# Earnings and Announcement Time Lags

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*This research is addressed to the issue of whether films that generate lower (higher) than expected earnings figures release those figures to the public later (earlier) than expected. Earnings expectations were gathered from the Value Line Investment Service and expectations of a firm's earnings announcement date were generated via each of five simple models. The results indicate that lower (higher) actual earnings relative to forecasted earnings are most likely to be released to the public later (earlier) than expected. Thus, investors might have the opportunity to act on the anticipation of bad news before its actual announcement to the public.*

The idea that firms should release their annual reports to the public as soon as possible after the end of the fiscal year has theoretical and practical support. In an effort to ensure that accounting information is communicated in a timely manner the Securities and Exchange Commission (SEC) requires the filing of quarterly reports within 45 days from the end of the fiscal quarter and annual reports within 90 days from the fiscal year end. (Schedules required by regulation S-X can be filed within 120 days after the fiscal year end.) Presumably, one of the reasons for early reporting requirements is to prevent earnings information from leaking to a few selected individuals or groups before public announcement, thereby destroying the fair game property of the capital markets.

Although most firms report the result of their operations to the public within three months after the end of the fiscal year, it is well known that the time lag between the fiscal year end and the earnings announcement date is much less than three months for many firms. (Ball and Brown [2] found that 75% of calendar year firms announced their annual earnings by 21 February.) Previous articles have suggested that the cross-sectional or time series diversity in the time lag may be systematic. Specifically, it was posited that lower than expected earnings (bad news) might be reported less rapidly than higher than expected earnings (good

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news) [4]. However, little research has been conducted on this issue. According to Fama and Laffer (FL) [9], a delay in the disclosure of bad news is affected by the concern of management for the firm's shareholders.

Since good news would eventually come to light anyway, the shareholders of the firm can secure net expected gains only from bad news, i.e., by selling out before the news becomes publicly available. Thus according to the FL scenario, the firm simply releases positive information and either suppresses or delays the release of negative information, thereby giving its shareholders the opportunity to divest themselves of the firm's shares before the information reaches the market. The shares can then be repurchased *after* the price decline caused by the release of bad news.

The potential gains to shareholders from this scenario can be realized if the shareholders interpret an announcement delay as a "silent signal" from management that bad news is on the horizon. It is also necessary that other traders in the market are either unaware of a reporting delay or do not interpret a delay as a signal of bad news. (If other traders intercept the signal, the share price of the firm would drop before the shareholders could act on the signal.)

Certainly, surreptitious signaling is not the only cause for a late announcement. Interviews with the managers of various firms by Lurie and Pastena [10, p. 59] in their study on 8K disclosures to the SEC unearthed another reason:

> Certain financial officers believe that their corporate information systems are not adequate to prevent division managers from suppressing unfavorable information until the last possible minute in hopes of netting it out against favorable information.

Thus, an announcement might be delayed through the blockage of internal information flows by division managers who face the prospect of reporting bad news to their superiors. However, a delay in disclosure, either intentional or inadvertent, could be a sign of bad news. Thus, the investor who finds that the expected earnings announcement date has been met with a stoney silence on the part of the company officials might sell off his investment in that particular company or sell short its shares in anticipation of a later announcement of bad news.

The objective of this study is to establish whether firms systematically report bad news later than good news. Good news (bad news) is defined as the announcement of an earnings figure that is higher (lower) than an analyst forecast of that figure. Expectations of each firm's earnings announcement date is generated via each of five simple models. The earnings announcement date is defined as early (late) if it falls before

(after) the date projected by a given model. If the earnings announcement time lag is a function of the type of news reported, then early (late) reporting firms should be characterized by higher (lower) than expected profit levels.

## Previous Research

At least two studies have previously been conducted on the relationship between earnings and the announcement time lag. The first was by Chapman [7] on 90 American firms from the ten largest industry classifications. The second was by Dyer and McHugh [8] on 120 Australian firms. The results of both studies are substantially in agreement: no significant relationship seems to exist between profitability and announcement time lags.

The study by Chapman was conducted on sample data for one year, 1971. Using earnings forecasts of financial analysts, firms were categorized according to the ratio of actual earnings divided by forecasted earnings ($A/F$), as reporting good news ($A/F > 1$), no news ($A/F = 1$), or bad news ($A/F < 1$). The lag period for any given firm was computed as the number of calendar days between the fiscal year end and the date that the income number was announced in the *Wall Street Journal*. A one-way analysis of variance did not indicate a significant difference in the lag periods of firms categorized as reporting good, bad, or no news.

