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**WHY FIRMS VOLUNTARILY DISCLOSE BAD NEWS**

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## 1. Introduction

This paper provides evidence on the voluntary disclosure practices of firm managers. More specifically, I examine all earnings-related disclosures made by a randomly chosen sample of 93 NASDAQ firms during 1981-1990. The most important results are as follows: (i) Consistent with prior studies, earnings-related voluntary disclosures occur infrequently (on average, there is only one disclosure for every ten quarterly earnings announcements); (ii) While good news disclosures tend to be point or range estimates of annual earnings-per-share (EPS), bad news disclosures are more likely to be qualitative and have implications for the current period's quarterly earnings; (iii) Other things held the same, the stock price response to bad news disclosures is larger than the stock price response to good news disclosures (the average abnormal return associated with bad news disclosures is -4.48%, compared with 1.85% for good news disclosures); and (iv) the frequency with which the news contained in quarterly earnings announcements is preempted by voluntary corporate disclosures is relatively high (20-25 percent) for earnings announcements that convey large negative earnings surprises, but not otherwise.

Overall, the evidence is consistent with the idea that managers face an asymmetric loss function in deciding on their voluntary disclosure policies--it seems that managers bear large costs when investors are surprised by large negative earnings news, but not otherwise. I argue that this asymmetric loss function is due to the operation of U.S. securities laws: stockholders can and do sue firms and their managers when there are large stock price declines on earnings announcement days, the allegation being that managers failed to promptly disclose important earnings news. One contribution of this paper is to elaborate on these legal incentives, which have hitherto been largely ignored in the accounting literature on discretionary disclosure but which may be quite important empirically.

An alternative, non mutually-exclusive explanation for the results is that money managers, stockholders, security analysts, and other investors do not like large negative surprises, and impose other (than legal) costs on managers who are less than candid about

potential earnings problems. For example, money managers may choose not to hold the stocks of firms whose managers have a reputation for withholding bad news and analysts may choose not to follow these firms' stocks.<sup>1</sup>

Of course, not all of the sample disclosures convey bad news, and these other disclosures appear similar to those in other studies. That is, they are typically point or range estimates of annual EPS that generally convey neutral to good news to investors.<sup>2</sup> By limiting their samples to point or range forecasts of annual EPS, many previous papers appear to have systematically excluded an important subset of all voluntary disclosures, being those bad news disclosures designed to preempt the information in quarterly earnings releases. Thus, another contribution of this study is to highlight the existence of this type of "bad news" disclosure, which other studies tend to exclude.

The next section of the paper lays out in more detail my argument for why securities laws operate in such a way as to motivate managers to preempt bad quarterly earnings news. Section 3 then briefly summarizes existing accounting research in the area of discretionary disclosure, and section 4 details the research hypotheses. Section 5 describes the sample and data. In section 6 I report the results of the hypothesis tests. Section 7 concludes the paper with a summary and discusses some implications of the results for future research.

## **2. Managers' Legal Incentives to Disclose Bad News**

In this section I argue that the securities law operates asymmetrically to provide managers with incentives to disclose bad, but not good, earnings news earlier than they are required to do so in quarterly earnings reports. To demonstrate this I briefly describe the law as it relates to corporate disclosures, and in particular the operation of SEC Rule 10b-5, under which almost all lawsuits in this area are brought.<sup>3</sup>

The most important part of Rule 10b-5, as far as corporate disclosure is concerned, is that it makes it unlawful for any person "to make any untrue statement of a material fact or to omit to state a material fact necessary in order to make the statements made, in light of the

circumstances under which they were made, not misleading." Thus suits can be brought against managers who either: (i) make statements that are untrue (misstatements), or (ii) fail to state "material facts" when circumstances dictate that such disclosures are necessary (omissions). Because I am principally interested in managers' legal incentives to voluntarily disclose information, I focus on the law as it relates to omissions.

The law is not clear-cut with respect to whether managers have an affirmative obligation to disclose information during the period between the various quarterly and annual reports required by the SEC. However, there is some consensus that there is no affirmative disclosure obligation unless there is a specific duty to disclose.<sup>4</sup> A specific duty to disclose arises in two situations:

1. The SEC's "disclose or abstain" rule requires that corporate insiders disclose all material information or abstain from trading. As a result, if either the firm or its insiders wish to trade in the firm's securities, all material developments must be disclosed.

2. If the company has disclosed information, that disclosure must, under the Rule, be complete and accurate. Consequently, the company has a duty to update or correct any pre-existing disclosures, including information disclosed in quarterly earnings releases and other mandatory disclosures, if those disclosures become inaccurate, incomplete, or misleading (eg., see Loss and Seligman, 1991, p. 3517).<sup>5</sup>

This second point is important because it forms the basis for claims that managers should have divulged information more quickly. In particular, Alexander (1991, p. 514) argues that "In light of the reporting requirements for publicly held companies, it is usually not difficult to allege that offering materials, annual reports, 10Ks or 10Qs, or press releases were or became misleading in light of the information at issue." Thus, it is usually not difficult, given that some important information has come to light in an earnings announcement, to allege that managers should have divulged that information earlier.

There are five necessary elements in a private right of action under Rule 10b-5. A cause of action under the Rule is based on the common law of fraud and requires the plaintiff to show:

(1) a misstatement or omission of (2) a material fact, (3) made with intent, (4) that the plaintiff justifiably relied on, (5) causing injury in connection with the purchase or sale of a security (Mitchell and Netter (1992)). Each of these requirements involves subtle and complex issues of law which make it difficult to present a clear and concise summary of the law in this area. However, there is evidence to suggest that, at a minimum, the law *operates* in such a way that almost all of the cases under the Rule are brought as a result of relatively large stock price declines.<sup>6</sup> There are at least two important points here.

First, empirical evidence from two studies indicates that there are many more "purchaser" lawsuits (ie., bad news lawsuits that follow stock price declines) than "seller" lawsuits (ie., good news lawsuits that follow stock price increases). Kellogg (1984) samples all available class action lawsuits filed against the 20 largest accounting firms between 1967 and 1976 that allege a breach of the securities laws. Of the 120 cases he found, 106 are lawsuits filed by classes defined as common stock purchasers while only 14 are filed by classes defined as common stock sellers, supporting the idea that the law operates asymmetrically. Kellogg argues that the asymmetry is due to the way damages are measured in 10b-5 cases, noting that (pp. 187-188): "Observed returns to stockholders of firms charged with issuing misleading accounting data may be negative prior to discovery solely due to the incentives built into the damage measure."

