Are Formal Corporate News Announcements Still Newsworthy? Evidence from Three Decades of U.S. Data on Earnings, Splits, and Dividends

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Abstract
This paper considers the share price reaction to dividend, earnings, and stock split announcements over a 30 year period. It first considers whether there is differential information content in similar corporate news announcements for different types of firms. Second, it investigates whether the value of news information about these firms has declined over time (has become “less newsworthy”). We categorize firms into groups by whether corporate news announcements regarding the firms will be more valuable to the public. For example, since the public may know more about larger firms, we expect the market to react less strongly (in absolute value) to new information from large firms. We find strong support for this idea. We find little evidence that is consistent with the idea that “news is less newsworthy” over the past few decades. Although, we do find that the share price reaction to “good” dividend news has become less positive and to “bad” dividend news has become less negative over time, no such related evidence exists for stock splits and earnings announcements. Additional investigation of entire distributions of returns using kernel density estimators also rejects the “news is no longer newsworthy” idea.

Keywords
corporations, corporate news announcements, share price, dividends, earnings

Comments
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ABSTRACT

This paper considers the share price reaction to dividend, earnings, and stock split announcements over a 30 year period. It first considers whether there is differential information content in similar corporate news announcements for different types of firms. Second, it investigates whether the value of news information about these firms has declined over time (has become "less newsworthy"). We categorize firms into groups by whether corporate news announcements regarding the firms will be more valuable to the public. For example, since the public may know more about larger firms, we expect the market to react less strongly (in absolute value) to new information from large firms. We find strong support for this idea. We find little evidence that is consistent with the idea that "news is less newsworthy" over the past few decades. Although, we do find that the share price reaction to "good" dividend news has become less positive and to "bad" dividend news has become less negative over time, no such related evidence exists for stock splits and earnings announcements. Additional investigation of entire distributions of returns using kernel density estimators also rejects the "news is no longer newsworthy" idea.

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In a recent paper, Farber and Hallock (2003), show that the share price reaction to job loss announcements in major U.S. firms has become (roughly) monotonically less negative over the past 30 years. The authors suggest several reasons for this change over time, including that layoff announcements in the 1970s may be due to “deficient demand” and those in the 1990s due to “efficiency” reasons. We focus on another idea: perhaps share prices react to corporate news announcements less (in any direction) than they did decades ago due to new technologies and the speed with which investors are now informed. To this end, in this paper we empirically investigate two issues. The first is whether the share price reaction to dividends announcements, earnings announcements, and stock splits has similarly moved toward zero over time. That is “is news less newsworthy” over time? Second, we investigate whether news from particular types of firms (e.g. larger, and therefore higher profile, firms) may be “less newsworthy” relative to news in other (e.g. smaller) firms at any point in time.

We have chosen to examine three major types of corporate news announcements in some detail. We expect that the share price reaction to dividend announcements to be relatively straightforward. First, we categorize dividends into several types. The two extreme cases of which are defined to be “good” news and “bad” news (as defined below). We expect the share price reaction to “good” dividend news to be positive and the share price reaction to “bad” dividend news to be negative. Furthermore, we expect dividend news in relatively large firms (also defined below) to be smaller (in absolute value) than dividend news in smaller firms. This is primarily because larger firms are subject to more scrutiny. Therefore, it is less likely that “surprises” are to come from them. We find evidence in the data that is consistent with each of these ideas.

We also study stock splits. Again, for splits, as for all corporate news, we have the expectation that announcements from smaller firms will lead to larger (in absolute value) share price reactions than splits announced in larger firms. This also is found in the data. However, the expected sign for splits overall is more difficult to determine, for reasons discussed below. Furthermore, although our

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1 Krueger and Forston (2003) examine whether markets respond more to more “reliable” labor market data using monthly employment change data from the Bureau of Labor Statistics.
hypothesized trend for the share price reactions to all corporate news we study is toward zero over time, we do not find evidence that the reaction to split announcements changes over the decades in our sample.

The last type of corporate news announcement we study is earnings announcements. Here (as with dividends and splits), we find larger effects for smaller firms. In addition, we classify earnings announcements into what we believe to be “good” news and into news we believe to be “bad” (as we describe in detail below). As expected, “good” earnings news sends stock prices up and “bad” earnings news sends stock prices down. In addition, as expected, the share price reaction to “good” news is less positive over time and the share price reaction to “bad” news is less negative over time.

First, we describe our data and methods. Second, we use simple event study methods to document the patterns of share price reactions to common corporate news events. Although finding that the share price reaction to corporate news events has declined (in absolute value) is consistent with the hypothesis that “news is less newsworthy” it is by no means sufficient evidence to suggest that this is all that is happening. Consider the case where the entire distribution of share prices simply changes so that it is closer to being centered on zero but the “spread” in this distribution stays fixed over time. In this case, we would reject the idea that corporate news is less newsworthy – since there are still just as many examples above and below the mean – but that the mean is just closer to zero. So, we go on to examine the distributions of share price reactions over time, including the inter-quartile range, the standard deviation, and kernel density estimates. Finally, we further consider the share price reactions in a more complicated empirical setting in order to better understand the reasons for the share price reactions over time.

The rest of the paper is organized as follows. In section I we describe the five sources of data used in the study. Our basic empirical methods are outlined in section II. Section III describes in more detail the example that motivated us. Empirical results for share price reactions to dividends, stock splits, and earnings announcements are detailed in sections IV-VI, respectively. Section VII studies the entire distribution of share price returns by considering statistics beyond the mean such as the inter-quartile
range and kernel density estimates. Finally, section VIII offers concluding comments, and suggestions for future research.

