Announcing the Announcement*

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Abstract

This paper studies how long in advance the date and time of earnings announcements are made public (the "Advance Notice Period"). We find that such Advance Notice Period varies within firm and that its variation affects how much investors pay attention to earnings news. This variation in investors' attention affects short-run and long-run stock prices, thereby creating incentives for firms to strategically reduce the Advance Notice Period when they plan to disclose bad news. Consistent with this idea, we find that within-firm variations in the Advance Notice Period predict the earnings surprise.

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Introduction

During earnings announcement seasons, investors need to digest news from numerous companies in a very short period of time. At the peak of the season, about 250 U.S. firms announce their earnings on the same day. While prior research shows that investors' limited attention is central to explain how stock prices incorporate earnings news, existing evidence that managers take advantage of investors' attention constraint during this period are mixed.[4]

This paper examines the effects of investors' limited attention on corporate managers' decisions. The question we ask is whether managers take investors' inattention into account when preparing their audience to the forthcoming earnings announcement. To answer this question, we study the notification process by which managers make investors aware of the date and time of earnings announcement events. We use a new dataset of approximately 53,000 press releases by U.S. firms during the 2007-2012 period that announce the date, time, conference call number, and other details about the organization of the earnings release to market participants (the "Notice of Earnings"). On average, such details are released ten days before the event (the "Advance Notice Period").[5] We argue that the choice of this Advance Notice Period affects investors' attention to earnings news and that firm managers use this notification period to strategically manage investors' attention.

We see three reasons that could explain why early notices of earnings can influence investors' attention to earnings news. First, time management is most likely an issue for market participants during earnings announcement season, especially when more than 250 firms

[4] Prior literature finds that stock prices under-react to earning news when multiple firms announce their earnings on the same day (Hirshleifer, Lim, and Teoh 2009), on Friday (DellaVigna and Pollet 2009), or when media coverage is low (Peress 2008). However, little evidence exists that managers exploit investors' inattention when announcing their earnings. Doyle and Magilke (2009) for instance find no evidence that firms opportunistically release bad earnings on Friday or outside the market hours.

[5] For the sake of clarity, we call the action of communicating the date, time, and any other organizational detail about earnings releases "notice of earnings". We call the action of disclosing quarterly earnings information "earnings announcement" or "earnings release". As illustrated in Figure 1, the "advance notice period" is the number of days between the date of the first notice of earnings and the earnings announcement date.

announce their earnings during the day. Therefore, they probably decide in advance on which earnings they will focus. In this case, sending the notice of earnings early increases the probability that the announcing firm is on market participants' agenda. Second, processing earnings news requires basic knowledge about the firm, which can be acquired by doing some preparation work ahead of the announcement day. However, investors may be reluctant to start this preparation work as long as there remains uncertainty about the date and hour of the event. In this case, the audience of the firm on the earnings announcement date will be on average better prepared and more able to process the news when the Advance Notice Period is long. Third, notices of earnings can coincide with earnings announcements by other firms. If investors are distracted by simultaneous earnings announcements made by other firms at the time of the notice of earnings, they could miss this notification.[6] Since this overlap problem is more likely to occur when the notice period is short, a longer Advance Notice Period increases the probability that investors include the event in their agenda and pay attention to it.

Consistent with those predictions, we find that an increase in the Advance Notice Period leads to higher attention to earnings news. We proxy for investors' attention using a variety of novel indicators, namely the number of participants to the earnings conference call, the likelihood that the stock of the firm is reported as "stock on watch" by the *Wall Street Journal*, and the number of email alerts including the transcript of the earnings call sent by the finance website *Seeking Alpha* to its subscribers. Controlling for known determinants of investors' attention as well as firm fixed-effects, all three indicators increase when the date and time of the earnings release are communicated earlier. To complement this analysis, we also use the abnormal trading volume as an alternative measure of investors' attention (e.g. Gervais, Kaniel, and Mingelgrin 2001; Barber and Odean 2008; Hou, Xiong, and Peng 2009). Again, we find

[6] Figure 3 illustrates very clearly this possibility of overlapping dates between both types of news.

that investors are more attentive to earnings announcements when earnings release details are communicated well ahead of time.

Next, we investigate whether the variation in the Advance Notice Period affects the speed of earnings news incorporation into stock prices. DellaVigna and Pollet (2009) and Hirshleifer and Teoh (2003) predict that higher inattention leads to lower immediate stock price reaction and to higher post-earnings announcement drift. Consistent with their predictions, we find that a longer Advance Notice Period increases the immediate reaction to earnings announcements and decreases the post-earnings announcement drift.

We then proceed to the central question of this paper and examine whether managers strategically use investors' limited attention by shortening the notice period when they are about to disclose bad news. Consistent with this idea, we find that for a given firm, the earnings surprise decreases on average by almost one cent when the notice of earnings is sent one week later. In other words, within-firm variations in the Advance Notice Period predict the earnings surprise. This finding holds after controlling for delays in earnings releases or when focusing on the subsample of firms that consistently report their earnings on the same date. Therefore, our effect is not driven by the well-documented behavior that managers tend to announce good news early and bad news late (Kross and Schroeder, 1984, Begley and Fischer, 1998, and Bagnoli, Kross, and Watts, 2002). While consistent with the "good news early / bad news late" practice documented by the accounting literature, our finding differs from this strand of research by showing that managers' communication ahead of the earnings announcement day also conveys information about earnings news that is not contained in the choice of the announcement date.

Next, we investigate how managers' response to investors' inattention varies across firms. First, not all managers can exploit investors' inattention. In particular, managers of highly visible firms whose stock is consistently scrutinized by the market do not have this possibility.

Consistent with this idea, we find that a change in the Advance Notice Period is much more informative about the earnings surprise for less visible firms, i.e. firms with the same fiscal year-end as their industry peers, firms with low analysts coverage, and small-cap companies. Second, some managers may care more about the short-term value of their firm's stock. For instance, managers who plan to issue new equity should focus more on maximizing their current stock price as well as managers of firms with short-term oriented shareholders. Consistent with this intuition, we find that a change in the Advance Notice Period is more informative about the earnings surprise when firms issue equity in the subsequent quarter or when their share turnover was high at the end of the previous quarter. Third, prior literature shows that the risk of shareholder litigation increases in case of a sudden drop in stock price. Therefore, managers who plan to announce bad news may be willing to smooth the negative effect of the news to minimize this risk. Consistent with this idea, we find that the Advance Notice Period is more predictive of the news when the risk of litigation is high. Overall, this second set of results suggests that firm managers respond strategically to investors' limited attention by shortening or lengthening the Advance Notice Period when it is in their interest to do so.

Finally, we investigate whether investors anticipate the implication of earnings notifications on future earnings surprises. Investors may detect that firms strategically choose their Advance Notice Periods. If they do, they should react positively to early notices and negatively to late notices. In this case, the market reaction to the notice of earnings should be positively correlated with the Advance Notice Period. We fail to find such a correlation, which suggests that investors do not perceive the implications of a change in the Advance Notice Period.

Consistent with this interpretation, we show that it is possible to build a trading strategy that takes advantage of the predictive power of the within-firm variation in the Advance Notice Period. Such a strategy consists in (i) buying stocks when the notice of earnings is issued earlier

than the notice of earnings issued one-year ago for the same fiscal quarter, and (ii) selling stocks when this notice of earnings is issued later. This strategy yields abnormal returns of 6 basis points per day (1.2% per month) before transaction costs.

To the best of our knowledge, this paper is the first to examine how long in advance the date and time of earnings announcement events are made public, and to study how this notification process affects asset prices and corporate decision making. Our main contribution is to show that making the date and time of earnings releases available earlier can make the market more efficient at incorporating earnings news. This result is important. In prior research on investors' attention, sources of distraction like the Friday effect or the number of simultaneous announcements are given, and little can be done to change this market environment. By contrast, our study shows that this environment can be modified, and that the cost of doing so is low.

The rest of the paper is organized as follows. Section 1 reviews the literature. Section 2 provides a background description on the earnings release process in the U.S. and develops our hypothesis. Section 3 describes the data. Section 4 examines whether the Advance Notice Period influences investors' attention to earnings news. Section 5 examines whether corporate managers use the Advance Notice Period strategically. Section 6 tests whether investors infer the relation between the Advance Notice Period and the subsequent earnings surprise. Section 7 discusses alternative interpretations. Section 8 concludes.

1. Literature Review

Our paper builds on three streams of research. First, we contribute to the extensive literature on the effects of investors' attention on asset prices (See Lim and Teoh (2010) for a comprehensive review). This paper relates in particular to Dellavigna and Pollet (2009), Hirshleifer, Lim, and Teoh (2009), and Peress (2008) who show that attention affects how

earnings news incorporate into the stock price. We provide evidence consistent with their results and add to them by shedding new light on the mechanism that drives investors' attention to earnings news. Specifically, our paper suggests that this mechanism is a two-step process, in which investors start by identifying a subset of news that they will consider and then process each news content within this consideration set only. This result is new and has important implications. For instance, in most existing asset pricing and information disclosure models, the information is released in a one-step process.[7] News is made available to the agent directly, without prior notice. In this framework, giving prior notice does not matter because investors are assumed to consider and to process the available information at the same time. Our finding that the notification process ahead of the news release matters is difficult to reconcile with this assumption. Instead, this finding suggests that investors consider and process the available information separately, which is more consistent with the two-step decision process identified by the marketing literature. [8]

Second, we contribute to a growing literature that studies how investors' limited attention affects corporate decision making. A first body of research examines whether managers time the release of information by disclosing bad news preferentially when attention is low. Consistent with this idea, early studies show that earnings released after the market closes or on Friday are more likely to contain bad news. (Patell and Wolfson 1982; Penman 1987; Damodaran 1989; Bagnoli, Clement, and Watts 2005; DellaVigna and Pollet 2009). However, recent papers find weak evidence that this empirical regularity is due to managers trying to exploit investors' inattention (Michaely, Rubin, and Vedrashko 2013; Doyle and

[7] One notable exception is Chemmanur and Tian (2012) who study the decision to pre-announce dividend cuts.
[8] The marketing literature provides strong and extensive evidence that consumers who face multiple alternative products use a "consider-then-choose" decision process in which they first identify a set of products for further assessment and then choose from this subset only (See Hauser (2013)).

Magilke 2009).[9] We contribute to this debate. As noted by Niessner (2014), existing evidence is weak probably because the timing of the earnings announcement date is known in advance.[10] Consistent with this view, we provide evidence suggesting that managers behave strategically in a more subtle way by changing the notification process ahead of the news release. A second set of studies explores alternative ways to influence attention. Solomon (2012) and Ahern and Sosyura (2014) study the effects of media coverage, Lou (2014) and Madsen and Niessner (2014) examine the role of advertising, and Li and Yermack (2014) investigate the effects of the location of the annual shareholders meeting.

Third, our paper is related to the literature on the timing of earnings announcement. Previous research has consistently identified that managers release bad news late (Kross 1982, Givoly and Palmon 1982, Kross and Schroeder 1984), and that the market reaction to earnings news is negative when such a delay occurs (Begley and Fischer 1998, Bagnoli, Kross, and Watts 2002). In this paper, we control for delays in earnings releases and also verify that our results systematically hold when focusing on the subsample of firms that consistently report their earnings on the same date. We contribute to this literature by emphasizing a new dimension of the timing of earnings announcement. We show that the notification process ahead of the earnings announcement date conveys information about the news that is not contained in the choice of the earnings announcement date.

2. Notice of Earnings: Legal requirements, Practices and Hypothesis Development

A "notice of earnings" is a press release announcing the date and time of the earnings release. In this section, we briefly describe the legal issues surrounding the disclosure of this piece of information and develop our hypothesis.

[9] In particular, Doyle and Magilke (2009) find no evidence that firms opportunistically report worse news after the market closes or on Fridays.

[10] Niessner (2014) revisits this question by focusing on non-earnings news and finds evidence that managers opportunistically release bad (non-scheduled) news on Friday.

2.1. Legal Requirements

"If an issuer wants to make public disclosure of material non-public information under Regulation FD (…), how far in advance should notice be given?

