Journal of Accounting Research
Vol. 40 No. 5 December 2002
Printed in U.S.A.

The Information in Management's Expected Earnings Report Date: A Day Late, a Penny Short

MARK BAGNOLI,* WILLIAM KROSS,† AND SUSAN G. WATTS‡

Received 27 December 2000; accepted 3 June 2002

ABSTRACT

Since 1995, managers of thousands of firms have voluntarily disclosed the expected date of their firm's next quarterly earnings announcement to Thomson Financial Services Inc. These disclosures are approximately 500% more accurate than the simple time-series expected report dates used in prior accounting research. These disclosures are also informative. On average, managers who miss their own expected date eventually report earnings that fall about one penny per share below consensus forecasts for each day of delay. Investors respond by sending the price of late-announcing stocks down at the missed expected report date and continue to send them down as the reporting delay lengthens, consistent with our "day late, penny short" result. Despite this, we find that the market response at the time earnings are announced still depends on whether the announcement is early, on time, or late relative to the firm's own expected report date.

*Purdue University; †Purdue University; ‡Purdue University. We are particularly grateful to the referee for suggestions that improved the paper and to Stan Levine for many helpful discussions. We also thank Ashiq Ali, Larry Brown, Maqbool Dada, Ilia Dichev, Bob Eskew, Sanjay Kallapur, Don Pagach, and participants at the 2000 DAIS Quantitative Equity Research Conference, the Georgetown University accounting and finance workshop, and the 2001 American Accounting Association meetings for comments. Thomson Financial Services generously provided First Call earnings report date expectations and analyst forecast data, and Byungjin Kwak, Mehmet Ozbilgin and James Su provided excellent research assistance.

1. Introduction

In 1995, First Call Corporation, a Thomson Financial Services company, began collecting and disseminating voluntarily disclosed expected earnings report dates from firms that are followed by First Call analysts. First Call originally gathered these dates directly during routine contacts with the firms or culled them from news services or brokers' notes but gradually refined its procedures over the years so that by 1998, more and more firms' investor relations departments were contacted via fax and e-mails for dates and confirmation of dates already provided. At that point, First Call's database contained expected report dates for approximately two-thirds of the firms that were covered by its analysts, suggesting that many firms choose to make public their expectation of when they will report earnings. The purpose of this article is to examine the nature of these disclosures and to determine whether they contain information useful to market participants.

We analyze approximately 26,000 expected and actual report dates from 1995 to 1998. Compared to expected report dates derived from extrapolative models used in prior research (Kross [1981], Givoly and Palmon [1982], Chambers and Penman [1984], Kross and Schroeder [1984], Begley and Fischer [1998]), First Call expected report dates are relatively accurate: 74% are correct with the percentage correct rising monotonically from 59% in 1995 to 81% in 1998. For our sample period, expected report dates derived from extrapolative models perform poorly: no more than 33% are correct. The difference is most likely due to First Call's more timely expected report dates (which have improved with the changes in First Call's collection procedures) and to management's forecasts containing information that is not incorporated in expected report dates derived from extrapolative models.

When management misses its own expected earnings report date, we find that reported earnings contain bad news (relative to First Call consensus forecasts) on average and that the later the report, the worse the news. In particular, the average earnings surprise is more negative by approximately one cent for each day the report is delayed. This result is consistent with, but even stronger than, prior findings that bad earnings news (measured relative to analysts' expectations) is released late (Kross [1981], Givoly and Palmon [1982], Bowen et al. [1992], Begley and Fischer [1998]). In contrast, we find little evidence that good news is reported early, consistent with the prior findings of only a weak association between good news and early announcements.

The strong correlation between a missed First Call expected report date and the nature of the forthcoming earnings news suggests that market participants—in particular, financial analysts and investors—may respond when an expected earnings report date comes and goes without an announcement. It is surprising that 91% of the time, First Call analysts do not alter their (public) forecasts of earnings per share after a missed expected report date. However, when they do revise their estimates, they generally

revise them downward, consistent with late announcers' reporting bad news, and their revised forecasts tend to be more accurate.

In contrast to the infrequent responses by analysts, investors generally do react to missed First Call expected report dates. Average market-adjusted returns cumulated over the expected report date and the next trading day are negative and significantly different from zero. If the report continues to be delayed, investors drop prices further in a manner consistent with the "day late, penny short" pattern we observe in unexpected earnings until the earnings are actually announced. In spite of this, stock price movements during the announcement period still depend on whether the firm is reporting early, on time, or late relative to its own expected report date. In particular, investors complete their response to a late announcement by lowering price relative to an on-time announcement regardless of the nature of the earnings news. Furthermore, they respond more aggressively to good or bad news if the firm reports early (relative to if it reports on time or late). Collectively, these results lead us to conclude that expected report dates provided by management are a useful source of information and might be used to enhance our understanding of how market participants respond to the information contained in earnings reports.

The rest of this article is organized as follows. Section 2 contains a description of our sample and data. Section 3 contains the empirical analysis, and section 4 contains concluding remarks.

2. *Sample and Data*

The expected and actual quarterly earnings report dates used in this study come from a database provided by First Call/Thomson Financial. As noted in the introduction, First Call generally obtains expected report dates during routine contacts with management a couple of weeks before the date the company reported same-quarter earnings the previous year or by culling them from news services or brokers' notes. However, in the latter part of our period, First Call expanded its routine to include contacting management via fax and e-mail approximately one week before the expected report date for confirmation of the date.[1,2] First Call believes that providing expected report dates developed as part of the firms' response to increased interest in quarterly earnings announcements during the 1990s and has become a routine part of most firms' overall investor relations efforts, with many firms disclosing the expected announcement date on their own Web sites.

[1] We are unable to provide quantitative details on the impact of this change because First Call's database contains no data on revisions of expected report dates. It retains only the last expected report date.

[2] When First Call is unable to obtain an expected report date either directly from or confirmed by the company, it provides (what it refers to as) a "week-of" date. In such cases, we treat the week-of dates as missing values because they are not voluntary disclosures by the firms themselves.

However, some firms (e.g., Disney and Dillards) have refused to provide such dates to First Call and do not explain why.

Announcements included in our sample satisfy three conditions. First, both the expected and actual report dates are in the First Call database. We should note that when there is a usable (see fn. 2) expected report date in the database, there is always a corresponding actual date. Second, the actual report date is not more than 60 days before or 90 days after the First Call expected report date. The 60-days-before criterion helps us avoid obvious data-entry errors and potential conflicts with prior earnings reports. The 90-days-after criterion also helps us avoid obvious data-entry errors and ensures that the company has had enough time to report and meet the Securities and Exchange Commission filing deadlines. Finally, we require that the corresponding First Call analyst consensus forecast of and actual earnings per share is available. (We lose 23% of the observations with both expected and actual report dates because of missing consensus forecasts.) These screens result in a final sample of 25,934 quarterly earnings announcements made by 4,434 firms (an average of 6 quarterly announcements per firm) from January 1995 to July 1998. This sample of firms makes up approximately two-thirds of the companies in the First Call analyst summary database. It is not surprising that the proportion increases over time: in 1995, the overlap in firms between the two databases was 53%, rising to 68% by the beginning of 1998.

3. Empirical Results

In this section, we first assess the *ex post* accuracy of firms' voluntarily disclosed expected earnings report dates. We then examine the association between the report-date forecast error and the nature of the earnings news released. Finally, we assess how market participants (both analysts and investors) react to report date expectations provided by management.