I. Data Sources and Description

We use five unique data sources in this paper. The first source is data on job loss announcements that we use in our motivating example below. Second, are data on dividend announcements collected from the Center for Research in Security Prices (CRSP) at the University of Chicago. Third, are data on stock splits, also collected from CRSP. Fourth, we have data on earnings announcements from the Institutional Brokers Estimate System (I/B/E/S). Finally, information on firm stock returns and market returns are collected from CRSP.

A. Layoff Announcements

The layoff announcement data come from a unique archival data source. First, the sample frame was identified as all firms that ever were in the Fortune 500 in any year from 1970 – 2000, inclusive. Since this list contains firms that were on this list in any year, there are obviously many more than 500 firms. Next the Wall Street Journal Index was used to seek information on all layoff announcements in each of the firms in question in each of the 31 years. The paper copies of the index were used. The index is published annually and contains a listing of abstracts by firm name of each article in the Wall Street Journal. After this process was completed, a total of 4,604 announced layoffs were recorded in 791 different firms. In another step, each actual article (not just the abstracts) was then carefully read so that additional information (e.g. number of workers in announced layoff) could be collected for more of the layoffs in the sample. The frequency of the number of job loss announcements for the firms in the sample is plotted against the U.S. civilian unemployment rate in Figure 1. Clearly the number of job loss announcements by time in the sample follows the business cycle quite closely.

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2 See Farber and Hallock (2003) and Hallock (2003) for more details on these data.
B. Dividend Announcements

The data on dividend announcements come from the Center for Research in Security Prices (CRSP) at the University of Chicago. We selected dividends announcements from among eight categories of US cash dividends. We dropped observations that had a missing announcement date. Our data includes 284,249 dividends announcements from 1970-2000. Figure 2A displays the frequency distribution of the number of dividend announcements for each year. There was quite dramatic growth in the number of dividend announcements through the 1970s. This was followed by a significant decline until 1986. Since the mid-1980s, although the number of dividends announced has fluctuated some, it has been much more stable than in earlier periods.

We further divided announced cash dividend payments into three different categories based on the type of news: "good," "bad," and "neutral". A dividend announcement is considered "bad" if the firm's announced cash dividend amount is less than the firm's previous cash dividend payment. It is considered a "good" announcement if the announced cash dividend payment is more than the previous cash dividend payment. Finally, a dividend payment is considered "neutral" if the announced cash dividend is equal to the previous cash dividend payment. The faction of dividends that can be categorized into the different types for our 31 years of data is summarized in Figure 2B. Although there is clearly some variability in the data, it is most likely that dividends fall into the "neutral" category at around 80% of the time. The fraction categorized as "good" is about 20% and as bad is generally less than 10%.

C. Stock Splits

The stock split data are also collected from the Center for Research in Security Prices (CRSP) at the University of Chicago. Our data includes 24,479 stock split announcements. In Figure 3A, it is clear that splits became generally more common throughout the 1970s and up until the late 1980s. Then after a short period of decline into the early 1990s, they increased again throughout the rest of that decade.

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3 These eight categories correspond with codes 1232, 1242, 1248, 1252, 1258, 1272, 1278, and 1292.
4 We also plot the civilian unemployment rate as a benchmark for other economy-wide variables. We do this in figures 3A and 4A (below) as well.
We group stock splits into one of three categories. The first category is "2 for 1" stock splits. As is clear from Figure 3B, this was a relatively rare type (just over 10%) in the early 1970s and has grown steadily over the past three decades to be the most common of the categories in the year 2000 at just over 50%. The second category is "less than 2 for 1" splits. This was the most common category in the early 1970s (at around 80%) but has declined steadily over the past three decades and is now just around 50%. The final category is "greater than 2 for 1" splits. These are quite rare and have hovered under 1% over the entire period of the sample.

D. Earnings Announcements

The fourth set of data is on earnings announcements. These data are collected from the Institutional Brokers Estimate System (I/B/E/S). These include information on announced earnings per share for every firm in the data. Note, however, that unlike our other data sources, these data are only available for the years 1974–2000. I/B/E/S only goes back to 1974 so we have no information from 1970–1973. The distribution of the number of earnings announcements in the sample is plotted in Figure 4A and is increasing over time (except for the last two years). This is not unexpected and largely reflects the sample size. Unlike dividend announcements and stock splits, firms must report earnings in a systematic way.

We were also able to match the actual earnings announcement with additional data in I/B/E/S on the most recent analyst forecast of earnings for the firm in question\(^5\). We end up with 179,702 earnings announcements. We then categorized the earnings news as "good," "bad," or "neutral". News is considered "good" if the actual announcement of earnings is higher than the forecast of the most recent analyst. News is considered "neutral" if the actual announcement exactly meets the most recent analyst forecast. Finally, news is categorized as "bad" if the most recent forecast of earnings is higher than the actual announcement of earnings. It is clear in Figure 4B that "neutral" news is substantially less common than either "good" or "bad" news. Also, since 1990, "good" news has become increasingly less common and "bad" news has become increasingly more common.

\(^5\) This reduced the available years to 1984-2000.
II. Baseline Empirical Specifications

The simplest way to consider whether corporate news announcements have any effect on stock prices would be to examine the prices before and after the announcements. Obviously, this comparison implicitly assumes that had the news event not been announced the stock prices after the news event would have been just equal to the returns before the announcement. Instead, we will use simple event study methods (Brown and Warner, 1985; Campbell, Lo, and MacKinlay, 1997; Fama, Fisher, Jensen, and Roll, 1969; and MacKinlay, 1997) that will help us to consider what would have happened to stock prices in the absence of the corporate news.