The Dyer and McHugh (DM) study was conducted on data taken on Australian firms for the years 1965–1971. The time lag that was the focus of the DM study was the total lag from year end to the date that published financial reports were presented to the stock exchange. (The release date of the annual report was, on average, 37 days after the preliminary earnings announcement date.) Rank correlations between changes in the rate of return on investment and changes in total lag were significantly greater than zero for only two of the five sample years. These results led DM to conclude that the "[t]ests of the relation between relative profitability and total lag surprisingly did not revel any meaningful associations."

## Procedure

The approach of this study extends that followed by Chapman and by DM. Chapman focused on the length of the time lag; DM focused on changes in the time lag length. This paper, like DM, focuses on time lag

change. However, time lag is defined as it is in Chapman, i.e., the number of days between the end of the year and the preliminary earnings announcement. Chapman tested only 1971; four years of data (1972–1975) are included in this study. Finally, both Chapman and DM used only one expectation for the earnings announcement date; five expectation models are included in this study. The sample consists only of American firms that are listed on the New York Stock Exchange.

The following procedure is utilized. First, a firm is categorized as reporting early or late by comparing the actual earnings announcement date with an expected date which is generated by an expectation model. Five different expectation models are used, and every firm is categorized by using each of the five models. Second, the ratio of actual to forecasted earnings is computed for each firm for each sample year. The forecast is an analyst forecast which is secured from the Value Line Investment Survey subsequent to the announcement of third quarter earnings. If relative profitability is related to the time lag, one would expect that low (high) actual to forecast ratios are associated with late (early) earnings announcements. The Mann–Whitney U and $\chi^2$ tests are used to assess whether earnings announcement time lags vary systematically with the type of news released.

**The Sample** An initial random sample of 200 firms that are listed on the NYSE was selected. Firms included in the study had to meet the following additional conditions:

1. Annual earnings from 1972–1975 were available on the COMPUSTAT tapes;
2. Earnings announcement dates for fiscal years 1970–1975 were available in the *Wall Street Journal*;
3. An analyst forecast of earnings made after the announcement of third quarter earnings was available in the Value Line Investment Survey for the four years, 1972–1975.

After applying the above screening procedures to the initial sample of firms, the final research sample was reduced to 108 firms which comprise a total of 432 observations.

**Lag Expectation Models** Since no research has been conducted on the time series behavior of earnings announcement lags, there is reason to question any proposed pattern that is attributed to these yearly lags. Therefore, five different patterns are proposed and tested with the expectation that one or more are sufficiently descriptive of the actual lag pattern so that meaningful test results can be obtained.

Each of the following five lag expectation models was used to categorize each observation as early or late:

1. Time series random walk,

$$E\,(\mathrm{LAG}_{it}) = \mathrm{LAG}_{it-1};$$

2. Cross-sectional random walk,

$$E\,(\mathrm{LAG}_{it}) = \mathrm{LAG}_{mt} + (\mathrm{LAG}_{it-1} - \mathrm{LAG}_{mt-1});$$

3. Pure mean reversion,

$$E\,(\mathrm{LAG}_{it}) = 1/N \sum_{j=1}^{N} (\mathrm{LAG}_{it-j});$$

4. Random walk with drift,

$$E\,(\mathrm{LAG}_{it}) = \mathrm{LAG}_{it-1} + 1/N \sum_{j=1}^{N} (\mathrm{LAG}_{it-j} - \mathrm{LAG}_{it-j-1});$$

5. Moving average mean reversion,

$$E\,(\mathrm{LAG}_{it}) = \mathrm{LAG}_{it-1} - 1/N \sum_{j=1}^{N} (\mathrm{LAG}_{it-j} - \mathrm{LAG}_{it-j-1});$$

where

$E(\mathrm{LAG}_{it})$ = expected number of days between the fiscal year end and the earnings announcement date for firm $i$ in period $t$,
$\mathrm{LAG}_{it}$ = actual number of days between the fiscal year end and the earnings announcement date for firm $i$ in period $t$,
$\mathrm{LAG}_{mt}$ = the average number of days between the fiscal year end and the earnings announcement date in period $t$ for all firms in the sample,
$N$ = number of periods used in the estimation process.

