the 12 months beginning from month -12 ending month -1, with month 0 being the announcement month.

PMBAF = percentage of meeting or beating earnings expectations in the 8 quarters preceding the announcement quarter. Expected earnings is measured as consensus analyst forecasts before earnings announcements from IBES. We require at least 4 quarters of non-missing net income on Compustat to compute this variable.

AF = number of analysts following the firm, measured as the number of analysts covering the firm at the beginning of the event quarter per IBES. If a firm is not on IBES, we code AF as zero. The window over the 252 days preceding to the stop-guidance announcement (management forecast) date for event (control) firms.

PINST = percentage institutional ownership measured prior to the announcement date as reported on Compact Disclosure.

LOPRED = one if management's reason for discontinuing guidance is due to difficulty predicting future earnings/increased uncertainty (as reported in company press release) and zero otherwise.

LTFOCUS = one if management's reason for discontinuing guidance is to focus on the long-term prospects of the company (as reported in company press release) and zero otherwise.

LNMV = natural log of the beginning of quarter market value of equity (Compustat quarterly #14*#61).

Table 5
Consequence of Stopping Quarterly Guidance: Future ERCs and ERCs

Panel A: Future ERC Test

Model $$CAR_{j,q}^{[+2,-2]} = \alpha_0 + \alpha_1 POST_j + \alpha_2 UE_{j,q} + \alpha_3 (POST_j \times UE_{j,q}) + \alpha_4 IMR_{j,q-1} + \varepsilon_{j,q}$$

	Event Sample			Control Sample			Difference (Stacked Sample)		
	Pred. sign	**Coeffs.**	**T-stats**	**Pred. Sign**	**Coeffs.**	**T-stats.**	**Pred. Sign**	**Coeffs.**	**T-stats.**
Intercept		0.08	(1.31)		0.10*	(1.52)		-0.03	(-1.03)
POST	?	0.03	(0.58)	?	0.03**	(2.12)	?	-0.00	(-0.14)
UE	+	5.31***	(4.58)	+	0.13*	(1.47)	?	4.33***	(5.65)
POST*UE	–	-4.91***	(-4.75)	?	0.16	(0.33)	–	-4.41***	(-5.32)
IMR	?	0.18***	(2.50)	?	0.04	(0.56)	?	0.11***	(2.45)

Table 5: Consequence of Stopping Guidance: Future ERCs and ERCs (continued)

Panel B: ERC Test

Model $CAR_{j,q,EAD}^{[-1,+1]} = \alpha_0 + \alpha_1 POST_j + \alpha_2 UE_{j,q} + \alpha_3 (POST_j \times UE_{j,q}) + \alpha_4 IMR_{j,q-1} + \varepsilon_{j,q}$

	Event Sample			Control Sample			Difference (Stacked Sample)		
	Pred. sign	**Coeffs.**	**T-stats**	**Pred. Sign**	**Coeffs.**	**T-stats.**	**Pred. Sign**	**Coeffs.**	**T-stats.**
Intercept		-0.02	(-0.43)		0.01***	(2.72)		-0.04*	(-1.54)
POST	?	0.01	(0.62)	?	-0.00	(-1.28)	?	0.02	(1.05)
UE	+	0.02	(0.80)	+	0.14***	(3.78)	?	0.04	(0.19)
POST*UE	+	-0.19	(-0.71)	?	-0.06	(-0.83)	+	-0.11	(-0.48)
IMR	?	0.02	(0.70)	?	0.04*	(1.83)	?	0.02**	(1.82)

Notes to Table 5: For the time-line used in this test, please refer to Figure 2. The future ERC tests in Panel A regress returns on upcoming unexpected earnings. The ERC tests in Panel B regress 3-day earnings announcement CAR on unexpected earnings for the quarter.
*, **, ***: significant at 10%, 5%, 1%, one-sided.
Definition of variables:

$CAR_{j,q}^{[+2,-2]}$ = cumulative abnormal returns from two days after the earnings announcement date of the previous quarter to two days before the earnings announcement date of the upcoming quarter. We obtain earnings announcement dates from Compustat quarterly file (RDQE), and measure this cumulative abnormal return for the pre-event quarter and the post-event quarter (see Figure 1 for more details).