In order to seek the stock price reaction to corporate news events, we will use the common event study method. Excess returns, cumulative excess returns, cumulative average excess returns, and cumulative median excess returns are all described below.\(^6\) Let \( t \) index trading time in days, \( s \) indicate the day of the corporate news announcement, and \( i \) indicate firms. First, the firm daily stock return, \( R_{it} \), is regressed on \( R_{mt} \), the weighted\(^7\) average market return for day \( t \). This regression

\[
R_{it} = \alpha_i + \beta_i R_{mt} + \eta_{it}
\]

is estimated for the period \( s-130 \) to day \( s-10 \).\(^8\) The least-squares coefficients from this regression, \( \hat{\alpha}_i \) and \( \hat{\beta}_i \), along with the actual values of the weighted average stock returns on day \( t \), \( R_{me} \), allow us to construct the expected return on that day for each firm for each day, \( \hat{R}_{it} \), where

\[
\hat{R}_{it} = \hat{\alpha}_i + \hat{\beta}_i R_{me} .
\]

Using this information on how we expected the stock of firm \( i \) at date \( t \) to perform we can then construct the abnormal return for firm \( i \) on day \( t \) as

\[
AR_{it} = R_{it} - \hat{\alpha}_i - \hat{\beta}_i R_{me} = R_{it} - \hat{R}_{it}
\]

\(^6\) As these yield very similar outcomes, we don’t report each in the paper.
\(^7\) These were computed as both value-weighted and equally-weighted returns with little effect on the results. We report results for value-weighted returns in the paper.
\(^8\) We tried various prediction periods such as \( s-255 \) to \( s-10 \) with no meaningful effect on the results.
\( AR_i \) is known as the abnormal (or excess) return of stock \( i \) on day \( t \). Intuitively, this abnormal return is the part of the movement in the stock return of firm \( i \) that is not correlated with overall movements in stock prices and therefore may reflect unexpected firm-specific factors.

These abnormal returns are calculated for each firm's corporate news event (e.g. dividend announcement, announcement of a stock split, earnings announcement) in the sample. We also calculate cumulative excess returns for several days around (e.g. three days – day \( s-1 \) to day \( s+1 \)) for each event. In addition, we compute the average cumulative abnormal returns (across all events at date \( s \) for each event), the average cumulative abnormal return (over the three days across all events), and the median cumulative abnormal return. If the corporate news announcements have no systematic effect on stock returns, then the mean and median returns will not differ significantly from zero.

The t-statistics used to compute whether the mean abnormal returns are different from zero are carefully described in Campbell, Lo, and MacKinlay (1997). The tests are based on the idea that the returns should be equal to zero in the absence of any news that affects the value of the company in question. The extent to which these returns differ from zero is obviously evidence consistent with the idea that the corporate news events we examine are, in fact, news.

III. Motivating Example: Share Price Reaction to Job Loss Announcements Over Time

The idea that originally motivated our work is from the example of Farber and Hallock (2003). Among other things, they investigate the share price reaction to a wide variety of job loss announcements in large U.S. firms. They find that the share price reaction has become less negative over time. The share price reaction averaged –0.283 percent (and significantly negative) in the 1970s, -0.091 percent in the 1980s, and +0.125 percent (but not significantly different from zero) in the 1990s.

More specifically, they document a gradual decline in the (absolute value) of the share price reaction of job loss announcements over the 30 year period. A simple summary of their results is
displayed in Figure 5. In this figure the cumulative average excess return for each year from 1970 – 1999 are plotted on the graph for the “3 day window” representing days –1, 0, and +1.

Farber and Hallock (2003) go through a variety of robustness checks on this basic result. They show for example, if cumulative median excess returns are used, or the fraction negative is used, the same basic result of a gradual decline in the share price reaction over time is found. Furthermore, using varying “window” widths has little discernable effect on the results. That is, if the window widths of one day (day 0) or 11 days (day –5 through day +5) are used, the same basic results hold up. It is also clear from figure 5 that this less negative share price over time also hold up when layoffs are not contaminated by other corporate news announcements.9

One possible reason for this gradual decline toward zero is that news is no longer newsworthy. That is, there is less news content in announcements released more recently so share prices react less powerfully than they did (for example) in the 1970s.

In the next three sections, we will consider the basic facts regarding share price reactions to corporate news of dividends, splits, and earnings. We begin by documenting the relationship between corporate news announcements and stock prices over time.

IV. Dividend Announcements

The information content of dividends’ hypothesis asserts that managers use cash dividend announcements to signal changes in their expectations about future prospects of the firm. As mentioned by Pettit (1972) there are several reasons to believe that new and significant information is conveyed by dividend announcements: “First, managers are to some extent restricted as to the kind of public statements they can make regarding the future earnings generating ability of the firm. Second, due to random factors reported earnings may vary substantially from long run normalized earnings and market participants may be unable to distinguish these random effects. In light of this, the management may use dividend payments

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9 Clear of dividend announcements means that layoff announcements in the sample do not occur within ten days of a dividend (earnings) announcement in the same firm. Clear of recent layoffs means that the layoff announcement is at least 100 days after any other layoff announcement in the same firm.
(or a lack of them) as a method of indicating their estimates of the firm’s earning power and liquidity.” Hence firms tend to increase their dividend payment when there is a high probability that cash flows in the future will be enough to support the higher rate of payment, and will decrease their dividend payment when they think that certain that cash flows are insufficient to support the present dividend rate.

There is a long and careful literature on the impact of dividend announcements on stock prices. Generally, an announcement of an increase in the dividend payment is associated with an increase in stock prices, while announcements reporting dividend payment reductions are associated with a decrease in stock prices (For example see Pettit, 1972; Charest, 1978b; Aharony and Swary, 1980; Kwan, 1981; Brickley, 1983; Aharony and Dotan, 1994; and Kaestner and Liu, 1998).

In this section, we will start documenting the very short-term share price reaction to dividend announcements over the 31-year period, 1970-2000. We will go on to consider whether news of different flavors affects stock prices differently.