3.1 REPORT-DATE FORECAST ERRORS

3.1.1. First Call Report Date Forecast Errors. To begin the analysis, we calculate the number of trading days between the actual and expected report dates, excluding weekends and holidays. If the actual report date occurs before (after) the expected report date, the announcement is considered early (late). Only when the actual report date coincides exactly with the expected report date is the announcement considered on time. Table 1 contains frequency counts of announcements by the report-date forecast error. As the table indicates, expected report dates provided by management are generally accurate: for the entire sample, 73.8% of earnings announcements were made on the expected date, whereas only 1.8% (1.6%) were seven or more trading days early (late). Year-by-year analysis shows that the percentage of on-time earnings announcements has increased significantly and monotonically over our sample period. In 1995, 59.3% of earnings announcements were on time relative to management expectations, but by 1998, 80.6%

TABLE 1

Report-Date Forecast Errors Using Company's Own Expected Report Date as Reported by First Call[a]

No. of Days Early (−) or Late (+)	Entire Sample (1995–98)		1995		1996		1997		1998	
	N[b]	%	N[b]	%	N[b]	%	N[b]	%	N[b]	%
−7 or more	470	1.8	171	3.7	127	1.6	116	1.4	56	1.1
−6	107	0.4	40	0.9	27	0.3	24	0.3	16	0.3
−5	155	0.6	44	0.9	44	0.6	41	0.5	26	0.5
−4	203	0.8	71	1.5	57	0.7	45	0.5	30	0.6
−3	288	1.1	100	2.1	83	1.0	72	0.9	33	0.7
−2	525	2.0	165	3.6	163	2.0	139	1.7	58	1.2
−1	1,611	6.2	393	8.5	464	5.8	490	5.9	264	5.4
On time	19,145	73.8	2,746	59.3	5,965	74.4	6,463	77.2	3,971	80.6
+1	1,652	6.4	360	7.8	550	6.9	490	5.9	252	5.1
+2	529	2.0	148	3.2	170	2.1	136	1.6	75	1.5
+3	364	1.4	128	2.8	101	1.3	99	1.2	36	0.7
+4	174	0.7	65	1.4	49	0.6	42	0.5	18	0.4
+5	177	0.7	54	1.2	48	0.6	52	0.6	23	0.5
+6	116	0.5	39	.8	30	0.4	36	0.4	11	0.2
+7 or more	418	1.6	105	2.3	135	1.7	121	1.4	57	1.2
Total	25,934	100.0	4,629	100.0	8,013	100.0	8,366	100.0	4,926	100.0

[a]The sample consists of 25,934 quarterly earnings announcements, made from January 1995 to July 1998, contained in the First Call expected report date database. Report-date forecast errors (number of days early or late) are the number of trading days between the actual report date as reported by First Call and the company's own expected report date, also as reported by First Call.

[b]N refers to the number of earnings announcements made the specified number of days early or late (from column 1) relative to the expected report date.

were. Chi-square tests of all pairwise comparisons indicate that the proportion correct in the more recent year is significantly higher at the 0.001 level.[3] Furthermore, the frequency counts in table 1 show that this improvement is due to decreases across the entire range of early and late reporting and not just to a reduction in the proportion of announcements that are only one or two days late. The improvement is not unexpected given the changes in First Call's confirmation procedures, but we cannot exclude the possibility that it is, at least in part, due to changes in either management's forecasting or reporting behavior.

Despite this trend, it is clear that managers still occasionally delay or accelerate the announcement of some earnings reports relative to their published expected date. Possible reasons for delays include last-minute

[3] One might conjecture that, because of the time-consuming audit and "settling-up" adjustments that are often made in the fourth quarter, firms may be better able to forecast report dates for interim quarters than for the fourth quarter. However, frequency counts by number of days early or late indicate no significant difference between forecasting accuracy for fourth-quarter versus interim reports. Specifically, 75% of the fourth-quarter report dates were forecasted accurately versus 74% of the interim report dates. The rest of the report-date forecast error distributions for the fourth-quarter and interim-quarter subsamples are similar to that for the entire sample as well, indicating that the fiscal quarter doesn't systematically affect the accuracy of a firm's expected earnings report date.

audit discoveries of substantial issues that prevent auditors from completing their work on time or disagreements between management and the auditors that are not quickly resolved and thus delay the release of the earnings numbers relative to when management expected. (Either of these explanations implies that a delay is more likely to be associated with forthcoming bad news.) Other common reasons for delays (cited in early studies on announcement timing) include delaying the announcement while negotiating contracts[4] or needing additional time to prepare responses to the forthcoming news, particularly if it is bad. Also, as Begley and Fischer [1998] note, Skinner [1994] and Francis, Philbrick, and Schipper [1994] suggest that recent changes in the litigation environment in the United States provide additional motivation for delaying or accelerating certain earnings announcements. In particular, Skinner asserts that escalating litigation induces firms to *pre-announce* forthcoming bad earnings news. Such a change also reduces incentives to delay the formal announcement of bad earnings news and might, in fact, lead to announcing bad news early. Furthermore, Francis, Philbrick and Schipper note that if stock prices run up and then subsequently decline, litigation is more likely. This suggests that managers and auditors have incentive to spend more time verifying good news, possibly leading to a delay in the formal announcement of good earnings news.

3.1.2. Naïve Report Date Forecast Errors. From a research perspective, a comparison of interest is whether First Call's self-reported expected dates differ systematically from those generated by extrapolative models such as those used in prior research.[5] To examine this, we calculate expected report dates using two naïve models and present the resulting report-date forecast errors in table 2.[6] The first naïve model (naïve 1) assumes that the earnings

[4] Recently, Internap delayed its reporting of 2001 second-quarter earnings by a day at the last minute, apparently because it was waiting to finalize the terms of a private-placement financing arrangement. We thank the referee for providing this current example.

[5] Previous research employs a variety of extrapolative models. For example, Givoly and Palmon [1982], Chambers and Penman [1984], Kross and Schroeder [1984], and Begley and Fischer [1998] define the expected report date in the current period as the end of the fiscal period plus the year-ago reporting lag (i.e., the number of days between the end the fiscal period and the actual report date one year ago). Kross [1981] and Kross and Schroeder [1984] also employ a more complicated time-series expectation model to generate an expected reporting lag.

[6] An issue here is the reliability of First Call earnings announcement dates; thus, we compared them with earnings announcement dates from Compustat. Specifically, we checked the earnings announcement date in the Dow Jones news retrieval database for 100 randomly selected observations from the sample. In 99% of the cases, the First Call date agrees with the Dow Jones Newswire or PR Newswire date; in 53% of the cases, the Compustat date does. However, in almost all (87%) of the cases where the Compustat date does not agree with the Dow Jones date, it is only one or two days later than the Dow Jones date, indicating that Compustat dates more often coincide with print media (e.g., *Wall Street Journal*) announcement dates.