(…) Public notice should be provided a reasonable period of time ahead of the conference call. For example, for a quarterly earnings announcement that the issuer makes on a regular basis, notice of several days would be reasonable. We recognize, however, that the period of notice may be shorter when unexpected events occur and the information is critical or time sensitive." (U.S. Security Exchange Commission - June 4, 2010)[11]

Pursuant to the 2002 Sarbanes-Oxley Act and the 2004 Regulation Fair Disclosure (*Reg FD*), public companies' quarterly earnings announcements are highly regulated activities, under strict control of the SEC. In particular, the SEC mandates that quarterly earnings releases disclosed by means of a press release trigger the filing of an 8-K form, and the conference call of earnings (if any) should be held shortly hereafter and be easily available to investors (e.g. through a real-time webcast). However, as the quote above highlights, the SEC has very few requirements regarding the notice of earnings disclosure; consistent with *Reg FD*, details on when and how to access earnings news must be made widely available to all investors, but there are no constraints on when to notify this information to investors. [12]

2.2. Practices

[11] http://www.sec.gov/divisions/corpfin/guidance/regfd-interp.htm. Compliance and Disclosure Interpretations of Regulation FD (Question 102.01).

[12] This absence of constraints on when to provide information about forthcoming earnings announcements contrasts with other corporate events like shareholder annual meetings. Under the law of Delaware, for instance, public notice of the place, date, and time of a meeting has to be made within 10 to 60 days before the event, and Courts may intervene if it can be shown that the meeting date was set to advantage the managers or disadvantage a shareholder.

In the absence of any specific guidelines, legal advisors recommend the notification to be made at least one week before the earnings announcement.[13] Anecdotal evidence suggests that earnings schedules are known late in the process and that a short notice period is an issue for market participants. In a letter to the SEC for instance, the CFA institute complains about the notification process (or the lack thereof) and asks the SEC to issue "additional statements […] that encourage companies to announce reasonably ahead of time when earnings will be released".[14] It also expresses its concern that a short notice period may disadvantage some market participants in accessing information related to earnings announcements.[15] To help market participants overcome this problem, financial data providers like Capital IQ and NASDAQ have developed algorithms that forecast in advance the predicted dates of earnings releases.[16] Other firms, like Wall Street Horizon, sell this information. Selling forecasts of earnings announcement times would not be possible without a real demand for that, which suggests that the date and time of earnings announcement are not always made available in a timely manner.

In this paper, we call the action of communicating the date, time and any other organizational detail about earnings releases "notice of earnings". We call the action of disclosing quarterly earnings information "earnings announcement" or "earnings release". As illustrated in Figure 1, the "Advance Notice Period" (hereafter ANP) is the number of calendar days between the date of the first notice of earnings and the earnings announcement date. Appendix A provides an example of notice of earnings issued by Agilent Technologies on

[13]"The Earnings Release : Legal Requirements and Best Practices", Insights, March 2008, Aspen Publishers
[14]Available on http://www.sec.gov/comments/s7-23-08/s72308-9.pdf
[15] "We would welcome additional statements by the SEC that encourage companies to announce reasonably ahead of time when earnings will be released. While some companies already engage in this practice, others continue to release earnings statements without any prior notice, which may disadvantage those without the dedicated means to consistently track this information"
[16] The NASDAQ website reports an earnings schedule calendar for firms listed on the NASDAQ based on an "expected date" for earnings release -i.e. an estimation derived from past years' release date, rather than the true date of earnings release. Available on http://www.nasdaq.com/earnings/earnings-calendar.aspx?

November 2, 2009. In this press release, "Agilent Technologies to Host Webcast of Fourth-Quarter Fiscal Year 2009 Financial Results Conference Call", the firm indicates that it will release its fourth-quarter earnings on November 13, 2009. In that case, the earnings announcement date was made available to market participants eleven days in advance.

2.3. Hypothesis development

We first hypothesize that the Advance Notice Period affects investors' attention to earnings news. This leads to the following testable prediction:

H1: Investors' attention on earnings announcement day should be positively correlated with the Advance Notice Period.

As shown by Hirshleifer and Teoh (2003) and DellaVigna and Pollet (2009), lower attention affects the speed of earnings news incorporation into stock prices - as long as market frictions prevent sophisticated investors from arbitraging the mispricing caused by the lack of attention. Thus, *H1* leads to the following corollary.

H2: A longer Advance Notice Period increases the sensitivity of the announcement abnormal return to earnings surprises, and decreases the sensitivity of the post-announcement abnormal return to earnings surprises.

H2 implies that managers whose objective function is to maximize the short term value of their stock price have an incentive to notify goods news early (to maximize the positive effect of the news) and to notify market participants on very short notice when they plan to announce bad news (to minimize the negative effect of the news). This leads to the following prediction.

H3: Within-firm, the earnings surprise should be positively correlated with the Advance Notice Period.

The cost of changing the Advance Notice Period to get more or less visibility is small, but it is not zero. Once the notice of earnings is released, firms have no choice but to respect the expected reporting date, and they lose the option to postpone their earnings announcement date.[17] This means that after the notification, managers will have no extra time to modify their financial communication if an unexpected event occurs before the earnings announcement date. Thus, increasing the Advance Notice Period carries a cost in terms of loss of flexibility. Decreasing the Advance Notice Period is also costly. A number of actions to be taken (e.g. validating the press release by the audit committee, sending the press release to wire services, NASDAQ or NYSE,…) can be done only when the notice of earnings has been issued. Therefore, those actions will have to be undertaken more rapidly if the Advance Notice Period is shorter than usual. As a result, corporate managers may trade off the benefits of higher / lower visibility with the cost of changing the timing of the notice of earnings. This leads to the following testable predictions

H4: The correlation between the earnings surprise and the Advance Notice Period decreases for firms that are more visible (*H4a*), increases when the horizon of the manager is short (*H4b*), and when the litigation risk is high (*H4c*)

Changing the Advance Notice Period to get more or less visibility carries no benefits at all for firms that are constantly scrutinized by the market. By contrast, this strategic behavior benefits managers whose horizon is short and who care more about the current value of their stock. In the same vein, managers of firms whose shareholder litigation risk is high, have more incentive to smooth the impact of a negative news strategically on the stock price to reduce possible litigation costs (Donelson et al. 2012) .

[17] Failure to respect the reporting date without a good explanation leads to extremely negative market reactions (Duarte-Silva et al. 2013) and increases the risk that sell-side analysts stop their coverage of the stock.

3. Data Collection and Descriptive Statistics

3.1. Notice of Earnings Data

We obtain corporate press release announcing the date and time of the forthcoming earnings release for U.S. companies from the Thomson Reuters Archives website which gives unlimited access to all articles published on the Reuters newswire during the 2007-2012 period.[18] A significant part of Reuters' news flow consists of press releases directly written by the companies, in which case Reuters does not alter the original companies' press releases and accepts no responsibility for their content. We focus on such firm-initiated press releases that explicitly schedule an earnings announcement (see Appendix A for an example). We systematically identify those press releases by writing a PERL script that matches string patterns expressing the future action of releasing or announcing an earnings such as *[to announce/to report/ to release/to host/ to webcast] [conference call]*.[19] To match those press releases with firm-level data, we also require the press release to include a valid company ticker, i.e. any characters of the press release that match the patterns *(NYSE:)* or *(NASDAQ:)*. We obtain a sample of 62,896 press releases. Sometimes, a notice of earnings coincides with the release of other relevant information such as a dividend announcement (254 observations), a management guidance (253), or preliminary results (168). We exclude those observations from our sample.

We obtain data on earnings announcement dates from Compustat and I/B/E/S. We start with all quarterly earnings announcements from Compustat with a corresponding record in I/B/E/S, and when the earnings announcement dates between the two sources differ, we apply the procedure described in DellaVigna and Pollet (2009) and take the earlier date as the correct

[18] http://www.reuters.com/resources/archive/us/
[19] Other significant string patterns include *[announces] [webcast/conference call]* or *[schedules/will announce] [earnings results]*

one. Finally, we match each press release of notice with the corresponding notified earnings announcement. The detail of this data step is provided in Appendix B.1. The final sample includes 52,871 notices of earnings (corresponding to 3,897 distinct firms) that could be matched with their corresponding earnings announcement.

3.2. Notified earnings announcement date vs. actual earnings announcement date

An important issue for us is to know whether the earnings announcement date notified to the market is actually met by the firm. In other words, we want to explore whether firms consider the date communicated to the market as binding. We tackle this question by checking whether the earnings announcement date announced in the press release effectively matches the actual date of announcement. To do so, we compare the announcement date notified to the market with the announcement date recorded in either Compustat or I/B/E/S.[20] We find that for about 9% of our observations the announcement date notified in the press release does not match the recorded date. We further explore this issue by drawing a random sample of 1% of the unmatched observations and manually collect the actual date of earnings announcement from Factiva. In all cases, firms respect the announcement date they announce but the recorded date in Compustat or I/B/E/S is wrong (often by a day or two). We conclude that all firms in our sample respect the earnings announcement date that they notify to the market, and that failure to do so is exceptional.[21]

3.3. Descriptive Statistics

[20] See more details about our procedure to perform this comparison in Appendix B.2.

[21] This is consistent with the findings of Duarte-Silva et al. (2010) who show that over the 1995-2006 period, a maximum of 791 earnings announcements were explicitly delayed. They also find that the market reacts very negatively to this type of delay.

We define the Advance Notice Period as the difference in calendar days between the earnings announcement date and the first notice of earnings. The distribution of this variable is displayed in Figure 3.

[Insert Figure 3 and Table 1 here.]

The distribution exhibits five modes: the first one corresponds to notices made approximately one week before the earnings announcement; the second one two weeks before; the third one three weeks before etc... On average, firms make public notice of the date, time and other details about their forthcoming earnings announcement about 15 calendar days before the event. Table 1 shows that this Advance Notice Period varies significantly across and within firm. While part of the total standard deviation (8.7) is driven by cross-sectional differences (7.4), the *within-firm* standard deviation (5.0) shows that there exists significant variation in the Advance Notice Period for the same firm across time. In this paper, we focus on the variation of the Advance Notice Period *within-firm* exclusively. This mitigates the concern that the variation of the Advance Notice Period captures unobserved differences across firms (e.g. the efficiency of their internal reporting process).

3.4. Other data sources

Analyst EPS estimates and actual earnings are taken from the I/B/E/S files. We use quarterly data and define the earnings surprise as the difference between actual earnings and the most recent consensus analyst forecast from the I/B/E/S consensus file, scaled by the stock price of the firm. Denoting $e_{k,t}$ the earnings per share for firm *k* at time *t*, $c_{k,t}$ the corresponding consensus, and $P_{k,t}$ the price of the share at the end of the quarter, the earnings surprise $s_{k,t}$ is defined as:

$$s_{k,t} = \frac{e_{k,t} - c_{k,t}}{P_{k,t}}$$

To mitigate the effects of outliers we remove observations for which the earnings surprise is larger (in absolute terms) than one, and we trim observations with earnings surprise in the top and bottom 1% of the distribution. Finally, we collect stock returns and trading volumes from the CRSP dataset, and accounting data from the Compustat dataset. All variables are winsorized at the 1% in each tail. Descriptive statistics for the main variables used in our tests are presented in Table 1.

4. Advance Notice Period And Attention To Earnings News

This section shows that the Advance Notice Period predicts investors' attention to earnings news, and affects short-run and long run stock prices.

4.1. Advance Notice Period and Attention to Earnings News

Existing literature on investors' attention proposes various proxies for investors' attention such as extreme returns (Barber and Odean (2008)), trading volume (Gervais, Kaniel, and Mingelgrin (2001), Barber and Odean (2008), Hou, Xiong, and Peng (2009)), news and headlines (Barber and Odean (2008); Yuan(2012)), advertising expense (Lou (2009), Chemmanur and Yan (2009)), or Google searches (Da, Engelberg, and Ga (2011)). One difficulty with those measures is that some of them are indirect (e.g. extreme returns, trading volumes), which is problematic because they may capture factors that are unrelated to market participants' attention. Another difficulty is that they are not always publicly available on a daily basis (e.g. Google searches).[22] Therefore, we use another set of variables to proxy for investors' attention.

[22] Google searches are only available on a weekly basis.

The first variable we use as a proxy for market attention to earnings news is the number of participants to the earnings conference call. We obtain this information from earnings conference call transcripts which report the names of all persons who participate to the conference call, including sell-side and buy-side equity analysts, institutional investors, and / or investment bankers.[23] Ideally, we would like the information on all the people who *listen* to the conference call – not only those who *speak*, but since the former measure is not available, we assume that the number of people who speak is correlated with the number of people who listen and adopt the latter.[24] The second variable we use as a proxy for attention is a dummy variable equal to one if the stock is reported as "*on-watch*" by *The Wall Street Journal* on the earnings announcement date. *The Wall Street Journal* identifies a stock as "*on-watch*" whenever a major announcement is expected by the company. The list of stocks "*on-watch*" is updated on a daily basis. Stocks can remain *"on-watch"* up to four days. We obtained this data on the website of *The Wall Street Journal*. The third variable we use as a proxy for attention is the number of email alerts containing the transcript of the earnings call sent by the website *Seeking Alpha* to its subscribers. *Seeking Alpha* is a popular finance website (Chen et al. 2014) that gives its subscribers the option to automatically receive press releases about the stocks that are on their watch list. Interestingly, the website discloses for each press release the total number of email alerts that were sent to its subscribers. There is little within-firm variation in the number of alerts, presumably because once investors subscribe to an email alert on a given stock, they never terminate their subscription, even if they stop following the stock. However, this stickiness goes against finding any result.