Figure 6A displays the cumulative average excess returns to dividend announcements for each year from 1970 through 2000, inclusive, using a three day event window (days –1, 0, and +1). Varying the event window (e.g. one day, three days, 11 days) does not substantially affect the results. It is not surprising that the line that represents “all” dividend categories is flat and changes little over the period of our sample. In fact, there is no a priori reason to predict that the announcement of dividends should get stock prices to respond either positively or negatively. However, we have categorized the dividend news into “good,” “neutral,” and “bad” based on whether the firm announcement of dividends is better, the same as, or worse than the previous dividends payment of that firm. We can see in figure 6A that dividend announcements that we have categorized as being “neutral” (or having no news) have a share price reaction very near zero and have had such a reaction for the entire period of the sample. On the other hand, as expected, dividend announcements that we have classified as being “good” (beating the last dividend payment) have had consistently positive share price reactions. Furthermore, as expected,

10 All specifications reported in this paper are using “value-weighted” market returns. We have also re-computed the analysis using “equally-weighted” market returns. There are no substantial changes in the results depending on which of these we use.
dividend announcements that we have classified as being “bad” (being less than the previous dividend payment) have largely had negative share price reactions.

The main focus of this paper, however, is on the change in the share price reactions to corporate news over time. Consistent with the idea that “news is less newsworthy,” Figure 6A also shows that the positive share price reaction to “good” news is less strong than it once was. Similarly (although not as clearly), the share price reaction to “bad” news is less negative than it once was.

Figures 6B and 6C investigate this issue more closely by considering only the largest 20% of firms in CRSP (in Figure 6B) and the smallest 20% of firms in CRSP (in Figure 6C). Our idea is that the share price reaction to dividend announcements in the very largest firms has been closer to zero over time and has declined less dramatically (toward zero) than the share price reaction for firms in the bottom quintile based on firm size. The reason for this is straightforward. The largest firms have always been closely monitored and analyzed. Therefore, there is not now, nor has there been very much “surprise” in dividend announcements for large firms. On the other hand, smaller firms have not been as easy to follow until recently, so it makes sense that the share price reactions to “good” news have become less positive for smaller firms and the share price reaction to “bad” news has become less negative for smaller firms. The evidence in Figures 6B and 6C is completely consistent with these ideas.

V. Announcements of Stock Splits

In this section, we consider share price reactions to announcements of stock splits. Our focus will be on the cumulative average excess return in response to stock splits over the 31-year period from 1970 – 2000. We go on to consider different types of stock splits.

Unlike cash dividends, stock splits do not directly affect the future cash flow of the firm. As mentioned by Charest (1978a), it is commonly asserted that investors view split news as good news, as it would show management’s confidence that the “good times” which saw stock prices increase to splitting level will continue. This “trading range hypothesis” suggests that managers will split to keep the price of
their shares within a reasonable trading range. Considering the costs associated with splits and reversals, managers with stock prices above this range might decide not to split as they expect that future events will force the price of the split shares to fall below the reasonable trading range. As mentioned by Grinblatt, Masulis, and Titman (1984), among other things, stock dividends and splits will call markets attention towards the firm, triggering reassessments of the company’s future cash flow by market analysts. While underpriced firms find such reassessments favorable, overpriced firms do not. They call this the “attention hypothesis”. There is a large number of studies on the impact of stock split announcements on stock prices. Generally, an announcement of a stock split is associated with an increase in stock prices (For example see Lakanishok and Lev, 1987; Grinblatt, Masulis, and Titman, 1984; Charest, 1978a; Arbel and Swanson, 1993; Lamoureaux and Poon, 1987; McNichols and Dravid, 1990; Han and Suk, 1998; Ikenberry, Rankine, and Stice, 1996; and Foster III and Vickrey, 1978)11.

We will categorize the splits into size categories and consider whether the share price reaction has tended toward zero over time. Figure 7A displays the cumulative average excess returns to stock split announcements for each year from 1970 – 2000, inclusive, using the three-day event window (-1, 0, and +1). Although the share price reactions to stock split announcements are generally positive (as described above in the previous literature), there does not seem to be any clear trend toward zero over time. This is inconsistent with the “news is less newsworthy” hypothesis.

Figure 7B repeats this analysis on only a subset of the data. In particular, this figure only considers very large and very small firms. Firms in the top quintile “top 20” and firms in the bottom quintile “bottom 20” are compared. As expected, on average, smaller firms have a universally larger share price reaction to stock split news than do larger firms. This is for the same reasoning we discussed in the previous section on stock dividend announcements. That is, information released on large firms is not as much of a surprise, on average, since these larger firms are more closely monitored.

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11 Ikenberry and Ramnath (2002) consider the case of the market underreaction to stock split announcements.
On the other hand, Figure 7B does not provide evidence in favor of the "news is less newsworthy" hypothesis. This is because, the share price reaction to stock split announcements for smaller firms has not tended toward zero (relative to that for large firms) over time.

VI. Earnings Announcements

This section examines the share price reaction to earnings announcements. In the finance literature there has been little question about whether the stock market reacts to news or not; the question is how fast it has done so. There is a vast literature on the effect of unexpected earnings on stock prices. The main focus of these studies is measuring the speed of the market reaction to unexpected earnings. While these studies have used different methods to measure unexpected earnings, they all agree that positive unexpected earnings increase stock prices while negative unexpected earnings decrease stock prices (For example, see Rendleman, Jones, and Latane, 1982; Aharony and Swary, 1980; Watts, 1978; Brown, 1978; Fried and Givoly, 1982. Also see Lundholm and Myers (2003) for a related study.).

As we noted above, we categorize earnings announcements into "good," "neutral," or "bad" news depending on whether the actual announcement of earnings exceeds, exactly meets, or falls short of the last recorded estimate by an analyst in the I/B/E/S data.