TABLE 2

Report-Date Forecast Errors Using Naïve (Extrapolative) Expected Report Dates[a]

	Naïve Model 1: Expect Same Reporting Lag as Four Quarters Previous			Naïve Model 2: Expect Report on Same Day of Week as Four Quarters Previous		
No. of Days Early (−) or Late (+)	N[b]	%	Mean Unexpected Earnings	N[b]	%	Mean Unexpected Earnings
−7 or more	300	2.6	−0.010	215	1.8	0.001
−6	217	1.8	0.000	75	0.6	−0.039
−5	202	1.7	0.004	187	1.6	−0.005
−4	260	2.2	−0.001	201	1.7	−0.009
−3	478	4.1	0.002	247	2.1	−0.000
−2	1,506	12.8	0.004	427	3.6	−0.001
−1	3,583	30.4	−0.002	893	7.6	−0.004
On time	1,563	13.3	−0.004	3,929	33.4	0.001
+1	24	0.2	0.017	54	0.5	0.029
+2	192	1.6	0.003	67	0.6	0.001
+3	842	7.2	−0.017	1,682	14.3	−0.003
+4	579	4.9	−0.003	942	8.0	−0.012
+5	712	6.1	−0.018	631	5.4	−0.009
+6	655	5.6	−0.018	590	5.0	−0.021
+7 or more	647	5.5	−0.071	1,620	13.8	−0.037
Total	11,760	100.0	−0.008	11,760	100.0	−0.008

[a]The sample consists of 11,760 quarterly earnings announcements, made from January 1996 to July 1998, contained in the First Call expected report date database. Report-date forecast errors (number of days early or late) are the number of trading days between the actual report date as reported by First Call and the expected report date as determined by one of two naïve (time-series) models that are estimated using actual report dates from the First Call expected report date database. Unexpected earnings in the table are the unscaled difference between actual earnings per share and the First Call consensus forecast for the quarter. The First Call consensus forecast is the average of the last forecast made by each analyst for the quarter.

[b]N refers to the number of earnings announcements made the specified number of days early or late (from column 1) relative to the expected report date.

announcement will occur on the same date as four quarters previous (e.g., a third-quarter report on October 10, 1995, means the next fiscal year's third-quarter report will be made on October 10, 1996) and is consistent with the model used by Givoly and Palmon [1982], Chambers and Penman [1984], Kross and Schroeder [1984], and Begley and Fischer [1998]. The second naïve model (naïve 2) predicts an earnings report on the same day of the week as the report four quarters previous (e.g., a third-quarter report on Tuesday, October 10, 1995, means the next fiscal year's third-quarter report will be made on Tuesday, October 8, 1996). For consistency, all actual report dates used to calculate naïve expectations are from the First Call database. Thus, we generate naïve expectations for earnings announcements made between 1996 and 1998.

Both naïve models yield results similar to those in Begley and Fischer [1998]: 43% (41%) of announcements are classified as on time or one day early by our naïve 1 (2) versus 30% by Begley and Fischer's naïve model

using data from 1983 to 1992.[7] However, both perform significantly worse than the management expectations recorded by First Call, which classify 5.6 (2.2) times as many announcements as on time as does naïve 1 (2). Chi-square tests indicate that First Call expected dates are significantly more often correct (73.8% of the time) than expected dates from either naïve model (13% of the time for naïve 1 and 33% of the time for naïve 2). Furthermore, the proportions of extremely late (seven or more days) announcements are significantly greater for naïve expectations. Naïve 1 (2) produces 5.5% (13.8%) extremely late announcements, whereas First Call expectations produce only 1.6% extremely late announcements. Similar results obtain for moderately late (three to six days) announcements: naïve 1 (2) produces 23.7% (32.7%) moderately late announcements, whereas First Call produces only 3.2%. In contrast, the proportion of slightly late (one or two days) announcements is significantly smaller when either naïve model is used. Naïve 1 (2) produces 1.8% (1.0%) slightly late announcements, whereas First Call produces 8.4%. Thus, not only do expectations based on naïve models significantly underclassify on-time reports, they also underclassify slightly early and late reports and overclassify extremely early and late reports.

These comparisons suggest that in recent years, market participants have access to much better report date expectations than those provided by the models used in prior academic research on announcement timing. One explanation for this is that First Call's dates are provided by the company rather than being generated by a time-series model. As such, they contain more timely information, not only because they are obtained closer to the actual report date but also because of improvements in First Call's collection procedures. Furthermore, First Call dates contain information available to management that is not incorporated in naïve dates. Thus, we expect reporting lags to have greater information content when management's own expectations are used.

3.2 UNEXPECTED EARNINGS AND REPORT-DATE FORECAST ERRORS

In this section, we examine the association between report-date forecast errors (the difference in trading days between the actual and expected report dates) and earnings surprises (the difference between actual earnings per share and the First Call consensus forecast from the First Call summary database). The First Call consensus forecast is the average of the last forecast made by each analyst for the quarter.

Table 3 contains descriptive statistics for unexpected earnings associated with report-date forecast errors when management's own expected report

[7] The increase in the percentage of on-time reports using these naïve models relative to prior results suggests that recently firms have become more consistent in their reporting behavior. Thus, part of the yearly increase in the percentage of firms reporting on time relative to First Call expected report dates can be attributed to changes in firm behavior rather than to changes in First Call data-collection procedures.

TABLE 3

Descriptive Statistics for Unexpected Earnings By Report-Date Forecast Error Using Company's Own Expected Report Date as Reported by First Call [a]

		Unexpected Earnings					
No. of Days Early (−) or Late (+)	N[c]	Mean	p-value for t-test[d]	Q1	Median	Q3	Percentage with Unexpected Earnings < 0[e]
Panel A: Winsorized Sample[b]							
−7 or more	470	−0.017	0.019	−0.030	0.000	0.030	39.8%
−6	107	−0.015	0.056	−0.040	−0.010	0.020	51.4%
−5	155	0.016	0.046	−0.010	0.010	0.030	26.5%
−4	203	−0.024	0.002	−0.030	0.000	0.020	38.9%
−3	288	−0.016	0.007	−0.020	0.010	0.020	36.5%
−2	525	−0.004	0.430	−0.020	0.000	0.020	36.6%
−1	1,611	−0.011	0.001	−0.020	0.000	0.020	34.3%
On Time	19,145	−0.003	0.000	−0.010	0.000	0.020	33.1%
+1	1,652	−0.022	0.000	−0.030	0.000	0.020	41.8%
+2	529	−0.027	0.000	−0.040	0.000	0.020	44.4%
+3	364	−0.027	0.000	−0.040	0.000	0.020	42.6%
+4	174	−0.036	0.026	−0.053	−0.010	0.020	50.6%
+5	177	−0.045	0.002	−0.050	0.000	0.010	46.9%
+6	116	−0.054	0.002	−0.068	−0.010	0.010	55.2%
+7 or more	418	−0.055	0.000	−0.060	−0.010	0.020	50.2%
Full sample	25,934	−0.008	0.000	−0.020	0.000	0.020	35.0%
Panel B: Nonwinsorized Sample							
−7 or more	470	−0.027	0.020	−0.030	0.000	0.030	39.8%
−6	107	−0.015	0.056	−0.040	−0.010	0.020	51.4%
−5	155	0.016	0.046	−0.010	0.010	0.030	26.5%
−4	203	−0.024	0.002	−0.030	0.000	0.020	38.9%
−3	288	−0.016	0.007	−0.020	0.010	0.020	36.5%
−2	525	−0.007	0.300	−0.020	0.000	0.020	36.6%
−1	1,611	−0.013	0.001	−0.020	0.000	0.020	34.3%
On time	19,145	−0.005	0.000	−0.010	0.000	0.020	33.1%
+1	1,652	−0.025	0.000	−0.030	0.000	0.020	41.8%
+2	529	−0.030	0.000	−0.040	0.000	0.020	44.4%
+3	364	−0.027	0.000	−0.040	0.000	0.020	42.6%
+4	174	−0.050	0.028	−0.053	−0.010	0.020	50.6%
+5	177	−0.036	0.065	−0.050	0.000	0.010	46.9%
+6	116	−0.102	0.080	−0.068	−0.010	0.010	55.2%
+7 or more	418	−0.110	0.001	−0.060	−0.010	0.020	50.2%
Full sample	25,934	−0.011	0.000	−0.020	0.000	0.020	35.0%

[a]The sample consists of 25,934 quarterly earnings announcements, made from January 1995 to July 1998, contained in the First Call expected report date database. Report-date forecast errors (number of days early or late) are the number of trading days between the actual report date as reported by First Call and the company's own expected report date, also as reported by First Call. Unexpected earnings are the unscaled difference between actual earnings per share and the First Call consensus forecast for the quarter. The First Call consensus forecast is the average of the last forecast made by each analyst for the quarter.