In addition, O'Brien and Hodges (1991) examine a comprehensive sample of 332 securities law class action cases reported in Securities Class Action Alert between April 1988 and June 1991. Of the 297 sample firms with stock price data, 289 (97%) showed a decline in stock price during the period over which damages were claimed or during the last three weeks of the damages period.

Second, in addition to the fact that many more purchaser suits are filed by plaintiffs, the large majority of securities class actions are settled without going to trial. In the O'Brien and Hodges (1991) study, information on the outcome of the case was available for 191 firms. Of these, 183 (96%) of the cases were settled without going to trial. Alexander (1991, p. 525) cites similar data from the Office of the United States Courts: of the 5,147 private securities actions

pending in federal courts in 1987, only 224 (4.3%) went to trial. These settlement percentages are much higher than for civil suits in general, which are settled about 50-60% of the time (Alexander (1991, p. 525)).<sup>7</sup>

Further to this, Alexander (1991) provides evidence that she interprets as implying that, at least for a particular type of securities law class action, cases are settled regardless of the legal merits.<sup>8</sup> Alexander samples the 17 largest computer and computer-related companies that went public in the first half of 1983 (to be included in her sample, the offering must have been for \$3 million or more, with an offer price of at least \$5) and ranks the firms by the total dollar gain or loss in the market value of the stock from the Initial Public Offering (IPO) date to March 31, 1984. Of the 17 initial public offerings, 12 made losses. Of the 12 that made losses, the nine with the largest total dollar losses (losses of at least \$20 million) were sued. None of the firms with smaller losses (or gains) were sued, even though there were no other apparent differences between the firms or the circumstances of the IPOs. In addition, a number of smaller computer-firm IPOs with similar percentage losses to the sued firms, but smaller total dollar losses, were not sued.<sup>9</sup>

Alexander concludes from this evidence that (p. 513): "suits alleging securities violations were filed whenever the stock price declined sufficiently following the IPO to support an award of attorney's fees that would make it worthwhile to bring a case." She goes on to discuss how a prominent plaintiff attorney describes a sudden decrease in stock price as one of the events that will "frequently trigger" an investigation into the filing of a lawsuit. Further, she argues that "As a practical matter, the pressure to be the first or among the first to file a complaint precludes extensive pre-filing factual investigation. Once potential securities violations have been identified by *screening for large, sudden price declines*, plaintiffs can file suit and use the tools of discovery to learn whether a violation actually occurred" (pp. 513-514, my emphasis).

To summarize, there is evidence that: (1) the preponderance of Rule 10b-5 cases are brought after stock price declines, (2) almost all of these cases are settled before going to trial. Thus, large stock price declines generate higher expected legal costs than do large stock price

increases. Moreover, it is fairly easy for plaintiffs to allege, based on the manager's duty to update, that managers failed to disclose material information. Thus, as summarized by Easterbrook and Fischel (1984, p. 707): "In recent years, it has been increasingly common for a precipitous stock price decline to be followed by a rash of lawsuits challenging the accuracy and completeness of the firm's prior disclosures. Often allegations of material omissions are at the core of such suits."<sup>10</sup>

To prevent large stock price declines on earnings announcement dates (and the possible lawsuits that follow), managers have incentives to preempt the announcement of large negative earnings surprises. This strategy avoids the legal costs because if the information is disclosed voluntarily (ie., in advance of the mandated information release date) it then becomes more difficult for the plaintiff, in the absence of information about when the manager first received the bad news, to argue that the manager withheld information. Moreover, the courts have said that "[T]he information must be 'available and ripe for publication' before there commences a duty to disclose. To be ripe under this requirement, the contents must be verified sufficiently to permit the officers and directors to have full confidence in their accuracy" (The Tenth Circuit, as quoted in Block, Barton, and Garfield (1985, p. 1258)). Thus, managers have a legitimate defense for withholding most information through the fiscal quarter, although this defense becomes weaker and weaker as the earnings announcement date approaches (and the information becomes more precise).

There are fewer such incentives in the case of large positive earnings surprises, and so the securities laws impose an asymmetry on managers' discretionary disclosure practices.<sup>11</sup>

Apart from legal liability, managers may have reputational reasons for wanting to preempt large negative earnings news. Articles in the financial press suggest that professional money managers, security analysts, and other investors impose costs on managers who fail to keep them informed of impending bad news.<sup>12</sup> For example, Ben Zacks of Zacks Investment Research was recently quoted as saying that "more companies every quarter are trying to get their [bad] news out early, to avoid portfolio managers' wrath for not having warned them"



("Abreast of the Market," The Wall Street Journal, June 29, 1992, at C1).<sup>13</sup> And in an extreme case, the SEC recently charged the chairman of Ultrasystems with insider trading after he called several analysts the day before the firm announced bad earnings news and its stock dropped about eight percent (this case is documented in Mitchell and Netter (1992)). Although the chairman did not trade on the basis of the information, the SEC argued that the executive had benefited by enhancing his reputation among analysts. This was of particular concern because, just prior to these events, the executive's reputation had been tarnished as a result of issuing overly optimistic earnings forecasts, and some analysts had actually stopped following Ultrasystems because of this. Although this is only one case, it is consistent with the idea that managers do care about their reputation in the investment community.

### **3. Discretionary Disclosure Research**

#### *3.1 Existing Theory*

Analytical research on discretionary disclosure focuses on the costs associated with discretionary disclosure, for in the absence of costs full disclosure obtains (Grossman (1981), Milgrom (1981)). For example, Verrecchia (1983) shows that if disclosure is costless and the existence of private information is common knowledge, managers will disclose all that they know. Since we do not observe full disclosure, Verrecchia imposes a constant proprietary cost, and shows that only managers of firms with news above a certain threshold will disclose their news. Because of the disclosure cost, uninformed investors cannot distinguish among firms with information less than the threshold and so cannot necessarily infer bad news from non-disclosure. Dye (1985) adopts a related perspective but proposes instead that investors are uncertain about the existence of managers' private information, and so cannot infer from silence that managers are withholding bad news. Both of these "screening" or "signaling" models imply that managers only disclose relatively good news.