Figure 8A displays the cumulative average excess returns for "good," "neutral," and "bad" news announcements as well as for all announcements together for each of the 17 years of data from 1984 – 2000. It is clear from the figure that the average three day share price reaction to earnings announcements that we have categorized as "good" news is consistently positive in each of the years of the data. Similarly, earnings announcements categorized as "bad" news are universally associated with negative cumulative average excess returns in each of these 17 years. Not surprisingly, earnings announcements categorized as "neutral" are associated with some slightly positive returns and some slightly negative returns. In addition, there is no evidence in Figure 8A that the share price reactions to "good" news have
become less "good" (tending toward zero) or that the share price reactions to "bad" news are becoming less "bad" (tending toward zero) over time.

In Figures 8B and 8C, we examine share price reactions to "good" news earnings announcements and "bad" new earnings announcements for firms in the top quintile in terms of size (in Figure 8B) and for firms in the bottom quintile in terms of size (in Figure 8C). Not surprisingly, firms in the bottom quintile in terms of firm size have, on average, much stronger share price reactions (either larger positive for "good" news or larger negative for "bad" news) than firms in the top quintile of the size distribution. Again, this is consistent with the idea that for the past decades, more is known about the larger firms so that any news is less surprising to the market. However, there is no evidence to suggest that "news has become less newsworthy" over the decades in this sample.

VII. Does Examining the Entire Distribution of Share Price Reactions Tell us Anything About the "News is Less Newsworthy" Idea?

After carefully examining the three day cumulative average excess returns to corporate news announcements, it seems reasonable to consider more complicated aspects of the distribution of returns to corporate news. For example, if we thought that corporate news was less newsworthy, then not only should the mean tend toward zero, but the variance should decline as well.

Figures 9A, 9B, and 9C summarize an investigation of the standard deviation of the three day cumulative excess returns by year for dividend announcements (in Figure 9A), for earnings announcements (in Figure 9B), and for stock split announcements (in Figure 9C). It is quite clear in each case that the variance is not declining over time. Of course, this analysis could also be done for other measures of dispersion in the data (not reported in the figures). This could be done, for example for the 90 – 10 percent differential or for the 75 – 25 percent differential (inter-quartile range). These trends are similar to those reported in Figure 9A, 9B, and 9C.

12 For example, in the dividend data, the 90 – 10 percent differential is roughly 8 to 10 percent and flat over time and the 75 – 25 percent differential is roughly 3.5 to 4 percent and flat over the 31-year period. For earnings
Obviously, still another step further is to examine the entire distribution of the three day share price reaction. This is done by plotting kernel density estimates of the distribution of the three day returns for dividend announcements (in Figure 10A), earnings announcements (in Figure 10B), and stock split announcements (in Figure 10C). Again, as in considering the estimates of the standard deviation above, the aim here is to investigate whether the distribution is less “spread out” (with, therefore, a higher central peak) in the later period. This would be evidence that is consistent with the news is less newsworthy idea.

There is no evidence for this in Figure 10A which plots the kernel density estimates for the distributions of dividend announcements for the 1970s, 1980s, and 1990s separately. In fact, the distribution for the 1990s seems to be to the right of that from the 1970s and to the left of the distribution from the 1980s. The spread for the 1990s (the focus of this section) seems to similarly fall between that from the other two decades.

The earnings data are only available from 1984 – 2000 so we separate 1984 – 1989 and 1990 – 2000. In figure 10B it is also not the case that the most recent group (the 1990s) is less spread out than the older (1980s) group. In fact, the 1990s are much more spread out. This is also true in figure 10C where the distribution of three day returns to stock split announcements is not less spread out in the most recent period. Therefore, none of the kernel density estimate evidence supports the news is less newsworthy hypothesis.

VIII. Summary, Concluding Comments, and Suggestions for Future Work

One of the goals of this paper is to investigate whether news is no longer newsworthy in securities markets. We investigate this idea and others using a variety of data sources and empirical

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announcements, the 90 – 10 percent differential is between 10 and 15 percent from 1984 through 1996 and goes up to roughly 24 percent by 2000. Similarly, the 75 – 25 percent differential is between five and six percent from 1984 through 1996 and rises to over 10 percent by 2000. For stock splits, the 90 – 10 percent differential is on the order of 12 to 15 percent from 1970 through 1998, with a slight decline over time and then goes up in the last few years to roughly 25 percent. The 75 – 25 percent differential is roughly five to six percent from 1970 through 1998 with a slight decline over time and then rises in the last few years to about twelve percent.
techniques. First, we examine whether the average cumulative excess share price reaction to different types of corporate news announcements has tended toward zero over time. While there is some evidence that this has happened for dividend announcements and for job loss announcements, there is no such evidence for stock splits or earnings announcements.

We go on to investigate the distribution of abnormal returns over time for four types of announcements and find that it has changed little, which is also inconsistent with the news is less newsworthy over time idea. We have also examined whether corporate news has a larger impact on stock prices when released from smaller firms (who may not receive as much media or analyst attention) than from larger firms. Our analysis strongly supports this idea.

Table 1 is a summary of some of our findings and points to some of the other details in our analysis. For example, we expected a positive share price reaction for dividend announcements that we defined to be “good” news and we found them. We expected to find negative abnormal average returns for dividend announcements that we thought to be “bad” news and we also found them (Figure 6). Under the news is no longer newsworthy hypothesis, we expected to find a less positive share price reaction to good news, and a less negative share price reaction to bad news over time. We found evidence for both.

Stock split information was presented in Figure 7. We predicted a positive share price effect for stock splits. In our empirical work, this turned out to be positive. Under the news is no longer newsworthy hypothesis we expected this effect to tend toward zero over time. We found no evidence for this.

The earnings analysis also yielded interesting findings. As anticipated, we found that the stock price reaction to earnings news that we categorized as “good” news was positive and earnings news that we categorized as “bad” news lead to negative returns. Here again the news is less newsworthy hypothesis that the share price reaction to good news would be less positive and to bad news would be less negative over time was rejected. In fact, the findings went the other way.