[b]Unexpected earnings >$1.00 or <−$1.00 are winsorized to $1.00 and −$1.00, respectively.

[c]N refers to the number of earnings announcements made the specified number of days early or late (from column 1) relative to the expected report date.

[d]The p-values for simple t-tests of the null hypothesis that mean unexpected earnings are zero versus the alternative that mean unexpected earnings are not zero.

[e]This column contains the percentage of the earnings announcements in each report-date forecast error category that contains negative unexpected earnings.

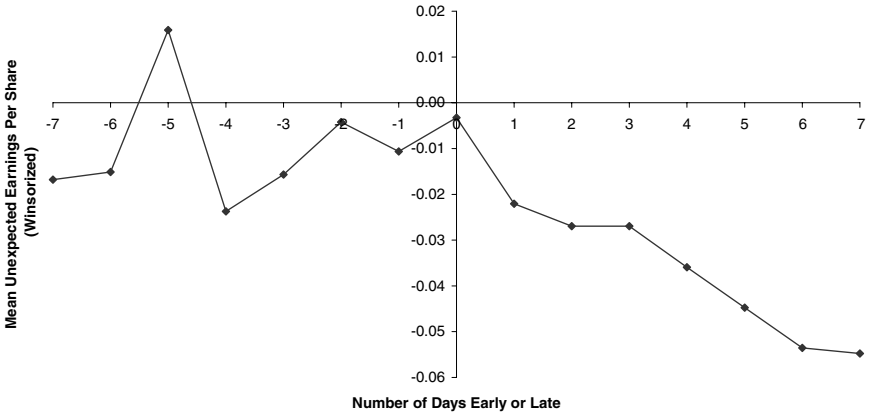

FIG. 1.— Mean unexpected earnings (winsorized) by number of days early or late. The sample consists of 25,934 quarterly earnings announcements made from January, 1995 to July, 1998, contained in the First Call expected report date database. Report-date forecast errors (i.e., number of days early (−) or late (+)) are the number of trading days between the actual report date as reported by First Call and the company's own expected report date, also as reported by First Call. Unexpected earnings are the unscaled difference between actual earnings per share and the First Call consensus forecast for the quarter. Unexpected earnings ≥$1.00 or ≤−$1.00 are winsorized to $1.00 and −$1.00, respectively.

dates are used.[8] In panel A, the descriptive statistics reflect a winsorized sample: unexpected earnings are set equal to $1.00 (−$1.00) for all observations that exceed $1.00 in absolute value. In panel B, we present statistics for the unwinsorized sample. Figure 1 graphs mean unexpected earnings per share by report-date forecast error for the winsorized sample.

As panel A of table 3 shows, mean unexpected earnings for late announcements are negative and statistically different from zero for all reporting delay categories (one day late, two days late, etc.). Furthermore, as figure 1 illustrates, they drop by about one penny per share for every additional day an announcement is late: reporting late is bad news, but reporting later is worse news. This is reflected in the significant difference in mean unexpected earnings for slightly late (three or fewer trading days) and very late (four or more trading days) announcements: −$0.011 and −$0.049, respectively.[9,10] Median unexpected earnings, also shown in table 3, provide

[8] The basic pattern in forecast errors described in this study remains when forecast errors are scaled by the firm's stock price 30 days before the actual report date. Results are available on request.

[9] The *p*-value for the two-sample *t*-test is 0.01. Similar results obtain for the unwinsorized sample.

[10] It is possible that extremely negative earnings surprises in late announcements are the result of large, unusual charges that may take time to determine or clear with the firm's auditor (e.g., restructuring charges or write-offs or write-downs). To examine this, we search the Dow Jones historical database for newswire announcements of earnings associated with unexpected earnings less than or equal to −$1.00 ($N = 69$). Of these announcements, 48% were associated

additional evidence that later reports tend to contain worse news: they become negative for very late announcements. Finally, the difference between the first and third quartiles grows as the delay lengthens, indicating greater variability in unexpected earnings over time. It is interesting that the difference grows because the first quartile declines, whereas the third quartile remains approximately constant, again indicating that the distribution of unexpected earnings is shifting to the left as the report gets later.

Table 3 also shows that late announcements contain bad news 23% more often than early announcements. Specifically, 44.5% of late announcements contain bad news whereas only 36.1% (33.1%) of early (on-time) announcements do. Furthermore, as the reporting delay grows for late announcers, the percentage of announcements containing bad news increases, going from 41.8% for announcements one day late to 50.2% for announcements seven or more days late. Finally, late announcers report losses 60% more often than early announcers and 90% more often than on-time announcers, providing further evidence that when management misses its own expected report date, bad news is more likely to be forthcoming.

In contrast, we find no consistent relation between unexpected earnings and reporting early. As table 3 shows, mean and median unexpected earnings are sometimes positive and sometimes negative.[11] Furthermore, the relative stability of the first and third quartiles indicates that the distribution of unexpected earnings does not depend on how early the firm reports earnings. Finally, in contrast to the late reporters where the percentage of bad news grows as the reporting delay increases, the percentage of bad news in the early announcements is relatively stable.

Consistent with prior research, we find that average unexpected earnings are also negative for announcements classified as late by naïve models (see table 2). However, when announcements are classified as late by First Call expected dates, average unexpected earnings are more negative. Specifically, late announcers as classified by naïve 1 (2) report earnings that are −$0.019 (−$0.013) below the forecast, on average. Late announcers as classified by First Call report average unexpected earnings of −$0.03. Furthermore, unexpected earnings are not monotone in report-date forecast error for either naïve model, a result also observed by Begley and Fischer [1998]. In fact, we find positive average unexpected earnings for the one- and two-days-late subsamples for both naïve models. Finally, the proportion of good news exceeds the proportion of bad news in both early and late announcements

---

with no specifically mentioned charge, and only 19% were associated with restructurings. Thus, large negative unexpected earnings do not appear to be systematically associated with large charges.

[11] We should note that the mean of the unwinsorized, unexpected earnings for firms reporting seven or more days early is one cent lower than the mean of the winsorized sample even though the medians and quartiles are unchanged. This suggests that some firms reported extremely bad news very early, a result that is consistent with the ideas developed in Skinner [1994].

for either naïve model, indicating a less clear relation between report-date forecast error and earnings surprise when naïve models are used.

3.3 ANALYST FOLLOWING

The results so far indicate a stronger association between late announcements and unexpected earnings when the expected report date is a management representation as opposed to a time-series expectation. Because expected report dates are voluntarily disclosed by management, a question that naturally arises is whether early, late, and on-time announcers share common characteristics. For example, large firms with "live-in" auditors and pervasive internal controls might be expected to more accurately forecast their own report dates. These firms also tend to enjoy wider analyst following. Thus, we expect firms that announce on time to be those with relatively heavy analyst following.