Several recent analytical models examine firms' incentives to voluntarily disclose news in an attempt to affect the behavior of their competitors. Darrough and Stoughton (1990) extend

Verrecchia's (1983) model to endogenize the proprietary costs of disclosure and show that firms may disclose bad news to discourage the entry of competitors (see also Wagenhofer (1990)). Dantoh (1989) considers firms that operate in oligopolistic product markets and shows that firms will disclose both good and bad news given the tradeoff between wanting to provide good news to stockholders and bad news to competitors. Finally, recent papers by Gigler (1992) and Newman and Sansing (1992) provide related applications of these so-called "two audience" models in a disclosure context. Overall, while there are no very precise empirical implications of these models, they imply that if we observe firms disclosing bad news then it is because they wish to deter entry/competition in their product markets.<sup>14</sup>

### *3.2 Empirical Evidence*

There are numerous empirical studies of managers' earnings forecasts.<sup>15</sup> Consistent with the screening/signaling scenario, papers by Patell (1976), Penman (1980), Waymire (1984), and Lev and Penman (1990) document that managers tend to disclose good news earnings forecasts more often than they disclose bad news earnings forecasts and, on average, that there is a positive stock price response to managers' earnings forecasts. However, for samples drawn from more recent time periods, Ajinkya and Gift (1984), McNichols (1989) and Pownall, Wasley and Waymire (1991) find that management earnings forecasts do not convey news that systematically exceeds the market's expectations.

Thus, there is evidence that managers disclose both good and bad earnings news voluntarily. Moreover, since managers tend to disclose good news when their firms are performing well relative to historical and/or industry benchmarks (eg., see Lev and Penman (1990)), there is some empirical support for the screening/signaling explanation for these types of disclosures. However, we know little about why firms disclose bad news. Several empirical papers provide some evidence on how managers disclose bad news.

Ajinkya and Gift (1984) examine the "expectations adjustment" hypothesis--that forecasts are issued by managers in an effort to move prevailing market expectations toward

managers' private beliefs about future earnings. Under this hypothesis, management issues earnings forecasts when it believes the market's expectations about earnings are sufficiently inaccurate that management "expects dramatic swings in price later when actual results come out" (p. 429). Thus, Ajinkya and Gift assume that it is costly for managers if there are large earnings surprises of either sign, although they do not speculate on what those costs might be. The argument is similar to the legal liability story advanced above, except that the legal liability argument implies that the costs of failing to disclose bad news before the earnings announcement are larger than the costs of failing to disclose good news, whereas Ajinkya and Gift posit a symmetric loss function.

Pastena and Ronen (1979) examine firms' "hard" and "soft" disclosures. They define "soft information" as that for which "either there is a low probability of imminent disclosure by sources uncontrolled by management or as a result of audit or both" and "hard information" as the complement of soft information (p. 551). Pastena and Ronen examine a sample of around 2,500 disclosure announcements for 122 firms over 1972-74 and find that managers: (1) prefer to postpone disclosures of negative information, (2) tend to disclose soft positive information but not soft negative information, and (3) disclose negative information only after that information becomes hard, ie., only after they have to.

In addition, several studies of managers' annual earnings forecasts find that bad news forecasts of annual EPS tend to be released later in the fiscal year than good news forecasts (see, eg., Hassell and Jennings (1986), Jennings (1987), and Pownall and Waymire (1989)). Lev and Penman find (1990, Table 5B) that the stock price reaction to annual forecasts of EPS is reliably positive in the first three fiscal quarters but not reliably different from zero in the fourth quarter. In addition, Pownall, Wasley and Waymire (1991) find that there is a relation between forecast horizon and forecast type--less specific or softer forecasts (eg., minimums) tend to be issued earlier in the year, while more specific forecasts or harder (point estimates) are issued over shorter horizons. This suggests that, as with Pastena and Ronen, firms tend to disclose bad news later in the fiscal year, when they are forced to do so.

Overall, this evidence is consistent with a world in which both the signaling and legal liability arguments apply--the signaling story predicts that managers prefer to disclose good news and will do so as that information becomes available (even if it is "soft" or relatively qualitative), whereas the legal liability argument suggests that managers will disclose very bad news to preempt large stock price declines on earnings announcement dates and so will wait until later in the period until the information becomes "hard" and they are sure that there will be no offsetting good news.<sup>16</sup>

Finally, Baginski, Hassell and Waymire (1992) analyze the disclosure of preliminary earnings estimates by managers and find that these disclosures are, on average, bad news to investors. Moreover, they document that a larger proportion of the eventual earnings surprise is revealed by the estimates in the case of bad news releases than in the case of good news estimates. Since these preliminary estimates are likely to be an effective way of preempting the information in earnings releases, this evidence is consistent with the view that managers are more likely to preempt bad earnings news than good earnings news.

#### **4. Research Hypotheses**

Based on the theory and evidence presented above, I examine several hypotheses in the tests that follow. The basic premise that I seek to test is that managers' voluntary disclosures fall into two distinct categories: (1) Good news forecasts of earnings-per-share (EPS), motivated by the screening/signaling theories described in section 3.1, and (2) Preemptive bad news disclosures, motivated by the legal liability argument described in section 2, that is, by the need to preempt large negative earnings surprises. (Since most firms are not in either of these situations most of the time, this theory predicts that the overall frequency with which firms make voluntary disclosures is low.) There are four principal research hypotheses.

First, because the principal motivation for the bad news disclosures is to preempt the information contained in quarterly earnings releases, I expect that:

H1: Bad news earnings disclosures are more likely to relate to specific quarterly earnings releases and less likely to relate to annual EPS numbers, and conversely for good news earnings disclosures.

More generally, if motivated by the need to preempt a specific quarterly earnings realization, these bad news disclosures are likely to take a different form from disclosures that are designed primarily to signal good news. For example, while bad news disclosures may be fairly specific in stating, say, that the current quarter's earnings will be "substantially lower" than the prior year's level, good news disclosures may simply state that earnings for the year are expected to exceed the prior year's levels. Thus I also provide evidence on whether there is a relation between the nature of earnings news and disclosure type.

Second, because avoiding the legal costs of failing to disclose bad news depends crucially on preempting the large negative stock price reaction on earnings announcement days, I expect that:

H2: Ceteris paribus, the absolute value of the stock price response to bad news voluntary disclosures will be larger than the absolute value of the stock price response to good news voluntary disclosures.

Third, the central prediction of the legal liability argument is that managers preempt earnings announcements that convey large negative earnings surprises more often than they preempt other quarterly earnings announcements. Thus, I expect that:

H3: The probability that the information conveyed by a given quarterly earnings announcement will be preempted by a voluntary corporate disclosure is relatively high for large negative earnings surprises but not otherwise.

By testing H3 I provide evidence on the extent to which the legal liability argument has empirical validity vis-a-vis the expectations-adjustment hypothesis of Ajinkya and Gift. Under the expectations-adjustment hypothesis, the probability that a given quarterly earnings announcement will be preempted increases with the size of the earnings surprise (regardless of its sign) whereas this is only true for large negative surprises under the legal liability argument.