In summary, therefore, the three day mean excess return analysis provides only weak evidence for the news is less newsworthy hypothesis (e.g. dividends and layoffs). When we combine these results with
the conclusive evidence on the distributions of the excess returns, we don't find much support for the idea that news is no longer newsworthy. This suggests that gains in information technology, computers, and the internet, have not changed the way capital markets react to corporate news events. We hope this work is a useful first step toward additional understanding of these ideas.
References


FIGURE 1. Frequency of Announced Layoff Announcements by Year from 1970 – 2000, inclusive

Notes: For the data on the frequency of all job loss announcements by year, the sample frame is all firms that were ever in the Fortune 500 between 1970 and 2000, inclusive. Paper copies of the Wall Street Journal Index were used to seek information on all layoff announcements by each of these firms in each year. The Index is published annually and contains a listing of abstracts by firm name of each article in the Wall Street Journal. After this process was completed, a total of 4,604 announced layoffs were recorded in 791 different firms. In an additional step, each full-length article was then carefully read so that we could be sure these were actual layoff announcements. For more detail on the data see Farber and Hallock (2003) and Hallock (2003). Data on the annual unemployment rate (civilian unemployment rate) were collected from the Economic Report of the President (2002).
Figure 2A. Frequency of All Dividend Announcements by Year

![Graph showing the frequency of all dividend announcements by year with corresponding civilian unemployment rate.]

Notes: Data on dividend announcements are collected from the Center for Research in Security prices (CRSP) at the University of Chicago. Dividend announcements were collected from eight categories of U.S. cash dividends: 1232, 1242, 1248, 1252, 1258, 1272, 1278, and 1292. Observations with missing announcement dates were dropped. The data include 284,249 dividend announcements from 1970 – 2000. Data on the annual unemployment rate (civilian unemployment rate) were collected from the Economic Report of the President (2002).

Figure 2B. Fraction of Dividend Announcements by Type

![Graph showing the fraction of dividend announcements by type.]

Notes: Data on dividend announcements are collected from the Center for Research in Security prices (CRSP) at the University of Chicago. Dividend announcements were collected from eight categories of U.S. cash dividends: 1232, 1242, 1248, 1252, 1258, 1272, 1278, and 1292. Observations with missing announcement dates were dropped. The data include 284,249 dividend announcements from 1970 – 2000. A dividend announcement is considered “bad” news if the firm’s announced cash dividend amount is less than the firm’s previous cash dividend payment. It is considered “good” news if the announced cash dividend payment is more than the previous cash dividend payment. A dividend payment is considered “neutral” if the announced cash dividend is equal to the previous cash dividend payment.
Figure 3A. Frequency of Stock Splits by Year

![Graph showing the frequency of stock splits by year with a line for civilian unemployment rate.]

Notes: Data on stock splits are collected from the Center for Research in Security Prices (CRSP) at the University of Chicago. Our data include 24,479 stock split announcements. Data on the annual unemployment rate (civilian unemployment rate) were collected from the Economic Report of the President (2002).

Figure 3B. Fraction of Split Announcements by Type

![Graph showing the fraction of split announcements by type from 1970 to 2010.]

Notes: Data on stock splits are collected from the Center for Research on Security Prices (CRSP) at the University of Chicago. Our data include 24,479 stock split announcements. Stock splits are grouped into one of three categories: “2 for 1” splits, less than “2 for 1” splits, and greater than “2 for 1” splits.
Figure 4A. Frequency of Earnings Announcements

Notes: Data are collected from the Institutional Brokers Estimate System (I/B/E/S). These include information on announced earnings per share for every firm in the sample. We have 179,702 observations on earnings announcements.

Figure 4B. Fraction of Earnings Announcements by Type

Notes: Data are collected from the Institutional Brokers Estimate System (I/B/E/S). These include information on announced earnings per share for every firm in the sample. We have 179,702 observations on earnings announcements. We were able to match the announcements with additional data in I/B/E/S on the most recent analyst forecast of earnings for the firm in question. News is considered “good” if the actual announcement of earnings is higher than the most recent analyst forecast. News is considered “neutral” if the actual announcement is exactly the same as the most recent analyst forecast. News is considered “bad” if the most recent forecast is higher than the actual announcement.
FIGURE 5. Share Price Reaction to Job Loss Announcements: Mean Cumulative Excess Returns, 3 Day Window

Notes: Data from Farber and Hallock (2003) on 4,273 job loss announcements. "All announcements" refers to the 3 day cumulative excess return to the job loss announcements by year. The cumulative excess returns were calculated by regressing the firm daily stock return, $R_{it}$, on the value-weighted average market return, $R_{kt}$. The regression $R_{it} = \alpha_i + \beta R_{kt} + \eta_{it}$ is estimated for a period $s-130$ to $s-10$ where $s = 0$ is the event date. Abnormal returns are computed as follows: $AR_{it} = R_{it} - \hat{\alpha}_i - \hat{\beta}_i R_{kt}$. Three day cumulative abnormal returns are then calculated by adding up the returns for the three days around the announcement and then averaging over all firms within each year. Clear of dividend (earnings) announcements means that the layoffs in the sub-sample do not occur within ten days of a dividend (earnings) announcement. Clear of recent layoffs means that the layoffs in the sub-sample are at least 100 days after any other layoff announcement by the same firm. Various changes to this selection criteria do not have meaningful effects on the results in Figure 5.
FIGURE 6A. Share Price Reaction to Dividend Announcements: Mean Cumulative Excess Returns, 3-Day Window

Mean Cumulative Abnormal Returns for Different Dividend Categories ((-1,+1) VW 130)