To examine this, we calculate First Call analyst following by report-date forecast error and present descriptive statistics in table 4. The number of analysts following the sample firms ranges from 1 to 34, with an average following of 6.23 analysts. Consistent with our expectations, table 4 indicates that on-time announcers do in fact enjoy wider analyst coverage than do either early or late announcers. Specifically, on-time announcers have a

TABLE 4

Summary Statistics for First Call Analyst Following by Report Date Forecast Error Using Company's Own Expected Report Date as Reported by First Call[a]

No. of Days Early (−) or Late (+)	N[b]	Mean Number of Analysts Following	Median Number of Analysts Following	Std. Dev.
−7 or more	470	4.41	3.00	4.31
−6	107	4.35	3.00	3.93
−5	155	5.59	4.00	4.66
−4	203	4.54	3.00	3.95
−3	288	4.38	3.00	3.83
−2	525	4.83	3.00	4.39
−1	1,611	5.24	4.00	4.53
On time	19,145	6.76	5.00	5.38
+1	1,652	4.77	3.00	4.25
+2	529	4.52	3.00	4.11
+3	364	4.96	3.00	4.79
+4	174	4.11	3.00	3.94
+5	177	4.47	3.00	4.33
+6	116	3.95	3.00	3.22
+7 or more	418	3.89	3.00	3.13
Full sample	25,934	6.23	5.00	5.19
Early only	3,359	4.93	3.00	4.39
Late only	3,430	4.57	3.00	4.14

[a]The sample consists of 25,934 quarterly earnings announcements, made from January 1995 to July 1998, contained in the First Call expected report date database. Report-date forecast errors (number of days early or late) are the number of trading days between the actual report date as reported by First Call and the company's own expected report date, also as reported by First Call.

[b]N refers to the number of earnings announcements made the specified number of days early or late (from column 1) relative to the expected report date.

mean (median) First Call following of 6.76 (5.00) analysts, whereas early announcers have a mean (median) First Call following of 4.93 (3.00) analysts and late announcers have a mean (median) First Call following of 4.57 (3.00) analysts. The differences are significant at the 0.01 level using either a standard *t*-test or a Mann-Whitney test. Furthermore, mean analyst following for early and late announcers is significantly different at the 0.01 level, as well, and the Mann-Whitney test rejects the null of same distributions at the 0.01 level. Thus, we conclude that fewer analysts follow early and late announcers, with late announcers' having the thinnest coverage of all.[12]

3.4 REACTION TO REPORT-DATE FORECAST ERRORS

Having shown that late announcers are likely to report bad news (and worse news the later the announcement), we now examine whether and how market participants (i.e., analysts and investors) respond when a firm's expected report date comes and goes without an earnings announcement.

3.4.1. Analysts' Reaction. To determine whether and how analysts (publicly) respond to a missed report date, we study forecast revision activity for the 3,430 occasions when managers announced earnings later than they said they would. It is interesting that analysts issued new forecasts after the missed expected report date on only 317 occasions (of 3,430). Of these, 178 are revisions of a prior forecast made during the quarter and 139 are first-time (during the quarter) forecasts.[13] Thus, the vast majority (91%) of missed report dates are *not* accompanied by First Call analyst activity.[14]

Despite this lack of analyst revision activity, when analysts did revise their earnings forecasts after a missed expected report date, they generally lowered their estimates and the revisions tended to be more accurate. Of the 178 revised forecasts, 70% (significantly different from 50% at the 0.01 level) are lower than the analyst's prior estimate. This percentage is significantly greater, at 0.01 level, than the 58% of last revisions that are lowered estimates for firms that report early or on time.[15] Furthermore, 87% (significantly different from 50% at the 0.01 level) of revisions made after the

[12] It is possible that reporting patterns are also related to industry. However, concentration ratios of industries for early, on-time, and late announcers are very similar to the concentration ratios for the full sample. In particular, the three largest SIC code classifications account for 23.2%, 22.5%, 24.3%, and 22.5% of the full sample and each of the subsamples, respectively. Furthermore, the six largest SIC code classifications are the same for the full sample and each of the subsamples, respectively. Thus, it appears that whether a firm reports early, on time, or late is not strongly related to industry classification.

[13] Of the 178 revisions, 10 are second or third revisions after management's expected date.

[14] Although this result may seem surprising at first glance, it's consistent with anecdotal evidence that analysts do not always update their official forecasts, even when they know those forecasts are "outdated" (see Ip [1997]).

[15] By last revision, we mean the last revision preceding the expected announcement date. Because First Call stops collecting revisions after the company reports earnings, for early announcers, the last revision before the expected announcement date is also the last revision before the actual announcement date.

missed expected report date are closer to actual earnings than the previous forecast. This percentage is also significantly greater, at the 0.01 level, than the 72% of last revisions that are more accurate for firms that report early or on time. Finally, of the 178 revisions made after the missed expected report date, 44% improve on the First Call consensus, 15% are revised to the First Call consensus, and 41% are worse than the First Call consensus forecast. For early and on-time announcers, the percentages are 28%, 24%, and 48%, respectively. The percentage of revisions that are worse than the consensus is not significantly different between the two groups. In contrast, the percentage that improve on and the percentage that are revised to the consensus forecast are significantly different between the two groups. In particular, a greater percentage of revisions made after the missed expected report date improve on the consensus.

These results suggest that even though there is generally little analyst revision activity after a missed expected report date, when revisions do occur, they tend to improve on the analyst's previous forecast and reflect the tendency of late announcers to report bad news. Furthermore, this revision activity differs from the last revisions for firms that do not report late, also in a manner consistent with late announcers' reporting bad news.

3.4.2. Stock Market Reaction to a Missed Expected Report Date. Having examined analysts' responses to missed expected report dates, we now turn to determining whether and how investors react. We begin by calculating market-adjusted returns (raw return minus the return on the S&P 500) accumulated around the missed First Call expected report date.[16] Because investors cannot know with certainty that a firm is going to announce late until after midnight, and thus after the market closes on the expected report date, most of their reaction is likely to occur on the following day. However, some movement in price may be observed on the expected report date itself either because investors are revising their probabilities that the announcement will be late or because of leakage (possibly due to changes in the scheduled conference call). Furthermore, if the firm reports only one day late, market reaction to the earnings news will be included in the report day's return, confounding the effect of the announcement's being late. Thus, we cumulate market-adjusted returns over the expected announcement day and the following day only for firms reporting at least two days late ($N = 1{,}759$). The average two-day cumulative market-adjusted return for those firms is -0.30%, which is significantly different from zero at the 0.10 level (two-tailed t-test, $t = -1.88$).[17] This suggests that the market adjusts to a missed

[16] Similar results obtain when the CRSP value-weighted market index is used as the market adjustment.