[23] We thank Ling Cen for sharing the data with us.

[24] One question (that is outside the scope of this research) is whether attendance to earnings call by sell-side analysts causes more market attention or if more attendance reflects the expression of a stronger interest for the stock by the market. We leave this question open. What is first order here is to find a good measure of market attention. Therefore, it is important that attendance to earnings call and market attention are correlated. The stronger the correlation, the better earnings call attendance is as a proxy for attention. The direction of the causality is of second order.

Finally, we use the abnormal trading volume as a proxy for attention to verify that our results still hold when using a more commonly used measure of investors' attention in the literature (e.g. Barber and Odean, 2008). The abnormal trading volume for company *k* on day *t* is calculated in the following way:

$$AbVol_{k,t} = \log(vol_{k,t}) - \left(\frac{\sum_{i=21}^{40} \log(vol_{k,t-i})}{20} \right)$$

where $vol_{k,t}$ is the number of shares traded on day *t* for company *k*, and where the "normal" trading volume is the average number of shares traded over a [-40, -20] trading days preceding the earnings announcement. We compute the abnormal trading volume around the earnings announcement as the mean abnormal trading volume over a [-1;+1] window around the earnings announcement.

Our baseline regression to estimate the effect of the Advance Notice Period on investors' attention to earnings news is the following

$$Y_{k,t} = \beta\ Advance\ Notice\ Period_{k,t} + \zeta\ Controls_{k,t} + \sum_{j=1}^{10} DS_{j,t} + \alpha_k + \alpha_t + \varepsilon_{k,t}$$

where $Y_{k,t}$ is the variable used as a proxy for attention, *k* indexes firm, and *t* indexes time.

We include firm fixed-effects to control for unobserved (time-invariant) differences across firms. Earnings announcement date fixed effects (one dummy variable for each earnings announcement date) are used to control for common sources of distraction on a given day (number of announcements by other firms, proximity of the week end, etc …). Because different types of news may lead to different degrees of attention, we also control for the earnings surprise in the regression. We have no strong prior about the form of the relation

between our proxy for attention and the earnings surprise. In particular, it may or may not be linear. For instance, it is possible that investors pay much more attention to extremely bad news than to very good news. Therefore, we divide the earnings surprise into decile and include one dummy variable for each decile of surprise. Finally, we use time-varying control variables to capture the effects of size, age, market-to-book as well as the possibility that attention varies because the earnings announcement date changes. Indeed, most firms in our sample do not consistently announce their earnings at the same date. Therefore it is possible that attention to earnings news changes because firms announce on a different date. To control for this effect, we include two additional variables in the regression: *reporting lag*, which is equal to the number of days between the closing date of the last balance sheet and the earnings announcement date, and *date surprise*, which is equal to the difference (in number of days) between the actual earnings announcement date and the expected earnings announcement date estimated on historical data (and divided into decile). The results of this analysis are shown in Table 2.

[Insert Table 2 here.]

Table 2 shows that, *within* firm, the variation in the Advance Notice Period positively predicts market participants' attention on earnings announcement date. This positive correlation holds across all proxies for attention. In column 1, the dependent variable used as a proxy for attention is the number of participants to the earnings conference call. The coefficient on the Advance Notice Period is positive and statistically significant at the 1% level. In term of economic significance, increasing the Advance Notice Period by one week explains only 4% of the within-firm variation in the number of call participants. Finding a small effect is not surprising. Since most conference call participants who speak during the call are sell-side analysts whose job is to closely follow a limited portfolio of stocks, the chance that they do not

attend a call because they missed a notice of earnings is small. Thus, the economic magnitude might be small here because the timing of the notice of earnings matters less for this subpopulation of financial experts whose job is to attend this type of events. Consistent with this interpretation, we find that the effect is much stronger for small firms that are less likely to be covered by sell-side analysts. In additional tests reported in Appendix D, we find that when focusing on firms in the low tercile of the sample in terms of size, the effect is three times bigger. For small firms, increasing the Advance Notice Period by one week explains 11% of the within-firm variation in the number of call participants.

In column 2, the dependent variable used as a proxy for attention is a dummy equal to one if the stock is reported as stock "on-watch" by the *Wall Street Journal*. The coefficient on the Advance Notice Period is again positive and statistically significant. In terms of economic magnitude, increasing the Advance Notice Period by one week leads to an increase in the probability to be reported as "stock on watch" by 0.3 percentage points. Since the unconditional probability to be on watch is 3%, this means that a one week increase in the Advance Notice Period increases the probability to be "on-watch" by 10%.

In column 3, the dependent variable used as a proxy for attention is the number of email alerts including the transcript of the earnings call sent by *Seeking Alpha* to its subscribers. The Advance Notice Period again positively predicts the volume of emails alerts although the statistical significance of the correlation is low, perhaps because there is little variation in the number of email alerts within firm. Finally, column 4 uses the abnormal trading volume as a proxy for investor attention. It shows that a longer Advance Notice Period leads to more trading volume on earnings announcement date, with the coefficient being statistically significant at the 1% level.

Taken together, those results suggest that the Advance Notice Period affects how much market participants pay attention to earnings news.

4.2. Advance Notice Period and stock price reaction to earnings news

If market participants pay less attention when the Advance Notice Period is short, then it is possible that the Advance Notice Period also affects the speed at which earnings news incorporate into stock prices (DellaVigna and Pollet 2009; Hirshleifer, Lim, and Teoh 2009). Therefore, we test whether a longer Advance Notice Period leads to higher immediate reaction at the earnings announcement date and lower post-earnings announcement drift.

To do so, we first compute cumulative abnormal returns for different windows at the date of earnings announcement. Denoting $r_{k,t}$ the return of company *k* on day *t*, we define the cumulative abnormal return $CAR[\tau, T]$ over a $[\tau, T]$ window as $\prod_{t=\tau}^{T}(1 + r_{k,t}) - \prod_{t=\tau}^{T}(1 + r_{p,t})$, where $r_{p,t}$ is the characteristics-adjusted portfolio return based on a monthly matching of stocks that belong to the same size/book-to-market/momentum quintiles in the spirit of Daniel, Grinblatt, Titman, and Wermers (1997). We then estimate whether the sensitivity of the market reaction to a given earnings surprise varies with the length of the Advance Notice Period. We follow the specification proposed by DellaVigna and Pollet (2009) and Hirshleifer, Lim, and Teoh (2009) and estimate the following equation:

$$CAR[\tau, T]_{k,t} = \alpha_t + \alpha_k + \beta\, DS_{k,t} + \gamma\, Advance\ Notice\ Period_{k,t} +$$

$$\delta\, DS_{k,t} \times Advance\ Notice\ Period_{k,t} + \zeta\, Controls_{k,t} + \varepsilon_{k,t}$$

where $DS_{k,t}$ is the earnings surprise for firm *k* at quarter *t* divided into ten deciles of surprise. Our main coefficient of interest is δ. This coefficient measures the sensitivity of the stock price response to the earnings surprise conditional on the level of the Advance Notice Period. We

include time-varying control variables in the regression to make sure that what we capture in our estimation is not driven by a spurious correlation between the Advance Notice Period and other variables that are known to affect the market reaction to earnings news. Specifically, we control for the effects of size, market-to-book, age, leverage, reporting lag, date surprise, and the number of analysts. We also control for the effects of the day of the week, as well as the presence of simultaneous announcements by other firms. We use earnings announcement date fixed effects to control for common sources of distraction in a given day and firm fixed effects to control for unobserved differences across firms. All our control variables are interacted with the level of earnings surprise.

[Insert Table 3 here.]

Table 3 presents the results of this analysis. In the first two columns, we focus on the effect of the Advance Notice Period on the immediate reaction to earnings announcement. In column 1, we run our estimation without the set of standard control variables. The coefficient on the interaction term between the Advance Notice Period and the decile of surprise is positive and statistically significant. In terms of economic magnitude, this coefficient indicates that for the same firm, the sensitivity of the immediate response to earnings news increases on average by 4 basis points when market participants are notified 7 days earlier. Including the whole set of standard control variables does not alter our estimation (column 2). We next focus on the effect of the Advance Notice Period on the post-earnings announcement drift (Column 3 and 4). This time, the coefficient on the interaction term is negative and statistically significant. Column 3 indicates that, for the same firm, the sensitivity of the post-earnings announcement drift to earnings news decreases on average by 5 basis points when market participants are notified 7 days earlier. The effect of the Advance Notice Period on the delayed response to earnings news is reasonably high. In relative terms, it means that increasing the notice period

by 1 week reduces the delayed response by 17% (7*0.72 / 28.8). Again, including standard control variables does not alter our estimation (Column 4).

Taken together, these findings are consistent with our hypothesis that a longer Advance Notice Period makes it easier for investors to process earnings news. Because earnings news are more easily processed when investors are notified earlier, those news incorporate more rapidly into stock prices. As illustrated in Table 3, this effect leads to higher immediate reaction at the earnings announcement date and lower post-earnings announcement drift.

5. Advance Notice Period and News Disclosure

This section examines whether firms strategically choose the date at which they send the notice of earnings to attract (escape) investors' attention when they plan to issue good (bad) news.

5.1. Advance Notice Period and earnings surprise

If managers' objective function is to maximize the short term value of the stock price, then they have an incentive to increase the Advance Notice Period when they plan to announce good news to maximize the effect of the news on the stock price, and to reduce the Advance Notice Period when they are about to disclose bad news to minimize this effect. If they do so, then the Advance Notice Period should be positively correlated with the earnings surprise.

[Insert Figure 4 here.]

We first investigate whether this correlation holds in the data using a graphical analysis. The result of this analysis is displayed in Figure 4. This figure shows the average change in EPS surprise for firms that change their Advance Notice Period relative to the same quarter of the previous year. We partition our sample according to the variation of the Advance Notice

Period. When the Advance Notice Period does not change, the firm is assigned to the category "0" (7,657 obs). When the Advance Notice Period increases, firms are split into four categories depending on the magnitude of the increase : category "+2" if the increase is lower than 2 days (5, 340 obs), category "+4" if the increase is strictly higher than 2 days but lower than 4 days (2,785 obs), category "+6" if the increase is strictly higher than 4 days but lower than 6 (2,594 obs), and category "+8 and more" if the increase is strictly higher than 6 days (4,877 obs). We adopt a symmetric partitioning when the Advance Notice Period decreases. The graph shows that the change in EPS surprise relative to the same quarter of the previous year increases with the variations in the Advance Notice Period. When firms increase the Advance Notice Period by more than eight days, the surprise relative to the same quarter of the previous year increases by 0.6 cents. By contrast, when firms decrease the Advance Notice Period by eight days or more, then the EPS surprise that will be announced is on average lower than the one announced a year ago by about 1.4 cents. In other words, the variations in the Advance Notice Period contain information that is predictive about the news to be announced.

We next investigate whether this correlation holds in a multivariate setting. To do so we regress the normalized EPS surprise on the Advance Notice Period, controlling for firm fixed-effects, time fixed-effects, as well as a set of time-varying control variables that may also affect the EPS surprise.

[Insert Table 4 here.]

The results of this analysis are presented in Table 4. In column 1, we regress the earnings surprise on the Advance Notice Period with no time-varying control variables but controlling for firm fixed effects, fiscal quarter fixed effects, and time fixed effects. Consistent with the strategic behavior hypothesis, we find that the Advance Notice Period predicts the earnings surprise. In terms of economic magnitude, in the first specification, one within-firm standard

deviation of the Advance Notice Period explains about 5% of the within-firm standard deviation of the earnings surprise.