Notes: Data on dividend announcements are collected from the Center for Research in Security prices (CRSP) at the University of Chicago. Dividend announcements were collected from eight categories of U.S. cash dividends: 1232, 1242, 1248, 1252, 1258, 1272, 1278, and 1292. Observations with missing announcement dates were dropped. The cumulative excess returns were calculated by regressing the firm daily stock return, \( R_{it} \), on the value-weighted average market return, \( R_{mt} \). The regression \( R_{it} = \alpha_i + \beta_t R_{mt} + \epsilon_i \) is estimated for a period \( s-130 \) to \( s-10 \) where \( s = 0 \) is the event date. We compute abnormal returns as follows: \( AR_{it} = R_{it} - \bar{R}_i - \bar{R}_m \). Three day cumulative abnormal returns are then calculated by adding up the returns for the three days around the announcement and then averaging over all firms within each year. A dividend announcement is considered "bad" news if the firm's announced cash dividend amount is less than the firm's previous cash dividend payment. It is considered "good" news if the announced cash dividend payment is more than the previous cash dividend payment. A dividend payment is considered "neutral" if the announced cash dividend is equal to the previous cash dividend payment.
FIGURE 6B. Share Price Reaction to Dividend Announcements: Mean Cumulative Excess Returns, 3 Day Window, Firms in the Top Quintile by Firm Size

FIGURE 6C. Share Price Reaction to Dividend Announcements: Mean Cumulative Excess Returns, 3 Day Window, Firms in the Bottom Quintile by Firm Size

Notes: Data on dividend announcements are collected from the Center for Research in Security prices (CRSP) at the University of Chicago. Dividend announcements were collected from eight categories of U.S. cash dividends: 1232, 1242, 1248, 1252, 1258, 1272, 1278, and 1292. Observations with missing announcement dates were dropped. The cumulative excess returns were calculated by regressing the firm daily stock return, \( R_{it} \), on the value-weighted average market return, \( R_{mt} \). The regression \( R_{it} = \alpha_i + \beta_i R_{mt} + \epsilon_i \) is estimated for a period \( s-130 \) to \( s-10 \) where \( s = 0 \) is the event date. We compute abnormal returns as follows: \( AR_x = R_{it} - \hat{\alpha}_i - \hat{\beta}_i R_{mt} \). Three day cumulative abnormal returns are then calculated by adding up the returns for the three days around the announcement and then averaging over all firms within each year. A dividend announcement is considered "bad" news if the firm’s announced cash dividend amount is less than the firm’s previous cash dividend payment. It is considered “good” news if the announced cash dividend payment is more than the previous cash dividend payment. A dividend payment is considered “neutral” if the announced cash dividend is equal to the previous cash dividend payment. “Top 20” refers to the top 20 percent of firms in CRSP in a given year by market value. “Bottom 20” refers to the bottom 20 percent of firms in CRSP in a given year by market value.
FIGURE 7A. Share Price Reaction to Stock Split Announcements: Mean Cumulative Excess Returns, 3 Day Window

![Graph A](image)

FIGURE 7B. Share Price Reaction to Stock Split Announcements: Mean Cumulative Excess Returns, 3 Day Window, Includes only Firms in Top Quintile and Firms in Bottom Quintile by Firm Size

![Graph B](image)

Notes: Data on stock splits are collected from the Center for Research in Security Prices (CRSP) at the University of Chicago. Our data include 24,479 stock split announcements. The cumulative excess returns were calculated by regressing the firm daily stock return, $R_{it}$, on the value-weighted average market return, $R_{mt}$. The regression $R_{it} = \alpha_i + \beta_i R_{mt} + \eta_i$ is estimated for a period s-130 to s-10 where s = 0 is the event date. We compute abnormal returns as follows: $AR_t = R_t - \hat{\alpha}_i - \hat{\beta}_i R_{mt}$. Three day cumulative abnormal returns are then calculated by adding up the returns for the three days around the announcement and then averaging over all firms within each year. “Facpr<0” refers to stock buybacks, “0<facpr<1” is for stock splits with split ratios less than 2:1, “facpr=1” is for 2:1 stock splits, and “facpr>1” is for stock splits with split ratio greater than 2:1. “Top 20” refers to the top 20 percent of firms in CRSP in a given year by market value. “Bottom 20” refers to the bottom 20 percent of firms in CRSP in a given year by market value.
Figure 8A. Share Price Reaction to Earnings Announcements: Mean Cumulative Excess Returns, 3 Day Window

(-1,+1) VW 130 EPS

Notes: Data are collected from the Institutional Brokers Estimate System (I/B/E/S). These include information on announced earnings per share for every firm in the sample. We have 179,702 observations on earnings announcements. The cumulative excess returns were calculated by regressing the firm daily stock return, $R_{it}$, on the value-weighted average market return, $R_{mt}$. The regression $R_{it} = \alpha_i + \beta_i R_{mt} + \epsilon_i$ is estimated for a period $s-130$ to $s-10$ where $s = 0$ is the event date. We compute abnormal returns as follows: $AR_{it} = R_{it} - \hat{\alpha}_i - \hat{\beta}_i R_{mt}$. Three day cumulative abnormal returns are then calculated by adding up the returns for the three days around the announcement and then averaging over all firms within each year.
Figure 8B. Share Price Reaction to Earnings Announcements: Mean Cumulative Excess Returns, 3 Day Window, Firms in the Top Quintile by Firm Size

Figure 8C. Share Price Reaction to Earnings Announcements: Mean Cumulative Excess Returns, 3 Day Window, Firms in the Bottom Quintile by Firm Size