Finally, if managers are indeed successful in preempting the stock price response associated with large earnings surprises, I expect that:

H4: *Ceteris paribus*, the stock price response to earnings news on earnings announcement dates will be smaller for earnings announcements that have been preempted by a voluntary corporate disclosure than for earnings announcements that have not been preempted.

## 5. Sample Selection, Data and Descriptive Statistics

To investigate the extent to which corporate managers disclose bad news before they are required to do so in quarterly earnings reports, I collect data on the voluntary disclosures of 93 NASDAQ National Market System (NMS) firms during the 1980s. I choose NASDAQ firms (as opposed to exchange-listed firms) for two reasons. First, because NASDAQ firms tend to be smaller and younger than exchange-listed firms, they are more likely to experience the types of earnings problems that lead to securities law suits. Second, NASDAQ firms are less closely followed than exchange-listed firms, so that their voluntary disclosures are a relatively important means of communication with outside investors. Large NYSE firms, on the other hand, are often followed by a dozen or more security analysts. This provides these firms with an alternative, less structured means of communication with outside investors so that their voluntary disclosures are but one of several possible means of communications.<sup>17</sup>

While small relative to New York and American Stock Exchange listed firms, the NASDAQ NMS firms from which I choose tend to be the "largest, most actively traded OTC stocks" (Schwartz (1988, p. 44)). This is important, because Alexander's (1991) evidence suggests that firms that are "too small" do not get sued because the size of any potential settlement means that it is not worthwhile for plaintiff's attorneys to bring suit.<sup>18</sup>

To collect a random sample of NASDAQ NMS firms, I first obtained a list of all firms listed on the NASDAQ NMS by January 1, 1985 (the NMS began in 1982, but only a small number of firms were listed in 1982 and 1983). This yields 1,234 firms. Of these, I retained those firms listed on the NASDAQ by January 1, 1981, the date from which I wish to collect the

disclosure data. This yields 657 firms, of which I randomly chose 100. Of these 100 firms, I was able to identify 94 on the 1990 CRSP NASDAQ tape. Notice that inclusion in the final sample does not require that the firm survive through the 1980s. Of the 94 firms, 59 are still listed on the NASDAQ at the end of December 1990, another 13 have listed on the New York or American stock exchanges by that time, while 22 firms do not survive through the end of 1990.

Based on comparative market capitalization as of December 31, 1980 and consistent with the sample selection criteria, the sample firms are smaller than exchange-listed firms but larger than other NASDAQ firms. The sample firms have an average (median) market value of \$117.2 million (\$61.9 million) compared to population statistics of \$534.4 million (\$98.4 million) for NYSE-ASE firms and \$49.9 million (\$18.0 million) for NASDAQ firms in general. In addition, as of the beginning of 1981 only 19 of the 94 firms were followed by Value Line analysts.

While the number of firms included in the sample may seem small relative to other empirical accounting studies, I chose, given relatively high data collection costs, to limit the number of firms to allow collection of a longer time-series of data for each firm. This preference for time-series vs. cross-sectional variation reflects the likelihood that firms' disclosure practices vary through time as a function of economic conditions. If, for example, I had collected data only for the early 1980s, when the economy was in recession, it would not be very surprising if I had discovered that firms disclosed a disproportionate amount of bad news.

To investigate the disclosure practices of these firms' managers, I perform a company search of the Dow Jones News Retrieval Service (DJNRS) during the period from January 1, 1981 through December 31, 1990.<sup>19</sup> The search used the keywords "earnings," "income," "profit(s)," and "loss(es)" to ensure that all earnings-related disclosures were retrieved. All of the articles that were retrieved as a result of this search procedure were then read to ensure that the statement was attributed to either the company or a company official. Of the 94 firms, there was one for which I could not obtain any information from the DJNRS and so I dropped this firm from further analysis. I thus proceed with a sample of 93 firms.

Table 1 provides descriptive information on the sample of earnings-related voluntary disclosures. Most previous studies of management earnings forecasts (including those discussed in section 3.2) include only the first point or range estimate of annual EPS and exclude forecasts that are preliminary EPS estimates (some studies also exclude forecasts in the last month of the fiscal year). In contrast, I include all disclosures that have implications for these firms' quarterly and annual earnings. Thus, I include not only quantitative statements about earnings such as point, range, minimum (lower bound), and maximum (upper bound) forecasts, but also qualitative statements such as "earnings will be down" or "earnings will be disappointing" because such statements are an effective means of conveying at least a good portion of imminent earnings news to investors, and the hypothesis is principally about whether the news in earnings is preempted. (Pownall, Waymire and Wasley (1991) examine a similar set of disclosures, although they exclude qualitative disclosures.)

There are a total of 375 earnings-related disclosures for these 93 firms over the 1981-1990 period (although recall that not all firms survive through the end of 1990). Thus, consistent with other studies, firms make relatively few voluntary disclosures.<sup>20</sup> There is considerable cross-sectional variation with respect to how often firms make voluntary disclosures. Of the 93 firms, 17 make no voluntary disclosures during the ten year period, and another 16 make only one disclosure during this interval. By contrast, there are four firms that make 13 or more disclosures during the sample period, and 12 firms that make ten or more disclosures. A number of previous studies examine the relation between various firm characteristics and relative disclosure frequency, including Imhoff (1978), Lewellen, Kross and Ro (1992), Ruland, Tung and George (1990), and Waymire (1985).<sup>21</sup> I examine how this variation affects the results of my tests later in the paper (section 6.5.1).

The left-hand column of table 1 indicates that of the sample of 375 forecasts, 109 (29%) relate exclusively to annual earnings, while another 94 (25%) have implications for both annual and quarterly earnings. Thus nearly half of the sample disclosures (172 observations or 46%) relate exclusively to quarterly earnings and so would be excluded from previous studies.



Similarly, 36% of the 375 observations take the form of preliminary earnings estimates that other studies exclude. These observations are potentially important for this study because the results in Baginski, Hassell and Waymire (1992) indicate that the majority of these estimates convey bad news to the stock market.

To provide information on the relative frequency of forecast type, the right-hand column of table 1 treats observations that include forecasts of both annual and quarterly earnings as separate observations. Because there are a total of 375 disclosures and 94 of these contain forecasts of both types, 469 forecasts are represented in the right-hand column of table 1. Of these forecasts, the largest single group comprises point estimates (123 or 26% of the total) which, when combined with the range estimates (74 or 16%), account for 42% of the total observations. Thus, by excluding minimum, maximum, and qualitative forecasts of EPS, other studies exclude a large subsample of earnings forecasts (this is similar to what Pownall, Wasley and Waymire (1991) find). Moreover, 102 (22%) of the observations are qualitative in nature, so that these are potentially an important subset of earnings forecasts as well.