We investigate the robustness of this result in the rest of the table. A first concern is the possibility that the Advance Notice Period is correlated with a change in the earnings announcement date. Firms do not systematically announce on the same date every year, and when they change their announcement date, this conveys information about the news they announce. In particular, the news is generally bad when the date comes later than expected and good when it comes earlier (Kross and Schroeder, 1984, Begley and Fischer, 1998, Bagnoli, Kross, and Watts, 2002). To make sure that this effect does not drive the correlation between the earnings surprise and the Advance Notice Period, we control for the date surprise (i.e. the difference between the actual earnings announcement date and an 'expected announcement date' that we estimate using historical announcements), and the reporting lag (i.e the difference between the date of announcement and the quarter-end date). We also control for the effects of size, age, market-to-book, *RoA* (lagged by 1 quarter) and leverage. In Column 2, our main result remains unchanged. The Advance Notice Period positively predicts the earnings surprise.

To further mitigate the concern that our finding is driven by firms announcing bad earnings late, we focus on the subset of firms that consistently announce their earnings at the same date. We still find a positive correlation between the Advance Notice Period and the earnings surprise (column 3). Finally, we check for the robustness of this correlation by using alternative definitions of the earnings surprise: A dummy variable equal to one if the surprise is positive (column 5), and the EPS surprise before normalization (column 6). This last estimation (column 6) is also useful to get a better sense of the economic magnitude of the correlation between the Advance Notice Period and the earnings surprise. The coefficient of

0.096 indicates that, for a given firm, a 10-day increase in the Advance Notice Period leads to a 1-cent increase in the EPS surprise.

5.2. Cross-Sectional Results on Firm Visibility

Next, we examine whether the magnitude of the correlation between the Advance Notice Period and the earnings surprise varies according to the degree of firm visibility. Indeed, being able to attract or escape investors' attention should be less of an issue for more visible firms, which are consistently scrutinized by the market, and much more of an issue for less visible firms. We use three proxies to measure firm visibility: (i) the difference between the fiscal year-end of the company and the average of its industry, (ii) the analyst coverage of the firm, and (iii) its market capitalization.

We use the absolute difference in number of days between the fiscal year-end of the firm and the average fiscal year-end of its peers from the same SIC3 industry as a proxy for visibility. The rational is that earnings are mechanically less likely to be announced at the same time as the earnings of industry, peers when this difference is large. In this case, investors are less likely to be distracted by simultaneous announcements made by firms from the same industry and the news released by the firm should thus be more visible. We also follow the literature and use both the number of sell side analysts (e,g, Baker, Nofsinger, and Weaver 2002) and the size of the firm as measured by the natural logarithm of its market capitalization to assess the degree of firm visibility.

For each criterion, we split our sample into three categories of visibility (low, medium, and high). We then define three dummy variables corresponding to each degree of firm visibility. With respect to the fiscal year-end criterion, the high (low) dummy variable is equal to one if the absolute difference between the fiscal year-end of the firm and the industry average

is in the top (bottom) 25 centiles of the distribution during the quarter, and zero otherwise. The medium dummy variable is equal to one if both the high and low dummy variables are equal to zero. We follow the same methodology to define the high, medium, and low dummy variables for the other two criterions.

We then estimate whether the correlation between the Advance Notice Period and the EPS surprise increases when firms are more visible. We use a specification similar to one used in Table 4, column 2. Table 5 displays the results of this analysis.

[Insert Table 5 here.]

Columns 1 to 3 show that the Advance Notice Period is much more predictive of the earnings surprise when the visibility of the firm is low. By contrast, we find that when the visibility of the firm is high, the magnitude of the correlation between Advance Notice Period and earnings surprise is weaker and even sometimes not statistically different from zero. Overall, those results are consistent with our hypothesis that firms do not behave strategically when they obtain no benefits for doing so.

5.3. Cross-sectional Results on Managerial Horizon

Since the effect of a change in the Advance Notice Period on the stock price is only temporary, managers with long horizons have lower incentives to behave strategically. By contrast, managers that care more about the current value of the stock price because their shareholders are more short-term oriented, or because they plan to issue equity in a short run have more incentives to notify market participants strategically. In this case, the correlation between Advance Notice Period and earnings surprise should be stronger.

[Insert Table 6 here.]

We test whether this conjecture is true in Table 6. In column 1, we use the presence of an SEO at the subsequent quarter as a proxy for the horizon of the manager. The variable short horizon is equal to one if the firm issues equity at the subsequent quarter and zero, otherwise. In column 2, we follow Polk and Sapienza (2009) and assume that high share turnover signals short-term oriented shareholders. We use the share turnover during the last month of the previous quarter as a proxy for the horizon the manager. Consistent with our conjecture, the correlation between Advance Notice Period and earnings surprise is stronger when managers care more about the short-term value of the stock. For each measure of short managerial horizon, the interaction term is positive and statistically significant.

5.4. Cross-Sectional Results on Shareholder Litigation Risk

Prior literature shows that the risk of shareholder litigation increases in case of a sudden drop in the firm's stock price (Donelson et al. (2012)). Therefore, managers who plan to announce bad news may be willing to smooth the negative effect of the news in order to minimize this risk. In our setting, one way to do so is to reduce the Advance Notice Period to lessen the negative effect of the news on the stock price. Since the cost of changing the notice of earnings is not zero, corporate managers may be willing to do it only when the risk of shareholder litigation is a serious source of concern. In this case, the correlation between Advance Notice Period and earnings surprise should be stronger.

[Insert Table 7 here.]

We test whether this conjecture is true in Table 7. In column 1, we use the presence of the word "litigation" in the proxy statement to identify firms that have ongoing litigations with their shareholders and whose managers may be more concerned about this risk. The variable High Litigation Risk is equal to 1 if the word "litigation" is mentioned more than 2 times. In

column 2, we follow Kim and Skinner (2012) and use the volatility of the stock price of the firm as a measure of future shareholder litigation risk. The variable High Litigation Risk is equal to one if the volatility of the stock price over the last calendar year is above the average. Consistent with our conjecture, the correlation between the Advance Notice Period and the earnings surprise is stronger when the risk of shareholder litigation is more likely to be a concern. For each measure of high shareholder litigation risk, the interaction term is positive and statistically significant.

6. Market Reaction to Notices of Earnings

If corporate managers notify good news and bad news strategically, then it is possible that investors detect this strategic behavior. We examine this question in this section.

6.1. Stock Price Reaction at the Notice of Earnings

If firms behave strategically, investors may detect this strategy. In this case, they should react positively to a longer Advance Notice Period (indicative of a future positive earnings surprise) and negatively to a shorter notice period (indicative of a future negative earnings surprise). The market reaction at the time of notice of earnings should then be positively correlated with the Advance Notice Period.

[Insert Table 8 here.]

To test whether this correlation exists in the data, we compute the immediate reaction at the date of notification as the cumulative abnormal return over a [-1;+1] window centered around the date of the notice of earnings (*CAR[-1;1]).* We then regress the immediate stock price reaction on *Advance Notice Period* and a set of control variables. Table 8 displays the

results and shows that the coefficient on *Advance Notice Period* is not statistically different from zero.

Interestingly, the coefficient on *Date Surprise* is negative, statistically, and economically significant. Since *Date Surprise* corresponds to the difference between the actual earnings announcement date (disclosed at time of the notice of earnings) and the expected earnings announcement date, this result means that the market reacts positively when the earnings announcement date comes earlier than expected and negatively when it comes later. This result is important for two reasons. First, it shows that investors react to the choice of the earnings announcement date ahead of time. This reaction confirms that the release of the notice of earnings is an important channel to look at when investigating how firms disclose earnings news and how investors react to it. Second, this result also shows that investors react to the information content of the press release at the time of the notice of earnings and that they interpret negatively any earnings release date that falls after the usual announcing date, consistent with the findings in the accounting literature (Bagnoli, Kross, and Watts 2002).

Taken together, those results suggest that investors process the information contained in the press release announcing the date and time of the forthcoming earnings release only partially. They correctly infer the information conveyed by the choice of the earnings announcement date, but surprisingly, they fail to detect that the choice of the Advance Notice Period also conveys information about earning news that is not contained in the choice of the earnings announcement date.

6.2. Information Updating before Earnings Disclosure

Finding no reaction to the Advance Notice Period at the time of the notice of earnings is surprising and requires additional investigations to make sure that our interpretation of our finding that the Advance Notice Period contains information about earnings news is correct.

It could be possible for instance that (i) the length of the Advance Notice Period is not informative but is correlated with the likelihood of other events occurring ahead of the earnings announcement date that are informative (e.g. "profits warnings") and (ii) that financial analysts do not immediately update their earnings forecasts to capture the information conveyed by those other events. In this case, we should find no market reaction to the Advance Notice Period at the time of the notice of earnings. However, we may still observe a correlation between the Advance Notice Period and the earnings surprise constructed from the consensus of analysts because those forecasts are not updated. To examine whether this explanation is correct, we carry out two analyses.

First, we screen the news issued by firms before the earnings announcement date to identify the firms that disclose preliminary results (including "profit warnings") ahead of the earnings announcement date. During the 2007-2012 period, we find in Factiva 1,115 articles corresponding to preliminary results released by 631 distinct U.S. firms. On average, those preliminary results are issued 20 days before the earnings announcement date. We first test whether the likelihood of issuing preliminary results within-firm is correlated with the Advance Notice Period. It is not. The correlation is close to zero (t-stat of -0.7). Second, we test whether the correlation between the Advance Notice Period and the earnings surprise still holds when we exclude all firms that issued at least once some preliminary results during the period of our sample. We find *exactly the same* results.[25]

[25] For the sake of brevity, those tests are not reported here, but they are available on demand.

Second, we implement a trading strategy to test if the Advance Notice Period conveys real information about the news. If the Advance Notice Period conveys information that is not incorporated into the stock price, then it should be possible to trade on it and make "abnormal" profits. By contrast, if the Advance Notice Period contains no real information then this trading strategy should not be profitable.

6.3. Trading Strategy

Our trading strategy exploits the fact that if the Advance Notice Period positively predicts the earnings surprise, then (i) observing a notice of earnings issued earlier than usual is a good signal, and (ii) observing a notice of earnings issued later than usual is a bad signal.

The way we build our strategy is similar in spirit to Barber, Lehavy, and Trueman (2007) who take advantage of analysts' upgrades and downgrades. By comparison with their strategy, we 'upgrade' a stock when the notice of earnings is made earlier than one year ago and we 'downgrade' the stock otherwise. Thus, we form two distinct "buy" and "sell" portfolios. Our strategy consists in (i) buying stocks when the notice of earnings is issued earlier than the notices of earnings issued in the past for the same fiscal quarter, and (ii) selling stocks, otherwise. Implementing this strategy only requires keeping track of historical notices of earnings, which is public information at the time of the trading decision.

We follow Barber, Lehavy, and Trueman (2007) and create calendar-time portfolios that invest one dollar at date *d*, the date at which we observe that an earnings release is notified earlier than usual or will be notified later than usual. Let $x_{k,t}$ denote the compounded daily return of stock *k* from date *d* through date *t*. The value-weighted portfolio return on date *t* is given by:

$$\frac{\sum_{k=1}^{n_t} x_{k,t-1} R_{k,t}}{\sum_{k=1}^{n_t} x_{k,t-1}}$$

where n_t is the number of stocks held in the portfolio at date *t* and $R_{k,t}$is the return of stock *k* on date *t*. The equally-weighted portfolio return on date *t* is given by:

$$\frac{\sum_{k=1}^{n_t} R_{k,t}}{n_t}$$

A stock is added to the buy portfolio when we observe that the date of the notice of earnings comes earlier than usual. Specifically, we construct a variable *notice lag*, which is equal to the difference between the notice of earnings and the quarter-end date. We then consider that a notice of earnings is issued earlier than usual if, at the date of the notice of earnings, the *notice lag* is strictly lower than the average *notice lag* observed over the past three years (for the same fiscal quarter). The stock is held in the portfolio until the earnings are announced to capture the effect of the good news on the stock price, and is removed three days after the earnings announcement date.[26] The sell portfolio is constructed in a similar way with one notable exception: We sell the stock as soon as it can be inferred that the notice of earnings will come later than usual (i.e. we do not wait for the notice of earnings to add the stock).

We compute the risk-adjusted return of each portfolio *p* using the Carhart 4-factor model:

$$R_{p,t} - R_{t,f} = \alpha_p + \beta_p\left(R_{m,t} - R_{t,f}\right) + s_p SMB_t + h_p HML_t + m_p WML_t + \varepsilon_{pt}$$

[26] The three day cutoff is here to ensure that an investor benefit from the position even if the market reacts to the earnings surprise with some delay.

where $R_{pt}$is the portfolio return on date *t*, $R_{m,t}$ is the market return on date *t*, $R_{t,f}$ is the risk-free rate on date *t*, and SMB_t, HML_t, WML_t are the size, book-to-market, and momentum factors taken from Kenneth French's website.