[17] Three-day (days -1, 0, and $+1$, where day 0 is the expected report date) cumulative market-adjusted returns are similar to the two-day cumulative market-adjusted returns: the mean is -0.003, the median is 0.000, and the standard deviation is 0.066. The three-day mean cumulative market-adjusted returns are significantly different from zero at the 0.10 level

expected report date by moving prices downward, on average—an initial response that is consistent with the strong correlation between a missed report date and forthcoming bad earnings news.[18]

What is not yet clear, however, is whether investors continue to react in a manner that is consistent with our finding that actual earnings per share miss the consensus by an additional penny, on average, for each *additional* day the announcement is late.[19] Examining this issue is complicated by the fact that we cannot observe the market's revised expected report date given the firm is late.[20] One hypothesis is that investors cannot distinguish among late announcers; that is, they react to each day the firm fails to announce earnings in the same way, regardless of how late the firm actually turns out to be. In this case, we would expect that if another day passes and the firm has not announced, investors perceive it as bad news and reduce the firm's stock price in a similar manner for all late announcers. An alternative hypothesis is that investors can, at least partially, distinguish among late announcers. If so, we expect them to react to late announcements differently as the days pass for firms that end up announcing a different number of days late—reducing the price less on any given day for firms that they believe will ultimately report sooner. In fact, in the extreme, investors could act as if they have perfect foresight and can correctly infer how late a firm's report will be. Under that hypothesis, one would expect an "efficient" response by the market. That is, given that the firm missed its expected report date, the market fully anticipates the forthcoming news and so fully adjusts price on the missed expected report date. If this is the case, we should not observe additional adjustment to a continued reporting delay.

To test these hypotheses, we once again focus on the 1,759 announcements that were at least two days late and cumulate daily market-adjusted returns from the day before the expected report date through the day before earnings are announced. The first question of interest is whether

---

(two-tailed test, $t = -1.80$). For the 1,641 announcements that are only one day late, we observe a mean (median) market-adjusted return of 0.000 (−0.001) for the expected report date with a standard deviation of 0.039. This result supports our conjecture that in general the market waits until after the expected report date has completely passed to fully respond.

[18] Similar analysis using expected report dates from our naïve models yields very different results. Specifically, there is no significant response to missing the naïve 2 dates: mean market-adjusted returns accumulated over the missed day and the following day are essentially 0.000, $N = 3{,}808$. There is a significant and positive response to missing the naïve 1 dates: mean cumulative market-adjusted returns are approximately 0.002 ($t = 1.72$), $N = 2{,}608$. However, because more firms are classified as reporting one day early by naïve 1, cumulating returns over days 0 (the expected report date) and +1 may miss some of the response. Including day −1 yields insignificant mean cumulative market-adjusted returns.

[19] We thank Ilia Dichev for conversations that led to the analysis that follows.

[20] That is, we expect market participants to revise their probability distribution over report dates when they learn that the firm has missed its own expected report date and generate a new but unobservable expected report date.

TABLE 5

Cumulative Market-Adjusted Returns Between the Missed (Company's Own) Expected Report Date and the Day Before the Actual Report Date for Firms Reporting at Least Two Days Late[a]

Day Relative to the Expected Report Date[b]	N	Cumulative Market-Adjusted Returns				
		Mean	p-value[c]	Q1	Median	Q3
Day −1	1,759	−0.0002	0.77	−0.0150	−0.0008	0.0139
Day 0	1,759	−0.0016	0.18	−0.0211	−0.0005	0.0195
Day +1	1,759	−0.0029	0.07	−0.0274	−0.0004	0.0240
Day +2	1,242	−0.0026	0.20	−0.0288	−0.0016	0.0255
Day +3	878	−0.0069	0.02	−0.0348	−0.0049	0.0266
Day +4	705	−0.0096	0.01	−0.0415	−0.0055	0.0310
Day +5	532	−0.0110	0.02	−0.0463	−0.0051	0.0323
Day +6	417	−0.0116	0.03	−0.0496	−0.0051	0.0365
Days +7 or more	347	−0.0136	0.11	−0.0702	−0.0078	0.0537

[a]The sample consists of the 1,759 earnings announcements made at least two days after the company's own expected report date as recorded by First Call. Daily market-adjusted returns are cumulated between the day before the expected report date and the day before the actual announcement day. Daily raw returns are adjusted for the return on the S&P 500.

[b]The expected report date is the firm's own expected report date as recorded by First Call.

[c]The p-values for t-tests of the null hypothesis that mean cumulative market-adjusted returns are zero versus the alternative that they are not zero.

cumulative or daily market-adjusted returns differ across late announcing groups on a given day (day −1, day 0, etc.). F-tests indicate no significant difference in either return measure depending on how late the firm actually reports, with one exception: average daily market-adjusted returns two days after the expected report date. Because the probability of one spurious significant result is approximately 0.56 $(=1 - (.95)^{16})$, we interpret these results as indicating no significant pattern in market-adjusted returns across late reporting groups—an observation that is consistent with the hypothesis that investors cannot distinguish among late announcers. Thus, we treat all firms that have not reported by a particular day symmetrically.

Given this, we next examine cumulative market-adjusted returns for the entire group of (at least two days) late announcers during the reporting delay to determine whether there is further price adjustment as the delay lengthens. We present descriptive statistics for these returns in table 5, and we graph mean cumulative market-adjusted returns (CARs) in figure 2. As the table and figure indicate, the pattern for the means is reminiscent of the "day-late, penny-short" pattern in table 3 and figure 1: average CARs become more negative (as do unexpected earnings) as the announcement delay increases. Specifically, on the second day late, the average CAR is about −0.3%, dropping to about −0.7% on the third day late, and then down to about −1.0% by the fourth day late. The pattern for the medians is also reminiscent of the day-late, penny-short pattern, and they are all negative as well. Thus, for both unexpected earnings and CARs, the distribution is shifting left. There is, however, one difference in the distributions: the third quartile of CARs is rising, indicating that as the announcement delay grows, the variability in the distribution of CARs (both positive and negative) is also growing. These findings suggest that the market does not (is not able to)

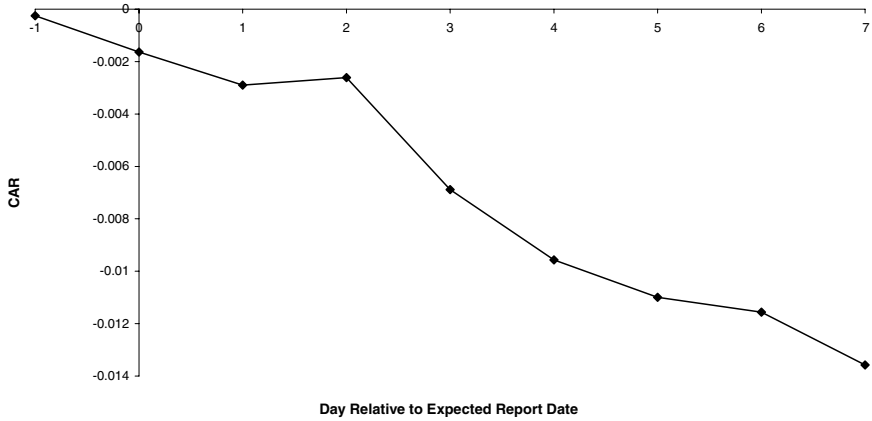

FIG. 2.— Average cumulative abnormal return following missed expected report dates. The sample consists of earnings announcements made at least two days after the company's expected report date as recorded by First Call. Daily market-adjusted returns are cumulated between the day before the expected report day (day −1) and the actual announcement day. Daily raw returns are adjusted for the return on the S&P 500 index. This figure is a graphical representation of the data presented in table 5.

fully adjust price on the missed expected report date but instead continues to revise its expectations as more time passes without an announcement. As a result, at least part of the market response to a late report occurs before the actual announcement date.