$CAR_{j,q,EAD}^{[-1,+1]}$ = 3-day cumulative abnormal returns centered on earnings announcement date.

$POST_j$ = indicator variable coded as 1 for the post-event quarter: for event firms it is the quarter after the stop guidance quarter and for control firms it is the quarter after the matched management forecast quarter.

$UE_{j,q}$ = unexpected earnings measured as seasonally differenced EPS (Compustat quarterly #19), scaled by stock price at the end of quarter Q-2. We measure this unexpected earnings variable for the pre-event and post-event quarters.

$POST_j \times UE_{j,q}$ = interaction between $POST_j$ and $UE_{j,q}$.

IMR j,q= Inverse Mills Ratio obtained from the determinant test in Equation (1).

Table 6
Consequence of Stopping Guidance: Beaver's U, Abnormal Trading Volume, and Return Volatility
For the Pre-Event Quarter (Q-1) and Post-Event Quarter (Q+1)

Panel A Mean and median values for Beaver's U statistics, abnormal trading volume, and return volatility

			Event		Control	
			MEAN	MEDIAN	MEAN	MEDIAN
Beaver's U-statistic	Event N=65	Q-1	3.88	1.88	4.52	1.81
[U]	Control N = 726	Q+1	5.18	2.06	5.15	1.97
Abnormal Trading Volume	Event N=65	Q-1	2.07	1.45	1.82	1.49
[TVOL]	Control N = 726	Q+1	1.96	1.63	1.99	1.58
90-day return volatility	Event N=66	Q-1	0.03	0.03	0.03	0.03
[STD90]	Control N = 838	Q+1	0.03	0.03	0.03	0.03
Analyst Following	Event N = 55	Q-1	7.93	5	9.59	8
[AF]	Control N = 793	Q+1	7.38	5.5	9.62	8
Forecast Dispersion	Event N =53	Q-1	0.24	0.08	0.12	0.04
[DISP]	Control N =764	Q+1	0.34	0.10	0.11	0.05
| Forecast Error |	Event N =55	Q-1	0.43	0.09	0.27	0.07
[|FE|]	Control N =783	Q+1	0.73	0.14	0.23	0.13

Table 6
Consequence of Stopping Guidance: Beaver's U, Abnormal Trading Volume, and Return Volatility
For the Pre-Event Quarter (Q-1) and Post-Event Quarter (Q+1)
(continued)

Panel B Regression Results -- Model:

$$U_{j,q}[TVOL_{j,q}, STD90_{j,q}, AF_{j,q}, DISP_{j,q}, |FE|_{j,q}] = \alpha_0 + \alpha_1 POST_j + \alpha_2 IMR_{j,q-1} + \varepsilon_{j,q}$$

		Event Sample		Control Sample		Difference between Event and Control	
Dependent variable		Coeff.	T-stats.	Coeff.	T-stats.	Coeff.	T-stats
U	POST	5.85**	(1.79)	1.55**	(1.97)	4.31*	(1.52)
TVOL	POST	0.36	(1.13)	0.05	(0.55)	0.31	(0.91)
STD90	POST	-0.00	(-0.77)	-0.00***	(-3.80)	0.00	(0.07)
AF	POST	0.00	(0.00)	-0.00	(-0.00)	0.00	(0.00)
DISP	POST	0.21**	(1.95)	-0.02	(-1.33)	0.22***	(2.56)
|FE|	POST	0.15*	(1.71)	-0.06	(-1.17)	0.23**	(2.08)

Table 6
Consequence of Stopping Guidance: Beaver's U, Abnormal Trading Volume, and Return Volatility
For the Pre-Event Quarter (Q-1) and Post-Event Quarter (Q+1)
(continued)

Notes to Table 6:

For parsimony we report the coefficients on POST only and do not present the intercepts and the coefficients on IMR (the Inverse Mills Ratio).

*,**,***: significant at 10%, 5%, and 1%, one-sided.