Finally, table 1 provides a breakdown of the disclosures according to whether they convey good, bad or neutral (no) news. I make this classification based on my reading of the complete text of the DJNRS document. Disclosures are classified as good/bad/no news if they indicate that earnings will be better/worse/same as expected or (in the absence of information about prior expectations) better/worse/same as the corresponding prior period's earnings. In most cases this classification is fairly straightforward, but when in doubt I classified an observation as "no news."

Consistent with prior research, the evidence in table 1 panel D indicates that firms disclose both good and bad news, although the majority of observations (52-53%) convey bad news. Only around 5% of the observations fall into the "no news" category, consistent with the expectations-adjustment view that managers only disclose information to change extant earnings expectations.

## 6. Results

### *6.1 Good vs. Bad News and the Nature of Voluntary Disclosures*

Under H1, I expect a relation between forecast horizon (annual vs. quarterly) and the nature of the news (good or bad) such that quarterly earnings disclosures are more likely to convey bad news than disclosures that relate to annual earnings. Panel A of table 2 presents the results of this test. (Since this hypothesis makes no statement about the "no news" observations, I drop these observations for the tests in table 2.) The results are consistent with H1. While the majority of good news disclosures relate to annual earnings (55%), around two-thirds of the bad news disclosures relate to quarterly earnings. Put differently, 55% of annual forecasts convey good news (105 of 191), while 65% of quarterly disclosures convey bad news (165 of 252). A chi-square test rejects the hypothesis that there is no relation between the nature of the news and forecast horizon at the .0001 level. Overall, the results indicate that quarterly disclosures tend to convey bad news while annual disclosures tend to convey good news, which is consistent with H1.

Table 2, panel B provides descriptive information on the relation between the nature of the earnings news and the way that news is disclosed by managers. As one would expect, good news is most often disclosed (around one-third of the time) as a lower-bound or minimum estimate while bad news is most often disclosed (also around one-third of the time) as an upper-bound or maximum estimate. Even ignoring this difference, however, it is clear that managers disclose good and bad news differently. Good news tends to be disclosed as a point or range estimate (55% of the time vs. 31% for bad news disclosures) while bad is more often disclosed qualitatively (28% of the time vs. 13% of the time for the good news releases). Chi-square tests reject the null hypothesis of no relation between the nature of earnings news and forecast type at small probability levels both before and after excluding minimum and maximum disclosures. Thus there is a relation between the nature of the news revealed and the way that information is revealed--managers tend to disclose good earnings news using point or range estimates while managers are more likely to disclose bad earnings news qualitatively.

Table 2, panel C reports on the proportion of good and bad news disclosures that take the form of preliminary earnings estimates. The results in Baginski, Hassell and Waymire (1992) suggest that these estimates are, on average, bad news to the stock market (although the mean and median forecast errors for the estimates in their sample are close to zero) so that we might expect these preliminary estimates to convey predominantly bad news. This is not the case for my sample. Based on the chi-square test there is no relation between the sign of the earnings news and whether the news is disclosed as a preliminary earnings estimate. (In fact, when I exclude the annual horizon forecasts, the preliminary earnings estimates are more likely to convey good news.)

Overall, the evidence in table 2 reveals that there are some important differences in the way that good and bad news is revealed to investors: good news is more often disclosed as an annual point or range forecast of EPS, whereas bad news disclosures are more likely to be qualitative in nature and have implications for quarterly earnings announcements. This is consistent with the view that bad news disclosures are more likely to be motivated by a need to preempt large negative quarterly earnings surprises, whereas good news disclosures are more likely to be driven by a desire to signal more generally that the firm is doing well.

### *6.2 The Stock Price Response to Voluntary Disclosures*

According to H2, other things held the same, it should be the case that the stock price response to bad news voluntary disclosures will be larger, in absolute value, than the stock price response to good news disclosures. To test this hypothesis, table 3 presents summary statistics for the abnormal stock returns associated with the voluntary disclosures.<sup>22</sup> I present results for the sample overall, as well as for the sample partitioned into the three news groups (good news, bad news, and no news) used in table 1. In addition, I partition the sample according to forecast horizon (panel B) and disclosure type (panel C) because other studies find that the stock price response to voluntary disclosures varies as a function of these variables (eg., Jennings (1987), Pownall, Wasley and Waymire (1991)). The partitions thus give me some ability to hold "other

things the same" in comparing the magnitude of the stock price response to good and bad news releases. Table 3 summarizes the stock price response to a sample of 333 voluntary disclosures. This sample represents the full sample of 375 voluntary disclosures described in table 1, less 42 disclosures that occur at the same time as earnings announcements.

Overall, the stock price response to the full sample of 333 voluntary disclosures is negative, with an average (median) abnormal return of -1.68% (-.70%). These numbers are reliably different from zero at the 1% level under a two-sided test. More important, the negative skewness is due to the effect predicted in H2: the stock price response to the sample of bad news disclosures is larger, in absolute value, than that to the sample of good news disclosures. For the bad news disclosures, the average (median) stock price reaction is -4.48% (-2.39%) compared to 1.85% (1.16%) for the good news disclosures. The absolute value of these distributions is significantly different at the .001 level under two-sample *t* and Wilcoxon tests (not reported in the table). This is consistent with H2.

Table 3, panel B partitions the sample of disclosures according to the forecast horizon. For this sample the forecasts with the least information content, as measured by the stock price reaction, are those that convey estimates of annual EPS--for the sample overall as well as for each of the good and bad news subsamples the abnormal returns associated with annual forecasts are not reliably different from zero. In contrast, for those disclosures that have implications for quarterly earnings (the "Quarterly" and "Both" categories), there is a detectable stock price response for both of the good and bad news subsamples--the average and median abnormal returns are all reliably different from zero at the 1% level. Thus, there is evidence that forecasts with shorter horizons generate larger stock price reactions. Although this is consistent with the idea that managers use these disclosures to preempt subsequent earnings-announcement date stock-price reactions, it could also reflect the fact that shorter horizon forecasts are likely to be more accurate (see Jennings (1987) or Pownall, Wasley and Waymire (1991)). With regard to H2, the absolute value of the stock price reaction is significantly larger for the bad news

disclosures for the "Both" category at the 1% level (under two-sample  $t$  and Wilcoxon tests), but not for either of the other two categories at the 5% level (all tests two-sided).