Model 1 is the most obvious model and is intuitively appealing. Model 2 incorporates the possibility that all firms might face reporting delays owing to some common factor (e.g., informational compliance with a new SEC reporting requirement). Models 3–5 incorporate more than just the immediate preceeding year in the expectation. The idea of Model 3 is that each firm gravitates toward a particular expected announcement date, which is estimated as the average of the previous announcement

**Table 1**: Frequency Distribution of the Difference Between the Actual Announcement Date and the Expected Announcement Date for Each Expectation Model

| Panel A–Model 1 | | | | | |
|---|---|---|---|---|---|
| **Year** | **1972** | **1973** | **1974** | **1975** | **Total** |
| ⩾14 days early | 9 | 4 | 4 | 10 | 27 |
| 7–13 days early | 16 | 8 | 7 | 10 | 41 |
| 0–6 days early | 46 | 46 | 43 | 55 | 190 |
| 1–6 days late | 32 | 38 | 29 | 18 | 117 |
| 7–13 days late | 4 | 10 | 13 | 10 | 37 |
| ⩾14 days late | 1 | 2 | 12 | 5 | 20 |
| Total | 108 | 108 | 108 | 108 | 432 |
| **Panel B–Model 2** | | | | | |
| **Year** | **1972** | **1973** | **1974** | **1975** | **Total** |
| ⩾14 days early | 8 | 4 | 6 | 10 | 28 |
| 7–13 days early | 6 | 8 | 12 | 10 | 36 |
| 0–6 days early | 25 | 46 | 45 | 46 | 162 |
| 1–6 days late | 52 | 38 | 25 | 26 | 141 |
| 7–13 days late | 14 | 10 | 8 | 10 | 42 |
| ⩾14 days late | 3 | 2 | 12 | 6 | 23 |
| Total | 108 | 108 | 108 | 108 | 432 |
| **Panel C–Model 3** | | | | | |
| **Year** | **1972** | **1973** | **1974** | **1975** | **Total** |
| ⩾14 days early | 16 | 12 | 7 | 7 | 42 |
| 7–13 days early | 7 | 9 | 11 | 9 | 36 |
| 0–6 days early | 46 | 47 | 34 | 42 | 169 |
| 1–6 days late | 28 | 26 | 35 | 35 | 124 |
| 7–13 days late | 7 | 8 | 6 | 9 | 30 |
| ⩾14 days late | 4 | 6 | 15 | 6 | 31 |
| Total | 108 | 108 | 108 | 108 | 432 |
| **Panel D–Model 4** | | | | | |
| **Year** | **1972** | **1973** | **1974** | **1975** | **Total** |
| ⩾14 days early | 13 | 4 | 5 | 13 | 35 |
| 7–13 days early | 15 | 11 | 8 | 7 | 41 |
| 0–6 days early | 30 | 33 | 34 | 51 | 148 |
| 1–6 days late | 32 | 29 | 26 | 18 | 105 |
| 7–13 days late | 10 | 18 | 19 | 13 | 60 |
| ⩾14 days late | 8 | 13 | 16 | 6 | 43 |
| Total | 108 | 108 | 108 | 108 | 432 |

Table 1: (Continued)

| | Panel E–Model 5 | | | | |
|---|---|---|---|---|---|
| Year | 1972 | 1973 | 1974 | 1975 | Total |
| ⩾14 days early | 16 | 9 | 6 | 9 | 40 |
| 7–13 days early | 7 | 7 | 13 | 8 | 35 |
| 0–6 days early | 46 | 50 | 38 | 60 | 194 |
| 1–6 days late | 28 | 23 | 23 | 19 | 93 |
| 7–13 days late | 7 | 13 | 14 | 8 | 42 |
| ⩾14 days late | 4 | 6 | 14 | 4 | 28 |
| Total | 108 | 108 | 108 | 108 | 432 |

dates, and the actual announcement is defined as early or late when compared to that estimated date. Models 4 and 5 incorporate drift factors into Models 1 and 3, respectively.

**Lag Change and Profitability Data** All firms for each of the four sample years (1972–1975) were categorized as reporting early or late using each of the five expectation models developed previously. If the actual announcement date was later in the calendar year than was the expected announcement date, then the firm was categorized as a late reporting firm; otherwise, the firm is categorized as an early reporting firm.