[Insert Table 9 here.]

Table 9 – Panel A presents the results. In columns (1) to (3), we present results for value-weighted portfolios where the first line (*Constant*) denotes the excess return. The portfolio of early notifications generates positive abnormal return of 4.2 bp per day. The portfolio of late notifications generates negative abnormal return of 3.6 bp per day. A long-short portfolio that buys early notifications and sells late notifications generates an excess return of 7.5 bp per day. In columns (4) to (6) we present results for the equally-weighted portfolio. We find an excess return of the same order of magnitude. In both cases, the long-short portfolio generates an excess return of around 1.2% per month.[27]

Frazzini and Lamont (2007) also identify significant mispricing during earnings announcement periods. They find that buying stocks of announcing firms and selling stocks of non-announcing firms every month yields substantial abnormal returns. They suggest that earnings announcements grab the attention of individual investors who rarely short sale and thus push up prices too high, thus creating temporary overpricing. While such overpricing around the earnings announcement date might influence our finding that buying stocks in case of early notice of earnings yields positive abnormal returns, it cannot explain why selling stocks of announcing firms in case of late notice of earnings also yields positive abnormal returns.

In panel B, we investigate how the profitability of the trading strategy changes when we change the allocation criteria to the high and low Advance Notice Period portfolio. Since larger

[27] The number of stocks in each portfolio varies every day. The number of stocks is lower outside earnings announcements seasons, but the portfolios are never empty.

variations in the Advance Notice Period predict larger changes in the EPS surprise, restricting the strategy to firms issuing their notice of earnings much earlier or much later than usual should increase the profitability of the strategy. We verify that this the case by re-running the analysis focusing on firms that issue their notice of earnings at least *n* days earlier or later than usual. Consistent with our prediction, the profitability of the strategy increases when the variation in the Advance Notice Period is large.

7. Alternative Interpretations and Robustness

In this section we consider an alternative explanation for our finding: earnings management. We also test whether our results on call attendance is robust to possible endogeneity concerns.

7.1. Advance Notice Period and Earnings Management

An alternative (but not mutually exclusive) explanation to our attention management explanation is that firms do more "earnings management" when they plan to announce bad news. Since earnings management takes time, they notify the market later, hence the positive correlation between the earnings surprise and the Advance Notice Period. Under this alternative explanation, the Advance Notice Period is lower when firms do more earnings management.

[Insert Table 10 here.]

In Table 10, we test whether, within-firm, the Advance Notice Period decreases when a firm increases accruals management (defined following Kothari, Leone, and Wasley 2005) or when it exactly meets or beats the consensus by less than one cent. In both cases, firms are more likely to have managed their earnings. However, we find no evidence that this leads to a

decrease in the Advance Notice Period. In Table 10, these two measures of earnings management do not appear to be correlated with the Advance Notice Period.

While we cannot (and do not) rule out the possibility that more earnings management reduces the notice period, this result suggests this explanation is not the main reason for our finding that within-firm, higher notice period predicts better news.

7.2. Advance Notice Period and earnings call attendance

The decision to notify market participants early is made internally by corporate managers. While we did our best efforts to control for the most relevant variables that may affect this decision, we do not observe all those variables.

As a robustness check, Table 11 verifies that the number of conference call participants decreases when the notice of earnings is sent later because local epidemics of flu reduce the activity of the firm. Epidemics of flu may force executives in charge of the earnings release process to stay at home and delay the release of the notice of earnings. By doing so, influenza might generate variations in the Advance Notice Period that are exogenous to the firm characteristics. We obtain data about flu epidemics by region using Google Flu Trends. We use the number of searches about flu during the 5-days period preceding the notice of earnings as an instrument for the Advance Notice Period. The results of this test are in Table 11.

[Insert Table 11 here.]

Column 1 shows the effect of the Advance Notice Period in the OLS setting. Column 2 displays the first stage of the IV estimation and shows that the relevance condition is satisfied. On average the notice period is shorter right after a surge of flu in the state of location of the headquarters. The second stage of the IV estimation is presented in column 3. The effect of the

notice period on earnings call attendance appears to be robust when focusing on exogenous variations in the notice period caused by the epidemics of flu. Of course, to be a valid instrument, the epidemics of flu should only affect the number of participants through the Advance Notice Period. Since complete recovery from flu takes up to 10 days, a legitimate concern here is that some participants might still be sick on the day of the conference call. We verify whether local epidemics of flu before the notice of earnings directly affect the number of participants to the earnings call in Column 4, and find that this is not the case. While this is not a test of the exclusion restriction condition (which cannot be tested), this mitigates the concern of a strong violation of the "only through" condition.

Conclusion

While investors' inattention to earnings announcement has been consistently shown as an explanation for several market inefficiencies, there have been mixed evidence of managers trying to benefit from this bias by timely disclosing bad news when investors are inattentive. We contribute to this literature by looking at the preparation by firms of earnings announcements through the notification of earnings disclosure. We show that the length of the Advance Notice Period predicts various measures of investors' attention to earnings news. Firm managers make use of the Advance Notice Period to time the release of good versus bad news. We find that the length of the Advance Notice Period is predictive of earnings surprise, with longer notices being associated with more positive earnings surprise, and that this strategic behavior is more pronounced for firms that face visibility issues. Investors fail to fully understand the implication of early versus late notice on the level of earnings surprise. A long-short portfolio that buys stocks with early notices and sells stocks with late notice generates an excess return of 1.2% per month.

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Table 1

Descriptive Statistics

This table presents summary statistics for our main variables. The sample includes 90,870 firm-quarter observations during the 2007-2012 period corresponding to 4,875 U.S. firms from the Compustat Quarterly database and the I/B/E/S database. Of these 90,870 earnings announcements, 52,871 observations (3,897 firms) could be matched with the corresponding notice of earnings date from Thomson Reuters Archive. *Advance Notice Period* is the number of days between the date of the notice of earnings (i.e. the press release announcing the date and time of the forthcoming quarterly earnings disclosure) and the earnings announcement date. *EPS Surprise* is the difference between the announced earnings per share and the consensus earnings per share, normalized by the stock price at the end of the corresponding quarter. All other variables are defined in Appendix C. All continuous variables are winsorized at the 1% level in each tail.

	Count	Mean	p10	p50	p90	Standard Deviation		
						Overall	Between	Within
Advance Notice Period	52,871	15.2	6.0	14.0	28.0	8.7	7.4	5.0
Reporting Lag	90,848	35.8	21.0	34.0	54.0	14.3	9.6	10.8
Date Surprise	89,157	0.1	-6.0	0.0	7.0	9.9	9.1	8.9
# Earnings Call Participants	55,443	7.2	3.0	7.0	12.0	3.9	3.2	2.2
On Watch Dummy	90,848	3.0%	0.0%	0.0%	100.0%	17.0%	6.6%	15.5%
# Email Alerts	14,747	1,138	85	389	2,706	2,188	1,824	0.11
Size (log of assets)	90,634	6.7	4.1	6.7	9.2	2.0	2.0	0.3
Assets	90,635	9,043	58	810	10,156	75,445	68,969	16,477
Market-to-Book	90,475	2.6	0.6	1.7	5.5	4.3	3.0	3.3
Age	90,848	8.7	5.0	8.8	12.0	2.5	2.3	1.6
Leverage	89,902	0.2	0.0	0.2	0.5	0.3	0.3	0.2
EPS Surprise	76,554	-0.4	-11.8	1.0	13.0	20.0	12.3	18.0
RoA	90,516	-0.3%	-5.9%	0.5%	3.2%	53.9%	36.9%	34.3%

Table 2

Advance Notice Period and Attention to Earnings News

This table presents panel regressions examining the effect of the Advance Notice Period on investors' attention to earnings news. In column (1), the dependent variable used as a proxy for attention is the number of participants to the earnings conference call. In column (2), the dependent variable used as a proxy for attention is a dummy variable equal to 1 if the stock is reported as "stock on-watch" by the *Wall Street Journal* website on earnings announcement day. In column (3), the dependent variable used as a proxy for attention is the number of email alerts sent by *Seeking Alpha* to its subscribers. In column (4), the dependent variable used as a proxy for attention is the abnormal trading volume on earnings announcement date. *Advance Notice Period* is the number of calendar days between the date of the notice of earnings (i.e. the press release announcing the date and time of the forthcoming quarterly earnings disclosure) and the earnings announcement date. *Reporting Lag* is the difference in calendar days between the announcement date and the quarter-end date. *Date Surprise* is the difference between the earnings announcement date and the expected announcement date (divided into decile). All other variables are defined in Appendix C. Standard errors are adjusted for heteroskedasticity and clustered by firm. t-statistics are in parentheses. *, **, *** indicate significance at the 10%, 5%, and 1% level, respectively.

Dependent Variable: Measure of Attention to Earnings News				
	(1)	(2)	(3)	(4)
Measure of Attention	# Earnings Call Participants	"On-Watch"	# Email Alert	Trading Volume
Advance Notice Period	0.011***	0.0004**	0.00034*	0.0016***
	(3.63)	(2.13)	(1.72)	(3.24)
Reporting Lag	-0.005*	0.0005	-0.00001	0.0012
	(-1.90)	(0.22)	(-0.27)	(1.24)
Date Surprise (Decile)	-0.008	0.0010**	0.00003	0.0014
	(-1.32)	(2.49)	(0.12)	(1.21)
Size	1.300***	0.0066	0.00316	0.0241**
	(13.35)	(1.31)	(0.86)	(2.14)
Age	-0.979*	0.256	-0.00486	0.0319
	(-1.75)	(0.30)	(-0.92)	(0.11)
Market-to-Book	0.025***	0.000	0.00002	0.0000
	(4.83)	(1.29)	(0.17)	(0.86)
Firm Fixed Effects	Yes	Yes	Yes	Yes
Earnings Announcement Date Dummies	Yes	Yes	Yes	Yes
Earnings Surprise Decile Dummies	Yes	Yes	Yes	Yes
Adj. R^2	68.6%	43.7%	76.1%	31.5%
N	37,677	46,821	11,870	46,813

Table 3

Advance Notice Period and Stock Price Response to Earnings News

This table presents panel regressions examining the effect of the Advance Notice Period on the immediate stock price reaction at the announcement and the long-run stock return after the announcement. The dependent variable is indicated under each column heading. *DS* is earnings surprise deciles (DS=1: lowest, 10: highest). *Advance Notice Period* is the number of days between the date of the notice of earnings (i.e. the press release announcing the date and time of the forthcoming quarterly earnings disclosure) and the earnings announcement date. Control variables include *Date Surprise, Reporting Lag, Number of Announcements, Size, Market-to-Book, Age, Leverage, Number of Analysts*, and indicator variables for each day of the week. All control variables are also interacted with the deciles of surprise *(DS)*. See Appendix C for variable definitions. Standard errors are adjusted for heteroskedasticity and clustered by the day of announcement. t-statistics are in parentheses. *, **, *** indicate significance at the 10%, 5%, and 1% level, respectively.

Dependent Variable: Market Reaction to Earnings News				
	(1) CAR [-1,1]	(2) CAR [-1,1]	(3) CAR [2,42]	(4) CAR [2,42]
Advance Notice Period x DS	0.60***	0.51**	-0.72**	-0.72*
	(3.30)	(2.32)	(-2.11)	(-1.77)
Advance Notice Period	-1.8	-1.22	3.3	4.68
	(-1.39)	(-0.76)	(1.35)	(1.63)
DS	92.70***	163.29***	28.81***	57.85**
	(29.41)	(13.38)	(4.83)	(2.57)
Controls (Interacted)	No	Yes	No	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes
EA Date Dummies	Yes	Yes	Yes	Yes
Adj. R^2	18.0%	20.0%	6.0%	9.0%
N	39,237	31,849	39,237	31,849

Table 4

Advance Notice Period and Earnings Surprise

This table presents panel regressions examining the relation between the Advance Notice Period and the earnings surprise at the time of the earnings announcement. In columns (1) to (3), the dependent variable is the difference between the announced earnings per share and the average expected earnings per share by sell-side analysts, normalized by the stock price at the end of the corresponding quarter. In column (4), the dependent variable is the difference between the announced earnings per share and the average expected earnings per share by sell-side analysts. In column (5), the dependent variable is a dummy equal to 1 if the surprise is positive and 0 if not. *Advance Notice Period* is the number of days between the date of the notice of earnings (i.e. the press release announcing the date and time of the forthcoming quarterly earnings disclosure) and the earnings announcement date. All other variables are defined in Appendix C. Standard errors are adjusted for heteroskedasticity and clustered by firm. t-statistics are in parentheses. ∗, ∗∗, ∗∗∗ indicate significance at the 10%, 5%, and 1% level, respectively.