3.4.3. Stock Market Reaction to Earnings Reports. Although it is clear that the market anticipates, at least to some extent, the news in delayed earnings announcements, it is not clear whether it is fully anticipated. To examine this issue, we next compare the market's response to late earnings announcements with its response to early and on-time announcements by estimating the following regression model:

$$\begin{aligned} CAR_{i,t} = {} & \gamma_0 + \gamma_1 UE_{i,t} + \gamma_2 D_{i,t}^{late} + \gamma_3 D_{i,t}^{early} + \gamma_4 D_{i,t}^{negUE} + \gamma_5 \left(D_{i,t}^{late} * UE_{i,t}\right) \\ & + \gamma_6 \left(D_{i,t}^{early} * UE_{i,t}\right) + \gamma_7 \left(D_{i,t}^{negUE} * UE_{i,t}\right) + \gamma_8 \left(D_{i,t}^{late} * D_{i,t}^{negUE}\right) \\ & + \gamma_9 \left(D_{i,t}^{early} * D_{i,t}^{negUE}\right) + \gamma_{10} \left(D_{i,t}^{late} * D_{i,t}^{negUE} * UE_{i,t}\right) \\ & + \gamma_{11} \left(D_{i,t}^{early} * D_{i,t}^{negUE} * UE_{i,t}\right), \end{aligned}$$

where $CAR_{i,t}$ is the market-adjusted return for firm i in quarter t cumulated over the earnings announcement day (day −1), the *Wall Street Journal* announcement day (day 0), and the day after (day +1);[21] $UE_{i,t}$ is the

[21] The actual announcement day in the First Call database generally corresponds with the newswire broadcast day.

difference between actual earnings per share and First Call consensus forecasted earnings per share, scaled by share price 30 days before the actual report date, for firm i in quarter t; and $D_{i,t}^{late}$, $D_{i,t}^{early}$, and $D_{i,t}^{negUE}$ are dummy variables indicating whether firm i's announcement in quarter t is late, early, or contains negative unexpected earnings, respectively.[22] We present the estimation results in table 6.

We begin with a discussion of the full sample. For on-time announcers, both the intercept, γ_0, and the earnings response coefficient (ERC), γ_1, are positive and significant. However, the coefficient for the negative unexpected earnings dummy variable, γ_4, and the coefficient for the interaction term between the negative unexpected earnings dummy variable and unexpected earnings, γ_7, are both negative and significant, indicating an asymmetric response to good and bad earnings news for on-time announcements. Specifically, the intercept of the *CAR-UE* relation ($\gamma_0 + \gamma_4$) is lower and the slope ($\gamma_1 + \gamma_7$) is not as steep for bad news announcements, consistent with the findings of Basu [1997].

When we consider the effects of the late announcement dummy variable, we find that only γ_2, the coefficient for the late dummy variable, is significant (and negative). None of the coefficients for interaction terms involving the late dummy variable (γ_5, γ_8, and γ_{10}) is significant. This indicates that the intercept is lower for good news when the announcement is late relative to when it is on time ($\gamma_0 + \gamma_2$) and lower still for bad news ($\gamma_0 + \gamma_2 + \gamma_4$). However, the slope of the relation is the same as it is for on-time announcements of both good and bad news. The common ERCs indicate that market responds to a given level of unexpected earnings in the same manner regardless of whether the announcement is late or on time, in spite of its having already adjusted prices (presumably in anticipation of the news) during the reporting delay for late announcements.

The coefficient for the early dummy variable, γ_3, is negative but only marginally statistically different from zero ($t = 1.76$). Thus, there is weak evidence that the intercept is lower for good earnings news when it is announced early ($\gamma_0 + \gamma_3$) relative to on time. It is lower still for bad earnings news when it is announced early ($\gamma_0 + \gamma_3 + \gamma_4 + \gamma_9$, where γ_4 is significant and negative and γ_9 is zero) relative to on time and relative to good earnings news that is announced early. Two of the coefficients on interaction terms involving the early dummy variable, γ_6 and γ_{11}, are significant at the 0.01 level. The variable γ_6 is significant and positive, γ_{11} is significant and negative, and $\gamma_6 + \gamma_{11} > 0$. This means that the slope is steeper for good news announced early ($\gamma_1 + \gamma_6$) relative to good news announced on time, and that it is slightly steeper for bad news announced early ($\gamma_1 + \gamma_6 + \gamma_7 + \gamma_{11}$) relative to bad news announced on time. Said differently, the market

[22] Although our focus is on determining the effect of an early or late announcement on the market response to earnings news, we include a dummy variable for negative unexpected earnings (dummy variable = 1 if unexpected earnings are negative) to control for the possible asymmetric market response to positive and negative earnings surprises (see Basu [1997]).

TABLE 6

Regression of Market-Adjusted Security Returns on Unexpected Earnings and Report-Date Forecast Errors[a]

Model:

$$CAR_{i,t} = \gamma_0 + \gamma_1 UE_{i,t} + \gamma_2 D_{i,t}^{late} + \gamma_3 D_{i,t}^{early} + \gamma_4 D_{i,t}^{negUE} + \gamma_5 \left(D_{i,t}^{late} * UE_{i,t} \right) + \gamma_6 \left(D_{i,t}^{early} * UE_{i,t} \right)$$
$$+ \gamma_7 \left(D_{i,t}^{negUE} * UE_{i,t} \right) + \gamma_8 \left(D_{i,t}^{late} * D_{i,t}^{negUE} \right) + \gamma_9 \left(D_{i,t}^{early} * D_{i,t}^{negUE} \right)$$
$$+ \gamma_{10} \left(D_{i,t}^{late} * D_{i,t}^{negUE} * UE_{i,t} \right) + \gamma_{11} \left(D_{i,t}^{early} * D_{i,t}^{negUE} * UE_{i,t} \right)$$

Coefficient	Full Sample[b]	Profits[b]	Losses[b]
γ_0	0.013	0.013	0.010
(t-statistic)	(20.27)***	(18.92)***	(2.94)***
γ_1	0.441	1.256	0.103
(t-statistic)	(5.68)***	(9.48)***	(0.85)
γ_2	−0.007	−0.004	−0.020
(t-statistic)	(−3.63)***	(−2.23)**	(−2.55)**
γ_3	−0.003	−0.000	−0.025
(t-statistic)	(−1.76)*	(−0.26)	(−2.78)***
γ_4	−0.029	−0.027	−0.028
(t-statistic)	(−25.32)***	(−21.31)***	(−6.55)***
γ_5	0.261	−0.202	0.179
(t-statistic)	(1.10)	(−0.72)	(0.30)
γ_6	1.024	−0.246	3.977
(t-statistic)	(4.49)***	(−0.95)	(5.64)***
γ_7	−0.413	−1.083	−0.086
(t-statistic)	(−5.10)***	(−4.88)***	(−0.69)
γ_8	−0.001	0.004	0.003
(t-statistic)	(−0.45)	(1.09)	(0.33)
γ_9	0.000	−0.001	0.019
(t-statistic)	(0.04)	(−0.39)	(1.69)*
γ_{10}	−0.273	1.084	−0.189
(t-statistic)	(−1.15)	(1.96)*	(−0.31)
γ_{11}	−1.008	0.238	−3.978
(t-statistic)	(−4.31)***	(0.64)	(−5.62)***
N	25,508	22,008	3,362
Adj. R^2	0.044	0.044	0.035

[a]The sample consists of 25,508 quarterly earnings announcements made from January 1995 to July 1998, contained in the First Call expected report date database, with share price on Compustat and coverage on the CRSP database. Variables are defined as follows. $CAR_{i,t}$ is the cumulative market-adjusted return for firm i in quarter t during the three-day earnings announcement event period. Daily market-adjusted returns are calculated by adjusting raw returns for the return on the S&P 500. $UE_{i,t}$ is the difference between actual earnings per share for firm i in quarter t and First Call consensus forecasted earnings per share, scaled by share price 30 days before the actual report date. $D_{i,t}^{late}$ ($D_{i,t}^{early}$) is a dummy variable that takes the value of 1 if the report is late (early) relative to management's expected report date as reported in the First Call database, and 0 otherwise. $D_{i,t}^{negUE}$ is a dummy variable that takes the value of 1 if unexpected earnings are negative, and 0 otherwise.