Notes: Data are collected from the Institutional Brokers Estimate System (I/B/E/S). These include information on announced earnings per share for every firm in the sample. We have 179,702 observations on earnings announcements. “Top 20” refers to the top 20 percent of firms in the data in a given year by market value. The cumulative excess returns were calculated by regressing the firm daily stock return, \( R_{it} \), on the value-weighted average market return, \( R_{mt} \). The regression \( R_{it} = \alpha_i + \beta_i R_{mt} + \epsilon_{it} \) is estimated for a period s-130 to s-10 where s = 0 is the event date. We compute abnormal returns as follows: \( AR_{it} = R_{it} - \hat{\alpha}_i - \hat{\beta}_i R_{mt} \). Three day cumulative abnormal returns are then calculated by adding up the returns for the three days around the announcement and then averaging over all firms within each year. “Bottom 20” refers to the bottom 20 percent of firms in the data in a given year by market value.
Figure 9A. Standard Deviation of Three Day Returns for Dividend Announcements Over Time

Figure 9B. Standard Deviation of Three Day Returns for Earnings Announcements Over Time

Figure 9C. Standard Deviation of Three Day Returns for Split Announcements Over Time

Notes: Dividend announcements data are described in table 2, earnings announcement data are described in table 4, and split announcement data are described in table 3. The cumulative excess returns were calculated by regressing the firm daily stock return, $R_{it}$, on the value-weighted average market return, $R_{mt}$. The regression $R_e = \alpha_t + \beta_t R_{mt} + \epsilon_t$ is estimated for a period s-130 to s-10 where s = 0 is the event date. We compute abnormal returns as follows: $AR_t = R_{it} - \alpha_t - \beta_t R_{mt}$. Three day cumulative abnormal returns are then calculated by adding up the returns for the three days around the announcement. Rather than averaging the three day's returns within year, these figures simply compute the standard deviations each year. In figure 9C, we report information for all splits, for “0<facpr<1” (stock splits with split ration less than 2:1), and “facpr=1” (stock splits with split ration equal to 2:1). We don’t report the category for splits with ration greater than 2:1 since there are so few in the data.
Figure 10A. Distribution of Three Day Returns for Dividend Announcements Over Time

Figure 10B. Distribution of Three Day Returns for Earnings Announcements Over Time

Figure 10C. Distribution of Three Day Returns for Split Announcements Over Time

Notes: Dividend announcements data are described in table 2, earnings announcement data are described in table 4, and split announcement data are described in table 3. The cumulative excess returns were calculated by regressing the firm daily stock return, $R_{it}$, on the value-weighted average market return, $R_{mt}$. The regression $R_{it} = \alpha_i + \beta_i R_{mt} + \eta_{it}$ is estimated for a period $s-130$ to $s-10$ where $s = 0$ is the event date. We compute abnormal returns as follows: $AR_{it} = R_{it} - \bar{R}_t - \bar{\beta}_t R_{mt}$. Three day cumulative abnormal returns are then calculated by adding up the returns for the three days around the announcement. Rather than averaging the three days returns within year, these figures compute kernel density estimates by the time periods indicated.
TABLE 1. Summary of Share Price Reactions to Corporate News: Mean Cumulative Excess Returns, 3 Day Window

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<th>Earnings</th>
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<tr>
<td>Estimated</td>
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<td>effects for small firms</td>
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</tr>
</tbody>
</table>

Notes: This table summarizes some of the main results in the paper using the four different types of data: layoff announcement data, dividend announcement data, data on stock split announcements, and data on earnings announcements. Data on dividend announcements are collected from the Center for Research in Security Prices (CRSP) at the University of Chicago. Dividend announcements were collected from eight categories of U.S. cash dividends: 1232, 1242, 1248, 1252, 1258, 1272, 1278, and 1292. Observations with missing announcement dates were dropped. A dividend announcement is considered "bad" news if the firm's announced cash dividend amount is less than the firm's previous cash dividend payment. It is considered a "good" announcement if the announced cash dividend payment is more than the previous cash dividend payment. A dividend payment is considered "neutral" if the announced cash dividend is equal to the previous cash dividend payment. Data on stock splits are collected from the Center for Research in Security Prices (CRSP) at the University of Chicago. Our data include 24,479 stock split announcements. Data are collected from the Institutional Brokers Estimate System (I/B/E/S). These include information on announced earnings per share for every firm in the sample. We have 179,702 observations on earnings announcements. We were able to match the announcements with additional data in I/B/E/S on the most recent analyst forecast of earnings for the firm in question. News is considered “good” if the actual announcement of earnings is higher than the most recent analyst forecast. News is considered “neutral” if the actual announcement is exactly the same as the most recent analyst forecast. News is considered “bad” if the most recent forecast is higher than the actual announcement. Large firms refers to the top 20 percent of firms in CRSP in a given year by market value. Small firms refers to the bottom 20 percent of firms in CRSP in a given year by market value. The cumulative excess returns were calculated by regressing the firm daily stock return, R_it, on the value-weighted average market return, R_m. The regression R_it = α_i + β_i R_m + ε_i is estimated for a period s-130 to s-10 where s = 0 is the event date. We compute abnormal returns as follows: AR_it = R_it - R_m. Three day cumulative abnormal returns are then calculated by adding up the returns for the three days around the announcement and then averaging over all firms within each year. We expected the overall sign of the share price reaction to layoffs to vary (positive or negative) and found this. According to the "news is no longer newsworthy" hypothesis, we expected to find a less negative reaction to layoff announcements over time and found this. For dividend announcements, we expected (and found) a positive reaction to "good" news and a negative reaction to "bad" news. We expected and found a less positive reaction over time to "good" dividend news and a less negative reaction to "bad" dividend news. We expected to observe (and observed) a positive reaction to stock splits. Although, according to the "news is no longer newsworthy" hypothesis, we expected to see a smaller (in absolute value) reaction to splits, we found no effect. We expected to find that the market reacted positively to "good" earnings news and negatively to "bad" earnings news. We found both. We expected to find a less positive reaction to "good" earnings news over time (but found the opposite). We also expected to find a less negative reaction to earnings news over time (but found the opposite). In the case of each of the four news types, we estimated larger (in absolute value) reactions to news from smaller firms, as expected.