Dependent Variable: Earnings Surprise Disclosed on Earnings Announcement Date

	(1)	(2)	(3)	(4)	(5)
	(Actual EPS - Estimated EPS) / Price			Positive Surprise	EPS surprise
Advance Notice Period	0.009***	0.012***	0.009***	0.003***	0.096***
	(4.75)	(5.96)	(2.58)	(6.25)	(6.00)
Date Surprise		0.024***	-0.007	0.008***	0.218***
		(5.11)	(-0.81)	(6.67)	(6.00)
Reporting Lag		-0.006***	0.002	0	-0.033**
		(-2.69)	(0.74)	(-0.76)	(-2.37)
Size		-0.224***	-0.253***	-0.050***	-1.923***
		(-4.14)	(-2.63)	(-4.39)	(-4.91)
Market-to-book		0.002	-0.01	0.00	0.00
		(0.38)	(-1.21)	(-0.12)	(-0.00)
Age		-3.633**	-44.945**	-0.613	-30.858*
		(-2.21)	(-2.01)	(-0.78)	(-1.64)
RoA		-0.568*	0.464	-0.121*	-3.114*
		(-1.69)	(0.63)	(-1.82)	(-1.71)
Leverage		0.429**	0.46	0.120***	4.805***
		(2.49)	(1.50)	(3.10)	(3.63)
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes
Time Fixed Effects	Yes	Yes	Yes	Yes	Yes
Fiscal Quarter Fixed Effects	Yes	Yes	Yes	Yes	Yes
Sample restriction	No	No	Yes	No	No
Adj. R^2	14.4%	15.1%	9.9%	11.7%	13.6%
N	44,860	41,403	9,163	41,403	45,444

Table 5

Cross-sectional Effects According to Firm Visibility

This table presents panel regressions examining how the relation between the Advance Notice Period and the level of earnings surprise varies with firm visibility. The dependent variable is the earnings surprise defined as the difference between the announced earnings per share and the consensus earnings per share, normalized by the stock price at the end of the corresponding quarter. *Advance Notice Period* is the number of days between the date of the notice of earnings (i.e. the press release announcing the date and time of the forthcoming quarterly earnings disclosure) and the earnings announcement date. Firm visibility is measured using three criteria: the fiscal year-end month of the firm relative to the average of the industry (same three-digit SIC code), the number of analysts covering the firm, and its market capitalization. *High* (*Low*) *Visibility* is a dummy variable equal to one if the proxy for firm visibility falls in the top (bottom) 25 centiles of the distribution during the quarter and zero otherwise. *Medium* is a dummy variable equal to one if both L*ow* and *High* equal zero, and zero otherwise. Controls variables include *Date Surprise*, *Reporting Lag*, *Size*, *Market-to-Book*, *Leverage*, and *Age*. All control variables are interacted with *High Visibility*, *Medium Visibility*, and *Low visibility*. All variables are defined in Appendix C. Standard errors are adjusted for heteroskedasticity and clustered by firm. t-statistics are in parentheses. The bottom of the table reports coefficients and f-statistics of an F-test that tests the equality of coefficient estimates for two variables: Advance Notice Period x High Visibility, and Advance Notice Period x Low Visibility. *, **, *** indicate significance at the 10%, 5%, and 1% level, respectively.

Dependent Variable: Earnings Surprise at the Earnings Announcement Date

Proxy for visibility	(1) Fiscal Year-End	(2) # Analysts	(3) Market Cap.
Advance Notice Period x High Visibility	0.006*	0.007***	0.003
	(1.75)	(3.17)	(1.48)
Advance Notice Period x Medium Visibility	0.012***	0.012***	0.014***
	(4.46)	(4.05)	(5.37)
Advance Notice Period x Low Visibility	0.017***	0.021***	0.037***
	(4.52)	(3.80)	(3.41)
High Visibility	-0.272	-0.635	0
	(-0.50)	(-1.64)	(.)
Medium Visibility	-0.264	-0.524	-0.115
	(-0.84)	(-1.44)	(-0.30)
Controls (Interacted)	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes
Time Fixed Effects	Yes	Yes	Yes
Fiscal Quarter Fixed Effects	Yes	Yes	Yes
Adj. R^2	15.2%	16.9%	15.7%
N	41,403	34,312	41,403
ANP x Low Visibility - ANP x High Visibility	0.011**	0.014**	0.034***
F-test	(4.34)	(4.98)	(9.13)

Table 6

Cross-sectional Effects according to Managerial Horizon

This table presents panel regressions examining how the relation between the Advance Notice Period and the level of earnings surprise varies with the horizon of managers. The dependent variable is the earnings surprise defined as the difference between the announced earnings per share and the consensus earnings per share, normalized by the stock price at the end of the corresponding quarter. *Advance Notice Period* is the number of days between the date of the notice of earnings (i.e. the press release announcing the date and time of the forthcoming quarterly earnings disclosure) and the earnings announcement date. Managerial horizon is measured using two criteria: the amount of new equity that will be issued in the next quarter scaled by the firm market capitalization (*New Equity Issue*$_{q+1}$), and the share turnover during the last month of the previous quarter (*Share Turnover*$_{q-1}$). In column (1), *Short Horizon* is equal to *New Equity Issue*$_{q+1}$. In column (2), *Short Horizon* is equal to *Share Turnover*$_{q-1}$. Controls variables include *Date Surprise*, *Reporting Lag*, *Size*, *Market-to-Book*, *Leverage*, and *Age*. All control variables are interacted with *Short Horizon*. All variables are defined in Appendix C. Standard errors are adjusted for heteroskedasticity and clustered by firm. t-statistics are in parentheses. *, **, *** indicate significance at the 10%, 5%, and 1% level, respectively.

Dependent Variable: Earnings Surprise at the Earnings Announcement Date		
	(1)	(2)
Proxy for Short Horizon	New Equity Issue$_{q+1}$	Share Turnover$_{q-1}$
Advance Notice Period x Short Horizon	0.013**	0.420*
	(2.20)	(1.73)
Advance Notice Period	0.011***	0.007**
	(5.40)	(2.43)
Short Horizon	0.086	20.003
	(0.20)	(1.39)
Controls (Interacted)	Yes	Yes
Firm Fixed Effects	Yes	Yes
Time Fixed Effects	Yes	Yes
Fiscal Quarter Fixed Effects	Yes	Yes
Adj. R^2	15.7%	15.1%
N	39,190	41,403

Table 7

Cross-sectional Effects according to Litigation Risk

This table presents panel regressions examining how the relation between the Advance Notice Period and the level of earnings surprise varies with the risk of shareholder litigation. The dependent variable is the earnings surprise defined as the difference between the announced earnings per share and the consensus earnings per share, normalized by the stock price at the end of the corresponding quarter. *Advance Notice Period* is the number of days between the date of the notice of earnings (i.e. the press release announcing the date and time of the forthcoming quarterly earnings disclosure) and the earnings announcement date. The risk of shareholder litigation is measured using two criteria: ongoing litigations as mentioned in the proxy statements (*proxy statements litigations*), and stock return volatility (*Volatility*). In column (1), *High Litigation* Risk is equal to 1 if ongoing litigations are mentioned in the proxy statements. In column (2), *High Litigation Risk* is equal to 1 if the volatility observed over the previous calendar year is above the average. Controls variables include *Date Surprise*, *Reporting Lag*, *Size*, *Market-to-Book*, *Leverage*, and *Age*. All control variables are interacted with *High Litigation Risk*. All variables are defined in Appendix C. Standard errors are adjusted for heteroskedasticity and clustered by firm. t-statistics are in parentheses. ∗, ∗∗, ∗∗∗ indicate significance at the 10%, 5%, and 1% level, respectively.

Dependent Variable: Earnings Surprise at the Earnings Announcement Date

	(1)	(2)
Proxy for Litigation Risk	Proxy Statements Litigations	$Volatility_{y-1}$
Advance Notice Period x High Litigation Risk	0.008**	0.007**
	(1.98)	(2.24)
Advance Notice Period	0.010***	0.010***
	(4.78)	(4.78)
High Litigation Risk	0.069	-0.074
	(-0.30)	(-0.35)
Controls (Interacted)	Yes	Yes
Firm Fixed Effects	Yes	Yes
Time Fixed Effects	Yes	Yes
Fiscal Quarter Fixed Effects	Yes	Yes
Adj. R^2	22.8%	22.9%
N	41,403	41,333

Table 8

Advance Notice Period and Market Reaction to Notices of Earnings

This table presents panel regressions examining the effect of the Advance Notice Period on the firm stock return at the notification of the date and time of the next quarterly earnings disclosure. The dependent variable *CAR[-1,+1]* is the cumulated abnormal return during days [-1,+1] around the date of the notice of earnings. *Advance Notice Period* is the number of days between the date of the notice of earnings (i.e. the press release announcing the date and time of the forthcoming quarterly earnings disclosure) and the earnings announcement date, divided into five quintile. See Appendix C for other variable definitions. Standard errors are adjusted for heteroskedasticity and clustered by the day of announcement. t-statistics are in parentheses. ∗, ∗∗, ∗∗∗ indicate significance at the 10%, 5%, and 1% level, respectively.

Dependent Variable: Market Reaction to Earnings Schedule Notification	
	CAR[-1;+1]
Advance Notice Period	0.031
	(1.36)
Date Surprise	-0.023***
	(-3.05)
Friday	0.069
	(0.68)
Size	-0.201**
	(-2.15)
Market-to-Book	0.00
	(-1.03)
Firm Fixed Effects	Yes
Year-Week Fixed Effects	Yes
Fiscal Quarter Fixed Effects	Yes
Adj. R^2	0.2%
N	43,363

Table 9

Advance Notice Period (ANP) Portfolios Abnormal Returns

This table presents daily abnormal return portfolios from January 2007 to December 2012. In Panel A, the portfolios of stocks are formed according to the date of the notice detailing the date and time of the forthcoming quarterly earnings disclosure. Stocks are added to the High (Low) ANP portfolio when the date of the notice of earnings (i.e. the press release announcing the date and time of the forthcoming quarterly earnings disclosure) comes at least one day earlier (later) than the date of the notice of earnings issued for the same quarter of the previous year. Stocks are removed from the High (Low) ANP portfolio three trading days after the earnings announcement date. In Column 1 through 3, all stocks are value weighted within a given portfolio. In Column 4 through 6, all stocks are equally weighted within a given portfolio. Column 1 through 6 report the coefficients of an OLS regressions of portfolios daily return in excess of the Treasury bill rate on daily factors. MktRf is the return on the CRSP value-weighted index minus the treasury rate. SMB and HML are the daily returns from the Fama and French (1993) factor-mimicking portfolios for size and book-to-market, respectively. UMD is the daily return from the Carhart (1997) factor-mimicking portfolio for momentum. The constant is the average daily risk-adjusted return expressed in basis points. Panel B examines the sensitivity of the results when stocks are added to the buy and sell portfolios only if the date of the notice of earnings is at least two (three, four, five or six) days earlier or later. t-statistics are in parentheses. ∗, ∗∗, ∗∗∗ indicate significance at the 10%, 5%, and 1% level, respectively.

Panel A

Dependent Variable: Portfolio Daily Excess Return (in bp)

	Value weights			Equal weights		
Portfolio:	High ANP	Low ANP	Long / Short	High ANP	Low ANP	Long / Short
	(1)	(2)	(3)	(4)	(5)	(6)
Constant	4.163***	-3.609**	7.578***	3.437**	-3.658**	6.878***
	(3.27)	(-2.22)	(4.27)	(2.41)	(-2.20)	(3.88)
MktRF	1.011***	1.004***	0.007	1.182***	1.192***	-0.01
	(55.65)	(64.25)	(0.42)	(51.23)	(43.39)	(-0.46)
SMB	0.680***	0.762***	-0.081***	0.234***	0.320***	-0.085**
	(22.76)	(24.27)	(-2.76)	(6.09)	(6.34)	(-2.35)
HML	0.127***	0.132***	-0.005	0.099***	0.097**	0.001
	(4.20)	(4.02)	(-0.15)	(2.65)	(2.46)	(0.04)
UMD	-0.001***	-0.002***	0.000**	0.000	-0.001***	0.000**
	(-8.52)	(-9.16)	(2.24)	(-1.55)	(-3.44)	(2.13)
N	1,239	1,242	1,239	1,239	1,242	1,239

Panel B

Add stock to portfolio if	Long/ Short - Value weights		Long/ Short - Equal weights	
ANP Variation	Constant of the model	t-stat	Constant of the model	t-stat
> 1 Day	7.578***	(4.27)	6.878***	(3.88)
> 2 Days	8.206***	(4.42)	7.514***	(4.00)
> 3 Days	8.152***	(4.17)	7.411***	(3.70)
> 4 Days	8.758***	(4.14)	7.728***	(3.59)
> 5 Days	9.085***	(4.05)	7.494***	(3.25)
> 6 Days	9.811***	(4.09)	8.001***	(3.27)

Table 10

Advance Notice Period and Earnings Management

This table presents panel regressions examining how the relation between the Advance Notice Period and the level of earnings surprise varies with firms' earnings management. The dependent variable is the *Advance Notice Period*, the number of days between the date of the notice of earnings (i.e. the press release announcing the date and time of the forthcoming quarterly earnings disclosure) and the earnings announcement date. *Accrual* is the absolute value of the residuals from the discretionary accruals model of Kothari et al. (2005). *Beat Forecast One Cent* is a variable equal to 1 if the firm beats analysts' expectations by one cent and 0 if the firm misses analysts' expectations by one cent. All other variables are defined in Appendix C. Standard errors are adjusted for heteroskedasticity and clustered by firm. t-statistics are in parentheses. ∗, ∗∗, ∗∗∗ indicate significance at the 10%, 5%, and 1% level, respectively.