The distribution of the differences between the actual and the expected announcement dates for each year and for each expectation model is presented in Table 1. As can be readily seen, the distributions are similar across all years and across all expectation models. Also, one should note that the vast majority of firms report within one week (early or late) of the expected date. Panel A of Table 1 shows that over 70% of the 432 earnings announcements were made within one week of the earnings announcement date of the preceeding year. Hence, any systematic relationship between earnings and lag changes might be difficult to detect. Thus, in addition to an analysis of the total sample, an analysis is conducted on the subsample that deviated from expectations by one week or more.

Earnings forecasts were obtained for each firm from the Value Line Investment Survey for each sample year. Analysts' forecasts, as opposed to naive or statistical models, were used to compute the $A/F$ ratios because of the mounting evidence that the earnings forecasts of

analysts are more accurate than many naive and statistical prediction models [1, 3, 5, 6]. The forecasts were made after the third quarter approximately one or two months before the actual annual earnings announcement. For each firm year, the actual-to-forecasted ($A/F$) earnings ratio was used to categorize a firm as reporting good or bad news. If earnings are higher (lower) than anticipated, the $A/F$ ratio exceeds (is less than) one. (There is a problem in the interpretation of the $A/F$ ratio if the actual or forecasted earnings is negative. For purposes of this study, whenever both the actual and forecasted earnings levels were negative, the sign of the $A/F$ ratio was disregarded and its inverse was used for testing purposes. For example, if actual EPS was minus \$4.00 while the forecasted EPS was minus \$2.00, the inverse of \$4.00/\$2.00, or 0.500 was used. This was the case for six observations over the four sample years. When the signs of the actual EPS and the forecasted EPS differed, then the $A/F$ ratio was arbitrarily set at zero if actual EPS were negative, and 2.000 if forecasted EPS were negative. This was the case for eight observations over four years. A total of 432 observations were included for testing.) If bad news ($A/F < 1$) is reported late, then late reporting firms should have lower $A/F$ ratios than do early reporting firms.

## Results

The number of observations in each cell, the Mann–Whitney test statistics, and the $\chi^2$ test statistic are reported in Table 2 for each year for each of the five expectation models. The test statistics for Model 2 (panel B) are not significant for the total sample or any sample year. Similarly, Model 4 (panel D) did not perform well, being significant for 1975 only. However, the results for Model 1 are significant for the total sample and for years 1972 and 1975. With respect to Model 1 (panel A) there were a total of 432 observations. Of these, 140 reported good news early, and 118 reported bad news early. For those firms that reported late, 81 released good news and 93 announced bad news. The $\chi^2$ statistic is not significant on these observations, but the Mann–Whitney statistic, based on a relative ranking of the $A/F$ ratios of early and late firms, indicates that late reporting firms have significantly lower ratios of actual to forecasted earnings. Model 3 (panel C) also performed well, yielding significant differences for the total sample and for 1973, 1974, and 1975. Model 5 (panel E) also had significant results for the total sample and for years 1973 and 1975. These results are generally consistent with the hypothesis that earnings announcement time lags are a function of the type of news released.

Since it is possible for the expected announcement date to fall on a weekend or a mid-week holiday, some announcements would have been classified as late according to one or more expectation models when, in fact, the earnings were released on the earliest possible *business day* after the expected *calendar date*. Also, since the late/early classification is to a great extent dependent upon the expectation model that is used, a delay of only a few days in reporting of earnings may not be as clear a signal of bad news as a delay of weeks. In an effort to ascertain whether the expectation models are better discriminators when a less ambiguous signal is received, the sample was partitioned into two groups—one that contains observations whose announcements were within six days of the expected announcement date and one comprised of all other observations, which were at least one week early or one week late.

Each of the two subpopulations were tested using each of the five expectation models. The results are reported in Table 3 and Table 4. Table 3 contains the results for those firms whose actual announcement date differed from the expected announcement date by at least seven calendar days. The $\chi^2$ statistic is significant for Models 1, 3, and 5, and the Mann–Whitney statistic is significant for all models except Model 4. In general the test statistics are greater for the subpopulation than they are for the total population. Table 4 contains the results for the subpopulation that reported within six days of the expected announcement date. Unlike the results for Tables 2 and 3, the $\chi^2$ and Mann–Whitney statistics are generally not significant. Only Model 3 (pure mean revision) was able to effectively discriminate between good news and bad news firms based upon the small earnings announcement time lag of those firms.