Finally, table 3C partitions the disclosures according to disclosure type, again cross-classified by the nature of the news. The evidence indicates that point estimates tend to have information content whether they convey good or bad news, presumably because they provide investors with the most precise information about future earnings. There is no statistically reliable difference in the absolute value of good and bad news point estimates. Apart from the point estimates, only maximum and qualitative disclosures that convey bad news generate statistically significant stock price reactions--for both cells the median is reliably different from zero at the 1% level and the mean at the 5% level. Consistent with H2, the absolute value of qualitative bad news disclosures exceeds that of the qualitative good news disclosures at the 1% level (again using two-sample  $t$  and Wilcoxon tests). It is not possible to formally test H2 for the other three disclosure types due to the small number of observations in one or other category.

Viewed collectively, the evidence in table 3 is consistent with H2--bad news disclosures, in particular those that have implications for quarterly rather than annual earnings, tend to generate larger (in absolute value) stock price reactions than otherwise similar good news disclosures.

### *6.3 Are Large Negative Earnings Surprises More Likely to be Preempted?*

The crux of the legal liability argument is that managers have incentives to preempt large negative earnings surprises but not other types of earnings news. To test this prediction I require a proxy for the manager's private information about the upcoming earnings release and how it differs from the market's expectation. Following previous studies, I measure the earnings surprise for each quarter as EPS for that quarter less (split-adjusted) EPS for the corresponding quarter of the previous year; ie., I assume that the seasonal-random-walk model provides a good approximation for the market's expectation of quarterly EPS and that managers have better information than outsiders about what EPS will be. I do not use analyst forecast data for these

tests because the majority of sample firms are not followed by analysts (see section 5). I deflate the quarterly earnings change by stock price 60 days prior to the earnings announcement date. [I use stock price approximately three months prior to the earnings announcement date because, for those quarters with disclosures, there are likely to be stock price changes that are correlated with the earnings surprise, so that using stock price immediately prior to the earnings announcement as the deflator would understate the size of the earnings surprise.]

The quarterly earnings data (quarterly EPS numbers and announcement dates) required for these tests are collected from one of three possible sources: (1) current and past versions of the quarterly Compustat tapes, (2) the Wall Street Journal Index, and (3) the DJNRS. By employing alternative sources for those data not available from the current version of Compustat I am able to obtain earnings data on non-surviving firms through the date of their demise, mitigating against any survivorship bias in these data.

For the 93 sample firms I am able to obtain complete earnings surprise data for a total of 2,647 firm-quarters during 1981-1990. Of this total, I classify 282 earnings announcements (10.7%) as having been preempted by a voluntary disclosure. This number is less than the total number of 375 voluntary disclosures that I initially identified for three reasons. First, sometimes there is more than one disclosure in a given quarterly window and clearly each quarterly earnings announcement can only be preempted once. Second, I exclude voluntary disclosures which, although they precede a given earnings announcement and follow (or occur at the same time as) the immediately preceding announcement, are clearly not designed to preempt the information contained in the announcement that follows. For example, disclosures that contain forecasts of annual EPS and that are made during the first quarter of the period often do not make reference to the first quarter's results; thus, I would not consider the first quarter's earnings announcement to be preempted.<sup>23</sup> Third, in some instances I cannot obtain the earnings surprise data that relates to a particular disclosure, and so I lose that disclosure.

Tables 4 and 5 contain the results of the tests of H3. Both tables provide evidence on how the likelihood with which an earnings announcement is preempted varies as a function of

the earnings surprise. Table 5 presents formal logit analyses. In addition, because the economic significance of logit analyses is often difficult to gauge, table 4 provides simple frequency distributions.

Table 4, panel A partitions the sample of earnings announcements into those that convey "very good," "intermediate" and "very bad" news. I define very good (bad) earnings news as earnings surprises that are greater (less) than five percent of stock price. All other earnings news is classified as intermediate. According to H3, very bad news will be preempted relatively often by managers, but otherwise there should be no relation between earnings news and the frequency with which it is preempted: most of the time managers have little incentive to preempt earnings news. The evidence in table 4A strongly supports H3. Of the 156 very bad news announcements, 39 (25%) are preempted. This proportion is substantially higher than those for (1) the overall sample (10.7%), (2) the intermediate news observations (10.0%), and (3) the very good news observations (4.9%). [Binomial tests (not reported) indicate that these three latter proportions are all significantly different from 25% at small probability levels.] Notice also that this evidence is inconsistent with the expectations-adjustment view, under which extreme news of both signs would be preempted relatively often while intermediate news would generally not be preempted.

Panel B of table 4 partitions the sample of earnings announcements into approximate deciles, formed after ranking the announcements according to the magnitude of the earnings surprise. Compared to panel A, this evidence should provide a better idea of the functional form of the relation between the earnings surprise and the probability of preemption. The results in panel B are again consistent with H3. For the extreme bad news decile, quarterly earnings announcements are preempted 22% of the time, the highest number in the table. In the next worst earnings news decile the proportion declines somewhat to 17.8%, but is still larger than any of the numbers below it (the differences in proportions between these two deciles and each of the remaining deciles are all significant at the 5% level using a binomial test). There are no statistically reliable differences among the proportions in the rest (ie., the other eight deciles) of

the table. Thus, consistent with H3, very bad news is preempted most often, but when we exclude the very bad news there is no relation between the magnitude of earnings news and the probability that it will be preempted. Moreover, apart from very bad news, firms generally do not preempt earnings news.

Table 5 presents the results of logit regressions estimated using the same set of 2,647 earnings announcement observations analyzed in table 4. The dependent variable is coded 1 if the earnings announcement is preempted and 0 otherwise. The variable "News" in table 5 is the deflated earnings change from table 4, and  $|\text{News}|$  is the absolute value of that variable.<sup>24</sup> In addition, I include a loss dummy that takes the value of 1 if bottom-line EPS are negative and 0 otherwise, and a sign dummy that takes the value 1 for earnings announcements in which the firm reports a decline in split-adjusted quarterly EPS (ie., the firm reports bad news) and 0 otherwise.