Dependent Variable: Advance Notice Period				
	(1)	(2)	(3)	(4)
Accrual	-0.076	-0.087		
	(-0.63)	(-0.69)		
Beat Forecast One cent			0.091	0.092
			(0.67)	(0.66)
Date Surprise		-0.181***		-0.217***
		(-12.67)		(-6.76)
Reporting Lag		0.073***		0.129***
		(11.64)		(8.06)
Size		0.917***		0.695*
		(4.83)		(1.90)
Market-to-book		0.037***		-0.013
		(2.86)		(-0.38)
Age		42.265**		67.629**
		(2.16)		(2.05)
RoA		1.423**		0.713
		(2.29)		(0.44)
Leverage		-0.111		1.553
		(-0.19)		(1.47)
Firm Fixed Effects	Yes	Yes	Yes	Yes
Year-Quarter Fixed Effects	Yes	Yes	Yes	Yes
Fiscal Quarter Fixed Effects	Yes	Yes	Yes	Yes
Adj. R^2	2.5%	4.9%	74.7%	76.6%
N	45,414	41,425	10,350	9,506

Table 11

Advance Notice Period and Attendance to Earnings Call (IV Approach)

This table examines the effects of the Advance Notice Period on the number of earnings call participants using Instrumental Variable regressions. The dependent variable is the number of earnings call participants. *Advance Notice Period* is the number of calendar days between the date of the notice of earnings (i.e. the press release announcing the date and time of the forthcoming quarterly earnings disclosure) and the earnings announcement date. All other variables are defined in Appendix C. Standard errors are adjusted for heteroskedasticity and clustered by firm. t-statistics are in parentheses. *, **, *** indicate significance at the 10%, 5%, and 1% level, respectively.

Dependent Variable: # Earnings Call Participants				
	OLS	IV		OLS
		First Stage	Second Stage	
	(1)	(2)	(3)	(4)
Advance Notice Period	0.011***		0.054**	
	(2.74)		(2.12)	
Reporting Lag	-0.007	0.099***	-0.012***	-0.006
	(-1.40)	(6.62)	(-2.79)	(-0.94)
Date Surprise (Decile)	-0.01	-0.109***	-0.005	-0.011
	(-0.99)	(-7.24)	(-0.61)	(-1.22)
Size	1.267***	0.612***	1.241***	1.275***
	(12.65)	(3.32)	(12.89)	(9.44)
Age	0.377	1.228	0.317	0.384
	(0.52)	(0.48)	(0.41)	(0.47)
Market-to-Book	0.027***	0.000	0.027***	0.027***
	(6.33)	(0.01)	(5.95)	(3.85)
Influenza		-0.001***		-0.00004
		(-4.26)		(-1.29)
Firm FE	Yes	Yes	Yes	Yes
Earnings Announcement Date x State FE	Yes	Yes	Yes	Yes
Earnings Surprise Decile Dummies	Yes	Yes	Yes	Yes
Adj. R^2	80.6%	95.3%	95.6%	70.2%
N	37,466	37,418	37,418	37,418
Kleibergen-Paap rk Wald F statistic			18.2	

Figure 1

Timeline of Events

This figure presents the standard timeline of the earnings release process in the U.S.. Information about the organization of the forthcoming earnings release is sent on average ten days before the event. Such information typically includes the date and time of earnings release as well as the earnings conference call number. We call the action of sending this information to market participants "Notice of Earnings". We call the action of disclosing quarterly earnings information to market participants "Earnings Announcement". The "Advance Notice Period" is the number of days between the date of the first notice of earnings and the earnings announcement date.

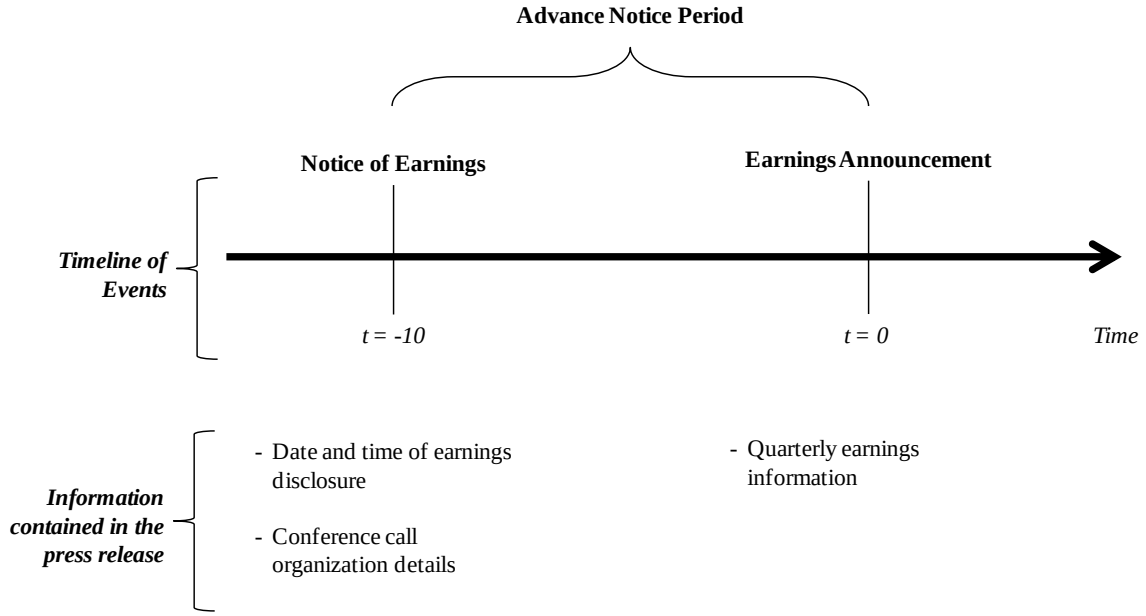


Figure 2

Number of Events Related to Quarterly Earnings Disclosure

This figure plots the frequency of events related to quarterly earnings disclosure by day within a trading year, based on (i) a sample of 4,875 U.S. firms (90,870 observations) from the Compustat Quarterly database and (ii) a sample of 3,897 U.S. firms (52,872 observations) from Reuters Archive over the 2007-2012 period. It figures the frequency of earnings announcements (the blue line), and the frequency of notices of earnings (the red line).

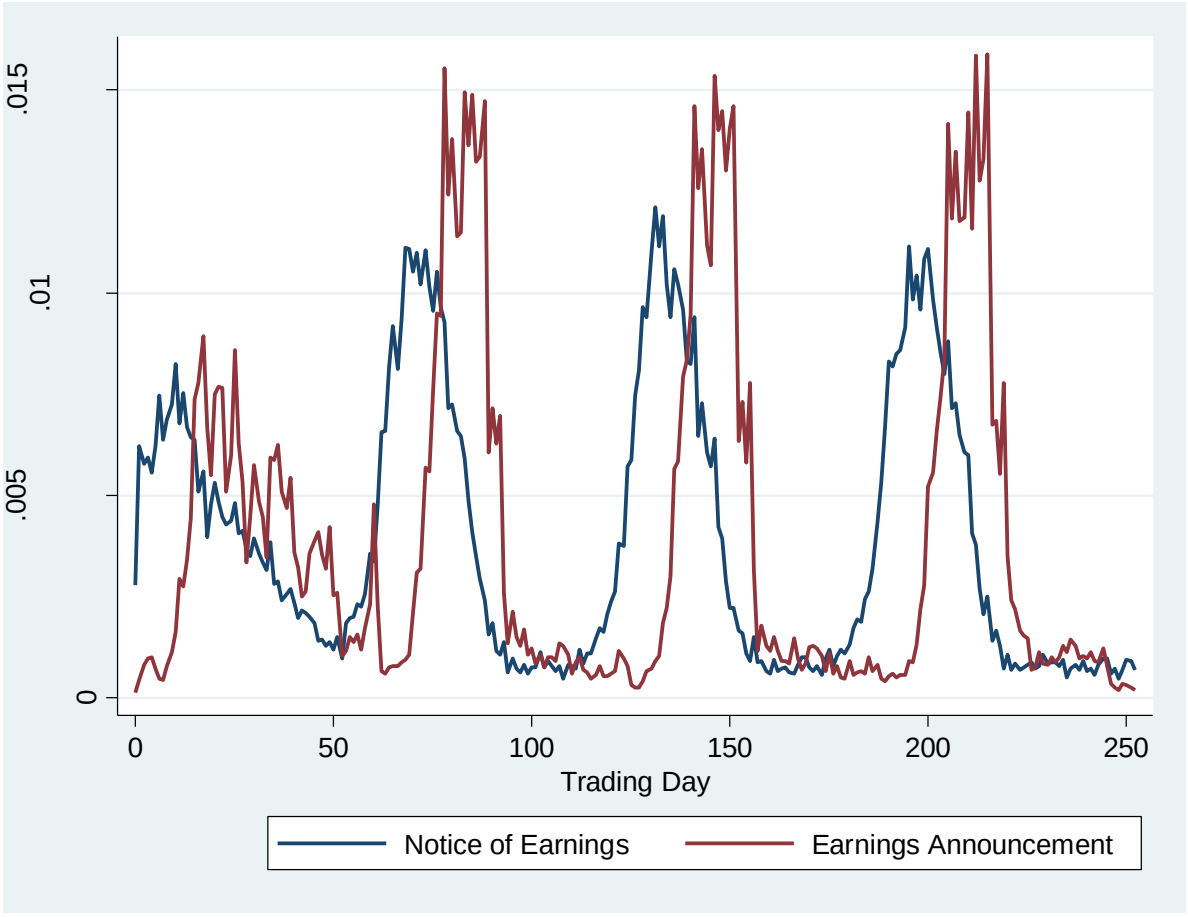


Figure 3

Advance Notice Period Distribution

This figure displays the density function of the Advance Notice Period, the number of calendar days between the date of the notice of earnings and the earnings announcement date. The sample includes 52,872 observations, corresponding to any notice detailing the date and time of the forthcoming quarterly earnings disclosure which we are able to identify in the Reuters press release database, and which we are able to match with 3,897 U.S. firms from the Compustat Quarterly database during the 2007-2012 period