The results appear to show that there is a systematic relationship between the type of news released and the earnings announcement time lag. More specifically, when the actual earnings announcement date differed from the expected date of earnings announcement by at least one week, lower (higher) than expected profits were more likely to be announced late (early).

The results are consistent with conventional wisdom but contrary to the results of previous research. The difference in results between this paper and the DM study probably lies in the classification of a firm as reporting early or late in the context of the change in the date of the preliminary announcement rather than in the DM context of the annual report release date. Since the earnings figure in the annual report seldom differs from that contained in the preliminary announcement, the actual figure is already public before the annual report is released. Thus, there is no rationale in withholding the annual report, and a delay in its release

Table 2: Type of Firm (Early/Late) Versus Type of News Released (Good/Bad) for Each of Five Expectation Models

| | | | | | |
|---|---|---|---|---|---|
| | | **Panel A–Model 1** | | | |
| **Year** | **1972** | **1973** | **1974** | **1975** | **Total** |
| Sample Size | 108 | 108 | 108 | 108 | 432 |
| Number of Firms | | | | | |
| early/good | 46 | 34 | 19 | 41 | 140 |
| early/bad | 25 | 24 | 35 | 34 | 118 |
| late/good | 21 | 27 | 22 | 11 | 81 |
| late/bad | 16 | 23 | 32 | 22 | 93 |
| Mann-Whitney Test Statistic | 1.651* | 0.930 | −0.347 | 1.754* | 2.395* |
| $\chi^2$ Statistic | 0.544 | 0.773 | 0.692 | 3.367* | 2.174 |
| | | **Panel B–Model 2** | | | |
| **Year** | **1972** | **1973** | **1974** | **1975** | **Total** |
| Sample Size | 108 | 108 | 108 | 108 | 432 |
| Number of Firms | | | | | |
| early/good | 23 | 34 | 23 | 35 | 115 |
| early/bad | 16 | 24 | 40 | 31 | 111 |
| late/good | 44 | 27 | 18 | 17 | 106 |
| late/bad | 25 | 23 | 27 | 25 | 100 |
| Mann-Whitney Test Statistic | 0.346 | 0.930 | 0.168 | 0.895 | 0.612 |
| $\chi^2$ Statistic | 0.774 | 0.773 | 0.867 | 1.156 | 0.000 |
| | | **Panel C–Model 3** | | | |
| **Year** | **1972** | **1973** | **1974** | **1975** | **Total** |
| Sample Size | 108 | 108 | 108 | 108 | 432 |
| Number of Firms | | | | | |
| early/good | 45 | 43 | 22 | 33 | 143 |
| early/bad | 24 | 25 | 30 | 25 | 104 |
| late/bad | 22 | 18 | 19 | 19 | 78 |
| late/bad | 17 | 22 | 37 | 31 | 107 |
| Mann-Whitney Test Statistic | 1.187 | 1.059 | 1.829* | 1.285 | 3.099** |
| $\chi^2$ Statistic | 0.489 | 2.706* | 0.487 | 3.121* | 9.858** |
| | | **Panel D–Model 4** | | | |
| **Year** | **1972** | **1973** | **1974** | **1975** | **Total** |
| Sample Size | 108 | 108 | 108 | 108 | 432 |
| Number of Firms | | | | | |
| early/good | 36 | 26 | 16 | 39 | 117 |
| early/bad | 22 | 22 | 31 | 32 | 107 |
| late/good | 31 | 35 | 25 | 13 | 104 |
| late/bad | 19 | 25 | 36 | 24 | 104 |

Table 2: (Continued)

| | | | | | |
|---|---|---|---|---|---|
| Mann-Whitney Test Statistic | 1.029 | 0.476 | −0.985 | 1.674* | 1.460 |
| $\chi^2$ Statistic | 0.037 | 0.057 | 0.288 | 3.066* | 0.135 |
| | | **Panel E–Model 5** | | | |
| **Year** | **1972** | **1973** | **1974** | **1975** | **Total** |
| Sample Size | 108 | 108 | 108 | 108 | 432 |
| Number of Firms | | | | | |
| early/good | 45 | 42 | 20 | 42 | 149 |
| early/bad | 24 | 24 | 37 | 35 | 120 |
| late/good | 22 | 19 | 21 | 10 | 72 |
| late/bad | 17 | 23 | 30 | 21 | 91 |
| Mann-Whitney Test Statistic | 1.187 | 1.503 | 0.160 | 1.399 | 2.299* |
| $\chi^2$ Statistic | 0.489 | 2.826* | 0.205 | 3.550* | 4.673* |

*Significant at $p = .05$.
**Significant at $p = .01$.

could be indicative of a printing delay, a delay in obtaining the signature of the auditor, or other causes unrelated to the earnings per se. Differences in results between this study and DM could also have been caused by the manner in which the firms were categorized as good or bad news firms. This study used the ratio of actual to forecasted earnings; DM used the accounting rate of return.