The first regression in table 5 provides evidence on whether there is a relation between the absolute value of the earnings surprise and the probability of preemption. The coefficient on  $|\text{News}|$  is positive and statistically significant (the  $t$ -statistic is 2.44), indicating that the probability that an earnings announcement will be preempted increases with the size of the earnings surprise. This is consistent with the expectations-adjustment hypothesis. In the second regression I include the loss dummy along with the  $|\text{News}|$  variable, to see whether there is something about incurring losses *per se* that increases the probability that managers will preempt an earnings announcement.<sup>25</sup> The evidence suggests that this is the case. The coefficient on the loss dummy is positive with a  $t$ -statistic of 3.46 and the size of the coefficient on the  $|\text{News}|$  variables declines somewhat (although it is still significantly positive). The third regression includes the  $|\text{News}|$  variable with and without an interactive dummy variable for whether the earnings news is good or bad (the sign dummy). This specification tests whether the slope coefficient on the  $|\text{News}|$  variable is different for earnings announcements that convey good and bad earnings news. The results indicate that, similar to table 4, for good news earnings announcements there is no relation between the size of the surprise and the probability of



preemption but that for the bad news earnings announcements the probability of preemption increases with the size of the earnings surprise. Notice that the size of the coefficient on  $|\text{News}|$  increases noticeably (from around .4 to 2.06) when it is not constrained to being the same for good and bad news earnings announcements. This evidence is consistent with H3.

Finally, regressions 4 and 5 in table 5 allow the intercept as well as the slope to vary according to whether the earnings announcement conveys good or bad earnings news. The coefficient on the intercept dummy is reliably positive (with a  $t$ -statistic of over five) while the coefficient on the interactive slope term, although it remains positive, becomes less significant when the intercept dummy is included (the  $t$ -statistic declines from 2.9 to 1.8). The fact that the intercept dummy seems more important than the interactive dummy term suggests that it is bad news *per se*, rather than the magnitude of that news, that is of most importance in explaining whether an earnings announcement is preempted, although it may be that the  $|\text{News}|$  variable suffers more from measurement error than the intercept dummy, which would bias its coefficient downward.

Overall, the results in tables 4 and 5 are consistent with H3--they indicate that earnings announcements that convey relatively large negative earnings surprises tend to be preempted more often than earnings announcements that convey intermediate or positive earnings surprises. This suggests that managers face an asymmetric loss function in formulating their discretionary disclosure policies, as the legal liability argument in section 2 suggests.

Moreover, when taken as a whole the evidence in tables 2-5 seems more consistent with the legal liability motivation for bad news disclosures than with idea that these bad news disclosures are designed to deter or discourage competitors and/or potential entrants in the firm's product market. For example, under the latter view it is not obvious why we would observe bad news disclosures that seem designed to preempt earnings-announcement-period stock price declines. If a manager wants to deter potential entrants (say) he or she would presumably make longer term projections, perhaps about the size of the market, about product development difficulties, etc., rather than making fairly specific, short-term statements about earnings (indeed,

Newman and Sansing (1992) offer their model as an explanation of the Management Discussion and Analysis section of the annual report, which usually contains broader, more forward-looking statements about the firm's general business outlook than the disclosures that I consider). Thus it is difficult to envision explanations for these results that do not involve legal liability.

#### *6.4 The Stock Price Response to Earnings Announcements that Are (Are Not) Preempted*

To investigate H4, table 6 reports on ordinary-least-squares (OLS) regressions of earnings-announcement period abnormal returns on the same earnings surprise measure ("News") used in tables 4 and 5. In this table I code a dummy variable 1 for earnings announcements that are preempted by a voluntary corporate disclosure and 0 otherwise. According to H4, the stock price response associated with earnings announcements that have been preempted should, other things held the same, be smaller than that for announcements that have not been preempted. Thus, under H4 I expect a negative coefficient on the multiplicative News\*dummy term.

The results in panel A of table 6 are not consistent with H4: the coefficient on the multiplicative dummy term is positive, not negative, although the *t*-statistic is only 1.01. However, the estimated slope coefficient on News and the R-squared values in these regressions are small, apparently because the News variable is very skewed. To address this I reestimate these regressions after making two alternative modifications in panels B and C respectively. First, in panel B I "winsorize" extreme values of News; values that exceed plus (minus) one are set equal to plus (minus) one. Thirteen observations are affected by this procedure. Second, in panel C I remove these outlying 13 observations entirely before estimating the regressions.

With respect to H4, the results in panel B of table 6 are similar to those in panel A: the coefficient on the multiplicative dummy variable is positive but not reliably so. This occurs even though (as expected given the winsorization) the estimated size of the slope coefficient on the News variable increases over fourfold from that in panel A, and the regression R-square increases from .89% to 3.04%.

In contrast to the results in panels A and B of table 6, when I delete the outlying observations in panel C the results are consistent with H4, ie., the coefficient on the multiplicative slope term is reliably negative (the  $t$ -statistic is -3.81) while that on the News variable remains reliably positive. This result indicates that, after conditioning on the earnings surprise, earnings announcements that have been preempted by a voluntary corporate disclosure generate a smaller stock price response than earnings announcements that have not been preempted.

Further investigation reveals that seven of the 13 observations that represent the difference between panel C and the other two panels comprise earnings announcements that have been preempted, so that these observations are clearly having an undue effect on the estimated coefficient on the multiplicative dummy variable in panels A and B. Thus, if one is willing to accept that these are somehow "invalid" observations (just because they are large and unusual) the results in panel C are more reliable and the evidence favors H4. On the other hand, the theory says that it is the large and unusual observations that are most important here, and in that sense, panels A and B probably provide more reliable evidence. Overall, because these regression results are sensitive to small manipulations of the data, it seems most reasonable not to infer too much from them.

## *6.5 Smaller Tests*

### *6.5.1 Firms that Disclose Very Often or Very Little*

Earlier in the paper I described the fact that of the 93 sample firms, 17 firms make no voluntary disclosures during the ten-year sample period, while 12 firms make ten or more disclosures. Because these two sets of firms are so unusual, I investigate the extent to which they affect the results. Firms that make voluntary disclosures very often (more than once a year, on average) may be doing so for some structural reason unrelated to the theory discussed in sections 2 and 3 above. For example, managers of some firms almost always make earnings-

related predictions at the time of the annual stockholders' meeting. A similar argument can be made for firms that almost never disclose information voluntarily.

Table 7 contains the same logit regression equations as table 5, but these equations have been estimated after excluding observations for firms that disclose very often (ten or more times). As would be expected if the legal liability argument is valid and these firms' disclosures were not driven by legal liability, the results in table 7 are somewhat stronger (ie., more supportive of H3) than those in table 5. In particular, the *t*-statistics on the multiplicative dummy variable in regressions 4 and 5 of table 7 are larger than those in table 5, indicating more strongly that the probability of preemption increases with the magnitude of the bad news.

I have also reestimated the table 5 logit regressions after excluding observations for firms that made no voluntary disclosures during the sample period. These results (not reported in tables) are even more similar to those in table 5 than those in table 7.