Definition of variables:

U = Beaver's U statistics, $\frac{e_{q,t}^2}{\sigma^2(e_q)}$. The numerator of Beaver's U is the mean squared error of the 3-day market-adjusted returns centered on earnings announcement date, and the denominator is the variance of daily market-adjusted returns of the non-announcement period, where the non-announcement period is defined as the window from two days prior to last quarter's earnings announcement to two days before current quarter's earnings announcement date. For event firms the event quarter is the stop-guidance announcement quarter, and for control firms the 'event' quarter is the matched management forecast quarter.

TVOL =abnormal trading volume, calculated as the mean 3-day earnings announcement window trading volume scaled by non-announcement period mean trading volume, where the non-announcement period is defined as the window from two days prior to last quarter's earnings announcement to two days before current quarter's earnings announcement. For event firms the event quarter is the stop-guidance announcement quarter, and for control firms the 'event' quarter is the matched management forecast quarter.

STD90 = standard deviation of daily stock returns for the [-90, -2] window pre-event date and for the [+2, +90] window post-event date, where day 0 is the stop guidance announcement date for event firms and the matched management forecast date for control firms.

AF = analyst following, measured as the number of analysts giving forecasts for the upcoming quarter, in the quarter before and after the event quarter. For event firms the event quarter is the stop-guidance announcement quarter, and for control firms the 'event' quarter is the matched management forecast quarter.

DISP = dispersion of analyst forecasts in the quarter before and after the event quarter, measured as the standard deviation of analyst forecasts for upcoming quarter divided by the absolute value of the corresponding mean forecast. For event firms the event quarter is the stop-guidance announcement quarter, and for control firms the 'event' quarter is the matched management forecast quarter.

|FE|=accuracy of analyst forecasts in the quarter before and after the event quarter, measured as the absolute value of [(actual EPS – mean analyst forecast/mean analyst forecast]. Because larger |FE| indicates greater deviation of forecast from actual, a bigger number means less accurate. For event firms the event quarter is the stop-guidance announcement quarter, and for control firms the 'event' quarter is the matched management forecast quarter.

IMR j,q-1= Inverse Mills Ratio obtained from the determinant test in Equation (1).

Table 7
Changes in Length of Disclosures in Earnings Announcement Press Releases Between the Pre-Event Quarter (Q-1) and Post-Event Quarter (Q+1)

Panel A: Univariate Statistics

	N	Mean	Std Deviation	Median
%ΔDISC	86	0.0853	0.3399	0.0193
p-value[a]		0.0112		0.0700
ΔQTR	86	-0.3605	1.8529	-2.0000
p-value		0.0748		0.0333
ΔLOSS	63	0.1429	0.3958	0.0000
p-value		0.0057		0.0117
ΔMISS	62	0.1935	0.5680	0.0000
p-value		0.0094		0.0071

Panel B: Multivariate Regression

$$\%\Delta DISC = \beta_0 + \beta_1 \Delta QTR + \beta_2 \Delta LOSS + \beta_3 \Delta MISS + \varepsilon$$

	Pred. Sign	Model 1 (n=86) Coefficent	t-stat	Model 2 (n=53) Coefficent	t-stat
Intercept	+	0.1081	3.06	0.0864	2.30
ΔQTR	+	0.0632	3.36	0.0760	4.17
ΔLOSS	+			0.1741	2.08
ΔMISS	+			-0.0708	-1.12
		R^2 =0.1083		R^2 =0.2703	

Notes to Table 7:
[a] P-values are from t-tests (for mean) and signed ranked tests (for median) testing whether the variable is greater than zero.

Variable Definitions:
%ΔDISC = The total words disclosed in the company's earnings press release in quarter q+1 ($DISC_{q+1}$) less the total words disclosed in the company's press release in quarter q-1 ($DISC_{q-1}$), divided by $DISC_{q-1}$.
ΔQTR = The fiscal quarter of quarter q+1 less the fiscal quarter of quarter q-1
ΔLOSS = LOSS in quarter q+1 less LOSS in quarter q-1, where LOSS is a dummy variable equal to 1 if the company's earnings before extraordinary items (Quarterly Compustat #8) is less than zero and zero otherwise.
ΔMISS = MISS in quarter q+1 less MISS in quarter q-1, where MISS is a dummy variable equal to 1 if the company's actual earnings is less than the mean analyst forecast per IBES.