[b]The full sample consists of 25,508 quarterly earnings announcements made from January 1995 to July 1998. The profits subsample consists of the 22,008 announcements with earnings per share >0. The losses subsample consists of the 3,362 announcements with earnings per share <0. The 138 announcements with earnings per share = 0 are included in the full sample only.

***Significant at the 0.01 level, two-tailed test.

**Significant at the 0.05 level, two-tailed test.

*Significant at the 0.10 level, two-tailed test.

appears to "reward" early announcements of good news and "punish" early announcements of bad news by responding more strongly to a given level of unexpected earnings than it would have had the announcement been made on time.

Hayn [1995], Lipe, Bryant, and Widener [1998], and Brown [2001] document a differential market response to unexpected earnings for firms reporting profits and losses, without controlling for the timing of the announcement. This suggests the possibility that our conclusions about the market's response to early, on-time, and late announcements may be sensitive to whether the firms report profits or losses. To examine this, we reestimate the regression model separately for firms reporting profits ($N = 22{,}008$) and losses ($N = 3{,}362$) and present the results in the two right columns of table 6. We draw several conclusions from the two additional regressions.

As the table indicates, the intercept results for the full sample generally hold in the profits and losses subsamples. However, the pattern of ERCs is sensitive to whether the firm reports a profit or loss, partly because the ERC is larger for on-time firms reporting profits rather than losses, consistent with prior research. In particular, the increase in ERC for early announcements seems to be confined to firms reporting losses (and is more pronounced when those firms report good news). The (approximate) equality of ERCs for late and on-time announcers remains for firms reporting good news, regardless of whether they report profits or losses. However, there is weak evidence that the market responds more to bad news reported by late, profitable firms relative to on-time, profitable firms.

It is interesting that the asymmetric response to firms reporting profits and losses does not seem to be strongly affected by when the firm reports relative to management's expectations. The usual result, that the market responds more to news from firms reporting profits, holds for both on-time and late announcers as well as for early announcers reporting bad news. In our sample, however, the market responds more to good news reported early by loss firms than to good news reported early by profitable firms.

When considered with the results in the previous section, the regression results in this section indicate that the market's response to an earnings announcement depends in important ways on whether the announcement is made early, on time, or late relative to the firm's own expected report date. In particular, if the announcement is late, the market partially responds during the delay and then again when the firm finally reports. Furthermore, its response to the magnitude of the good or bad news reported is generally the same for on-time and late announcers, indicating a stronger response overall to news that is reported late. If the announcement is early, there is evidence that the market also responds more aggressively to a given level of unexpected earnings, regardless of its good or bad nature. Thus, the delay or acceleration of an earnings announcement appears to have an effect on the market's perception of the information content in the numbers being reported.

4. Summary and Conclusions

In 1995, First Call began to collect voluntarily provided management expectations of their firm's quarterly earnings report dates. We find that the fraction of announcements made on management's expected report dates is high (74%) and that it has risen monotonically from 59% in 1995 to 81% in 1998. In contrast, for our sample period, expected report dates derived from extrapolative models perform poorly, with an on-time rate no greater than 33%. Thus, we conclude that management's expected report dates contain more timely information and information available to management that cannot be incorporated in naïve dates.

When management misses its own expected report date, we find that reported earnings contain bad news on average and that the later the report, the worse the news. In particular, the average earnings surprise is more negative by approximately one cent for each day the report is delayed. We find no relation between earnings surprises and report dates if the announcement is early. We also find that late reporting firms tend to have lighter analyst coverage relative to those that report early or on time and that those that report on time have the heaviest analyst coverage.

It is surprising that 91% of the time, analysts do not alter their (public) forecasts of earnings per share in response to a missed expected report date. However, in contrast to analysts, investors generally do respond; average market-adjusted returns cumulated over the missed expected report date and the next trading day are negative and significantly different from zero. Furthermore, when late news is finally announced, the market responds further, suggesting that the news was not fully anticipated.

Our analysis suggests two potential avenues for future research. First, empirical researchers may find that management's own expected report dates are a useful alternative source of information for testing theoretical models of voluntary disclosure. Second, analytic researchers may find it useful to extend existing models of voluntary disclosure to include an examination of why managers voluntarily provide such expectations and why there is information associated with a missed expected report date.

REFERENCES

BASU, S. "The Conservatism Principle and the Asymmetric Timeliness of Earnings." *Journal of Accounting and Economics* 24 (1997): 3–37.

BEGLEY, J., AND P. FISCHER. "Is There Information in an Earnings Announcement Delay?" *Review of Accounting Studies* 3 (1998): 347–63.

BOWEN, R.; M. JOHNSON; T. SHEVLIN; AND D. SHORES. "Determinants of the Timing of Quarterly Earnings Announcements." *Journal of Accounting, Auditing and Finance* 7 (1992): 395–422.

BROWN, L. "A Temporal Analysis of Earnings Surprises: Profits Versus Losses." *Journal of Accounting Research* 39 (2001): 221–41.

CHAMBERS, A., AND S. PENMAN. "Timeliness of Reporting and the Stock Price Reaction to Earnings Announcements." *Journal of Accounting Research* 22 (1984): 21–47.

FRANCIS, J.; D. PHILBRICK; AND K. SCHIPPER. "Shareholder Litigation and Corporate Disclosures." *Journal of Accounting Research* 32 (1994): 137–64.

GIVOLY, D., AND D. PALMON. "Timeliness of Annual Earnings Announcements: Some Empirical Evidence." *The Accounting Review* 57 (1982): 486–508.

HAYN, C. "The Information Content of Losses." *Journal of Accounting and Economics* 20 (1995): 125–53.

IP, G. "Many Traders Ignore Official Estimate on Earnings, Act on Whispered Number." *Wall Street Journal* (January 16, 1997): C1.

KROSS, W. "Earnings and Announcement Time Lags." *Journal of Business Research* 9 (1981): 267–80.

KROSS, W. "Profitability, Earnings Announcement Time Lags and Stock Price." *Journal of Business, Finance and Accounting* 9 (1982): 313–28.

KROSS, W., AND D. SCHROEDER. "An Empirical Investigation of the Effect of Quarterly Earnings Announcement Timing on Stock Returns." *Journal of Accounting Research* 22 (1984): 153–76.

LIPE, R.; L. BRYANT; AND S. WIDENER. "Do Nonlinearity, Firm-Specific Coefficients, and Losses Represent Distinct Factors in the Relation between Stock Returns and Accounting Earnings?" *Journal of Accounting and Economics* 25 (1998): 195–214.

SKINNER, D. "Why Do Firms Voluntarily Disclose Bad News?" *Journal of Accounting Research* 32 (1994): 38–61.