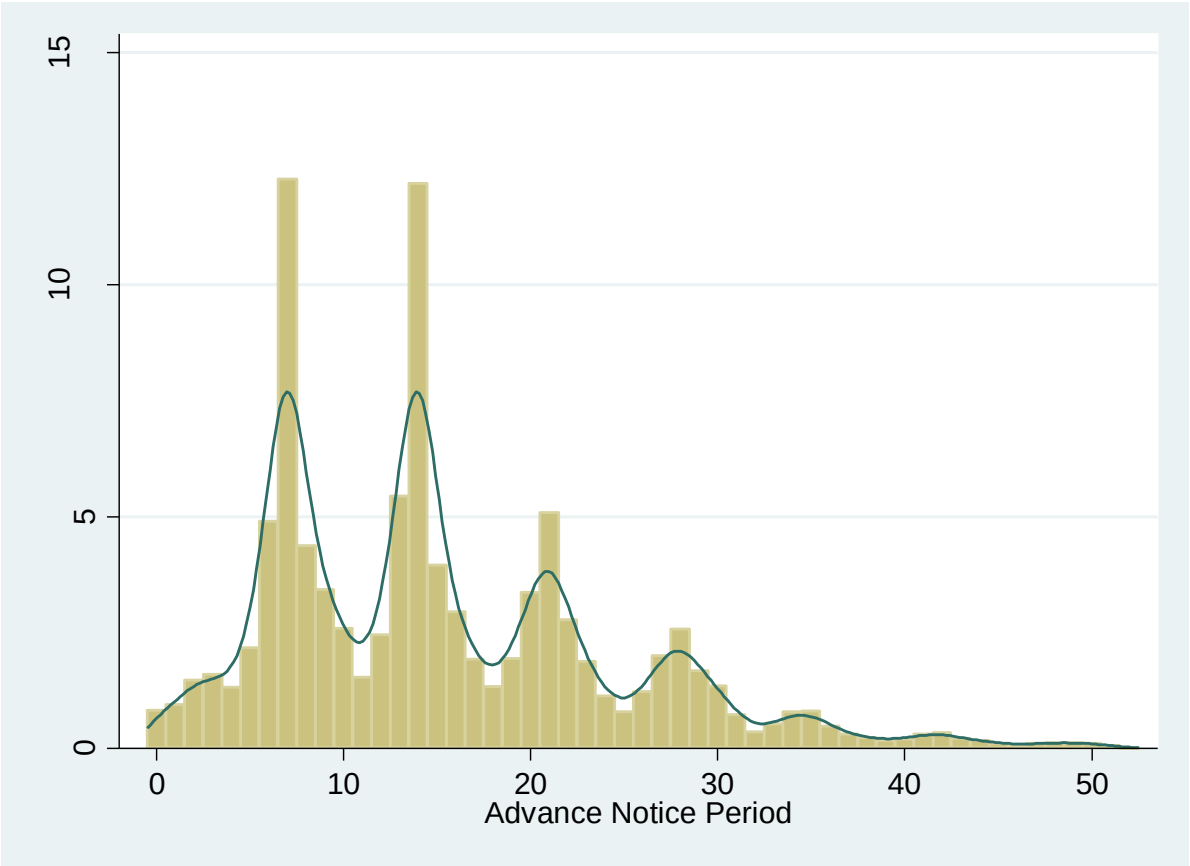
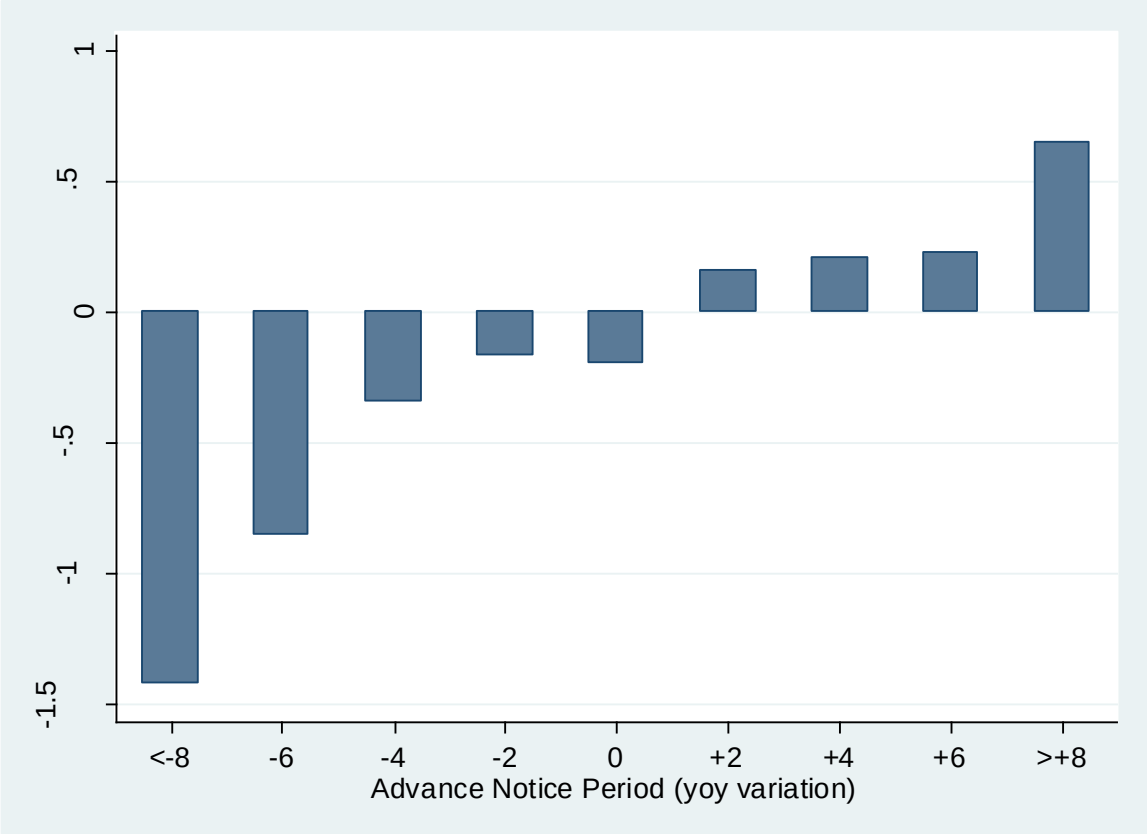


Figure 4

Advance Notice Period Variation and Change in EPS Surprise (in cents)

This figure displays the average change in EPS surprise (USD cents) for firms that change their Advance Notice Period relative to the same quarter of the previous year. Variations in *Advance Notice Period* are divided into 9 bins. The Advance Notice Period is the number of calendar days between the notice detailing the date and time of the forthcoming quarterly earnings disclosure, and the earnings announcement day. The sample includes 52,872 observations, corresponding to any notice detailing the date and time of the forthcoming quarterly earnings disclosure which we are able to identify in the Reuters press release database, and which we are able to match with 3,897 U.S. firms from the Compustat Quarterly database during the 2007-2012 period.



Appendix A Agilent Technologies Earnings Announcement Schedule

Agilent Technologies to Host Webcast of Fourth-Quarter Fiscal Year 2009 Financial Results Conference Call

* Reuters is not responsible for the content in this press release.

Mon Nov 2, 2009 11:00am EST

SANTA CLARA, Calif.--(Business Wire)--
Agilent Technologies Inc. (NYSE:A) will release its fourth-quarter fiscal year 2009 financial results before the stock market opens on Nov. 13. The company will host a live webcast of its investor conference call in listen-only mode.

Date: Friday, Nov. 13

Time: 5:30 a.m. (PT)

Web access: www.investor.agilent.com

Listeners may log on and select "Q4 2009 Agilent Technologies Inc. Earnings Conference Call" in the "News & Events -- Calendar of Events" section. The webcast will remain on the company site for 90 days.

In addition to the online broadcast, a telephone replay of the conference call will be available at 8:30 a.m. (PT) after the call on Nov. 13 through Nov. 20 dialing +1 888 286 8010 (for international, dial +1 617 801 6888) and entering pass code 96035796.

About Agilent Technologies

Agilent Technologies Inc. (NYSE:A) is the world`s premier measurement company and a technology leader in communications, electronics, life sciences and chemical analysis. The company`s 18,000 employees serve customers in more than 110 countries. Agilent had net revenues of $5.8 billion in fiscal 2008. Information about Agilent is available on the Web at www.agilent.com.

NOTE TO EDITORS: Further technology, corporate citizenship and executive news available on the Agilent news site at www.agilent.com/go/news.

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Appendix B Data proceeding

This appendix provides details on two important data steps. First, we show how to match each press release of notification with the corresponding earnings announcement. Second, we describe how to identify whether the release date set forth in the press release of notification has been respected by the company.

B1- Matching press releases with the corresponding earnings announcement

We match each press release of notification with the corresponding earnings on the basis of the fiscal quarter-year reported in the press releases. To recover the fiscal quarter in the press releases, we search for string pattern such as *[first/second/third/fourth] [quarter]*. It is more challenging to recover the fiscal year as several years can be mentioned in a press release (not only the fiscal year but also the year at which the announcement actually occurs). We opt for the following approach: for each press release in our dataset, identified by a company ticker and a fiscal quarter, we look forward to identify the next earnings announcement made by the firm in the fiscal quarter mentioned in the press release. When there are several press releases that notify the same earnings announcement, we take the earlier one to identify the *first* time the earnings announcement date was made public to investors. Finally, we remove press releases where the notification is published on the same day of the earnings announcement.

B2- Checking that the notified release date has been respected by the firm

For each press release of notification, we search for string patterns that match a date i.e. any strings of the form *[Month Day, Year]* such as May 9, 2012. A press release of notification can mention several other dates than the date of earnings announcement (e.g. the date until which the conference webcast will be available). We then check whether at least one of those dates reported in the press release match with the actual date of announcement. If this is the case, we consider the company to respect its notification. Of the 54,570 notices of earnings in the initial dataset, we were able to identify 49,441 earnings announcements where the release date announced in the press release matches either the Compustat or the I/B/E/S reporting date. We are thus left with 5,129 notices of earnings (about 9.4% of the dataset) where the earnings release date is potentially not respected by the firm. Due to the difficulty of extracting the date of announcement from the text of the press release, this figure represents an upper bond of the number of non-respected earnings notification. To further examine this question, we draw a random sample of 1% of the unmatched observations (52 press releases) and manually check whether the date of announcement has been respected by the firm. We find that in 71% of the case (37 observations), firms actually respect their earnings schedule date, but our procedure fail to identify it[1]. In the remaining 29% of the cases (15 observations), firms respect their notifications, but the earnings announcement date recorded in either I/B/E/S or Compustat is wrong (often by a day or two) and no match can thus be found. On this random sample, we thus find no firms that do not respect the date of earnings that they announce in advance to market participants.

[1] For instance the date "May 9, 2012" can be displayed in the press release under the form "Wednesday, May 9". The latter expression is not matched by our procedure

Appendix C List of Variables

Variable	Definition	Source
Advance Notice Period	The number of calendar days between the release of the notice of earnings and the earnings announcement date.	Reuters Archives
EPS Surprise	The difference between the announced earnings per share and the consensus earnings per share.	I/B/E/S
DS	The *Earnings Surprise* normalized by the stock price at the end of the corresponding quarter, divided into ten deciles.	I/B/E/S
Date Surprise	The difference in calendar days between the earnings announcement date and the expected announcement date, defined as the same day of the week as the earnings four quarter previous.	I/B/E/S and COMPUSTAT
Reporting Lag	The difference in calendar days between the date of announcement and the quarter-end date.	I/B/E/S and COMPUSTAT
# Call Participants	The numbers of participants to the earnings conference call.	Analysts' transcripts
# Analysts	The numbers of sell-side analysts at quarter-end date.	I/B/E/S
Size	The natural logarithm of assets.	COMPUSTAT
Market-to-Book	Market to book ratio.	COMPUSTAT
Age	The number of years elapsed since a firm's inception.	COMPUSTAT
Leverage	Total debt over total assets.	COMPUSTAT
RoA	Net Earnings over Assets at the end of the period.	COMPUSTAT

Appendix D Additional Tests

This table presents additional regressions examining the effect of the Advance Notice Period on the number of participants to the earnings call. *Advance Notice Period* is the number of calendar days between the date of the notice of earnings (i.e. the press release announcing the date and time of the forthcoming quarterly earnings disclosure) and the earnings announcement date. Large is a dummy equal to 1 if the firm is in the high tercile of the sample in terms of size at the end of the quarter. Small is a dummy equal to 1 if the firm is in the low tercile of the sample in terms of size at the end of the quarter. Medium is a dummy equal to 1 if Large and Small are equal to zero. Control variables include *Reporting Lag*, *Date Surprise*, Size, *Age*, and *Market-to-book*. All variables are defined in Appendix C. Standard errors are adjusted for heteroskedasticity and clustered by firm. t-statistics are in parentheses. *, **, *** indicate significance at the 10%, 5%, and 1% level, respectively.

Dependent Variable: # Earnings Call Participants		
	(1)	(2)
Advance Notice Period	0.011***	
	(3.63)	
Advance Notice Period x Large		0.005
		(1.18)
Advance Notice Period x Medium		0.011**
		(2.21)
Advance Notice Period x Small		0.030***
		(4.46)
Large		-0.391
		(-1.02)
Small		-0.238
		(-0.63)
Controls (Interacted)	Yes	Yes
Firm Fixed Effects	Yes	Yes
Earnings Announcement Date Dummies	Yes	Yes
Earnings Surprise Decile Dummies	Yes	Yes
Adj. R^2	68.6%	68.5%
N	37,677	37,677