The difference in results between this paper and the Chapman paper is probably due to (1) focusing on reporting lag changes over time for each firm rather than lag differences across all firms, and (2) the incorporation of more sample years. It is quite possible that cross-sectional lag differences could be influenced more by industry or firm characteristics than profit figures. The very large or highly divisionalized firm might, all other things equal, report later than smaller or highly centralized firms because of the complexity of the internal information systems of the larger firms. If this is the case, some firms would generally report later than others, and any cross-sectional comparison of earnings announcement time lags will pick up these *inter*firm differences while obscuring the *intra*firm differences. The utilization of only one sample year can also present problems. For instance, economic movements in any one year can have a drastic effect on data inputs, such as analyst forecasts, and obscure the hypothesized relationship between variables. (For example, Barefield and Comiskey [3, p. 244] found that the average

**Table 3**: Type of Firm (Early/Late) Versus Type of News Released (Good/Bad) for Subpopulation that Reported at Lease One Week Early/Late

| | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 |
|---|---|---|---|---|---|
| Total Number of Observations | 125 | 129 | 139 | 179 | 145 |
| Early Firms | 68 | 64 | 78 | 76 | 75 |
| Good news | 40 | 35 | 49 | 36 | 43 |
| Bad news | 28 | 29 | 29 | 40 | 32 |
| Late Firms | 57 | 65 | 61 | 103 | 70 |
| Good news | 20 | 26 | 26 | 48 | 26 |
| Bad news | 37 | 39 | 35 | 55 | 44 |
| Mann-Whitney Test Statistic | 3.081* | 2.214* | 2.367** | 1.077 | 3.286** |
| $\chi^2$ Test Statistic | 6.080** | 1.946 | 4.837* | 0.002 | 5.136* |

*Significant at $p = 0.5$ (one tailed test).
**Significant at $p = .01$ (one tailed test).

**Table 4**: Type of Firm (Early/Late) Versus Type of News Released (Good/Bad) for Subpopulation that Reported Within Six Days of Expected Date

| | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 |
|---|---|---|---|---|---|
| Total Number of Observations | 307 | 303 | 293 | 253 | 287 |
| Early Firms | 190 | 162 | 169 | 148 | 194 |
| good news | 100 | 80 | 94 | 81 | 106 |
| bad news | 90 | 82 | 75 | 67 | 88 |
| Late Firms | 117 | 141 | 124 | 105 | 93 |
| good news | 61 | 80 | 52 | 56 | 46 |
| bad news | 56 | 61 | 72 | 49 | 47 |
| Mann–Whitney Test Statistic | 0.7579 | −0.7631 | 2.031* | 0.9538 | 0.2074 |
| $\chi^2$ Test Statistic | 0.001 | 1.355 | 4.825* | 0.008 | 0.486 |

*Significant at $p = .05$ (one tailed test).
**Significant at $p = .01$ (one tailed test).

earnings forecast error of analysts was 50% higher in 1970, a year of general economic downturn, than for the average of the other five sample years.)

## Conclusions

Consistent with conventional wisdom, but contrary to previous research, it was ascertained that late earnings announcements are more likely to contain bad news than announcements that are early. Although the results are significant for three of five lag expectation models used on the composite sample, the results are more emphatic when the actual announcement date differs from the expected date by one week or more. For the announcements that were made within a week of the expected date, significant results could be obtained for only one of the five expectation models.

The results of this study could be due to an intrafirm information blockage, or purposeful action by the firm which allows its shareholders to sell out before bad news is announced, or for other unknown reasons. But irrespective of the cause, the importance to investors is clear. It might be possible to act upon impending bad news *before* its public announcement. Whether investors can earn abnormal security returns by selling short late announcing stocks, or whether the securities markets already impound this information in the share price, is a question for future research.

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