### *6.5.2 Forecast Revisions*

Throughout the paper I have argued that, because of the asymmetric loss function due to legal liability, managers have incentives to preempt large negative earnings surprises more than other earnings news. If this argument is correct it should also be the case that, once managers have made earnings predictions, they will revise that prediction more often when they come to realize it is too optimistic than when they come to realize it is too pessimistic. In other words, given legal liability managers again wish to avoid big, bad earnings surprises.

To investigate this, I went through the sample of 375 voluntary disclosures to obtain a sample of earnings predictions that were later revised before the earnings announcement date. There are 24 such forecast revisions, of which 19 were downward revisions and five were upward revisions. While this is clearly a very small sample, the asymmetry is consistent with the legal liability argument.

## 7. Conclusion

This paper extends existing research on managers' discretionary disclosure practices in at least two ways. First, I propose a new and (I believe) potentially important explanation for why managers voluntarily disclose bad earnings news. Specifically, I argue that securities laws in the U.S. operate in such a way as to impose an asymmetric loss function on managers: by announcing large negative earnings surprises on earnings announcement dates, managers face potentially costly stockholder lawsuits while similar announcements of large positive earnings surprises generate no such effects. As a result, managers have incentives to preempt large negative earnings surprises by voluntarily disclosing that information early, but have no such incentives with respect to large positive earnings surprises.

Second, I provide evidence that is generally consistent with the idea that a large subset of earnings-related voluntary disclosures are designed to preempt bad quarterly earnings news. More specifically, I find that: (1) bad news disclosures generate, other things equal, a larger stock price reaction than good news disclosures, and (2) large negative earnings surprises are preempted much more frequently (20-25% of the time) than other earnings releases (which are preempted around 10% of the time). This evidence complements existing research, which documents the existence of point or range estimates of annual EPS, but which (given the typical sample selection criteria) tends to exclude disclosures that relate specifically to quarterly earnings news. I find that bad news disclosures are more likely to relate to quarterly (as opposed to annual) EPS and are more likely to be disclosed in a qualitative manner (as opposed to disclosure as point or range estimates) than are good news disclosures. Thus, because previous research tends to include only point or range estimates of annual EPS, that research tends to exclude a potentially important subset of managers' earnings-related disclosures.<sup>26</sup>

Overall, my evidence suggests that managers voluntarily disclose earnings information for two mutually-exclusive reasons: (1) Consistent with extant research, when their firms are doing well relative to either historical or cross-sectional benchmarks, managers make good news disclosures to distinguish their firms from those that are doing less well (eg., see Lev and

Penman (1990)); and (2) Consistent with the legal liability argument, when managers anticipate a large negative stock price reaction to an upcoming earnings announcement, they tend to disclose the bad news early to reduce the possibility of stockholder lawsuits.

This research also has implications for future accounting research. First, given the interaction that I document between the type of earnings news, forecast horizon, forecast type, etc., it is important that researchers take care not to exclude important types of disclosures by restricting their samples unnecessarily. For example, based on my evidence research that excludes qualitative earnings disclosures will exclude a disproportionate number of bad news disclosures. Moreover, even though I define voluntary disclosures more broadly than previous research, it would be interesting to examine an even broader set of managerial disclosures.<sup>27</sup> For example, by looking (say) at management's product development announcements, market share predictions, and so forth, we may be able to provide some evidence that bears on existing analytical research about how managers balance their discretionary disclosure policies given that these disclosures typically have to speak to at least two audiences--stockholders and competitors. Second, this study offers evidence that suggests, at a minimum, that the legal liability explanation is worthy of more attention than it has hitherto received from accounting researchers. In particular, if the legal liability argument is not important, it remains for us to explain why managers preempt large negative earnings surprises much more often than they preempt other earnings news.

## Footnotes

1. Recent analytical research suggests another explanation for why firms disclose bad news: to deter entry/competition in their product markets (eg., see Darrough and Stoughton (1990), Newman and Sansing (1992)). However, as discussed further below, it seems unlikely that the type of earnings-related bad news disclosures in this study are driven by the need to deter competitors.
2. I discuss extant research more thoroughly in section 3.
3. This section draws on securities law texts by Bloomenthal (1990), Hazen (1989, Section 13), Loss and Seligman (1991, Vol. VII), and Walton and Brissman (1991, Chapter Two).
4. For example, see Hazen (1989, p. 753), Walton and Brissman (1991, p. 2-8). While the law provides no general obligation to disclose information as it becomes available, stock exchange listing requirements do impose an affirmative duty to disclose material new information on a timely basis. For example, the NYSE Manual states that "[a] listed company is expected to release quickly to the public any news or information which might reasonably be expected to materially affect the market for its securities" (as quoted in Walton and Brissman (1991, p. 2-19)). However, violations of these rules do not give rise to either a private legal right of action or any government imposed liability, and must be enforced by the exchanges, who can delist the firm's security. The extent to which the exchanges can and/or do enforce these rules is therefore an open question.
5. In addition, when corporations file Securities Act registration statements for new securities offerings with the SEC, they have a duty to disclose all material developments. Thus one might expect that firms are more likely to voluntarily disclose information in the period at or before new securities offerings. Frankel, McNichols and Wilson (1992) and Lang and Lundholm

(1991) provide evidence that voluntary disclosure levels are higher for firms that are active in issuing securities.

6. The legal reasons for this asymmetry appear to relate to the proof of damages and the need to show causation (ie., a sufficient causal connection between the plaintiff's injury and the wrongful conduct). If an investor purchases a stock whose price subsequently declines, it is relatively easy to show both an economic loss and (if the decline is due to the release of information) causation. Conversely, if a stockholder sells "too early" (before good news is revealed) the plaintiff has a more difficult burden in having to show that he or she would not have sold had the information been available.

7. Alexander (1991) and Romano (1991) argue that the relatively high incidence of settlement for securities class actions is due to the facts that: (i) firms' directors and officers are usually named, along with the firm, as defendants in these cases, (ii) individual directors and officers are likely to be much more risk averse than corporations and so may settle even if the probability of losing the suit is very low, (iii) directors and officers' liability insurance typically provides coverage for the settlement of cases but not for damages if the case goes to trial and is lost (Romano (1991, p. 57)). In addition, Alexander (1991, pp. 526-527) argues that securities class actions are usually settled without any type of legal adjudication, ie., without even a summary judgement (in which the court sanctions the plaintiff's legal theory), because these cases tend to turn on issues that are too subtle to be decided without a trial.

8. O'Brien (1991) makes a similar argument based on the evidence in O'Brien and Hodges (1991): "There is little variation in settlement amounts, both in real terms and as a percentage of investor losses. This suggests that settlement payments are not determined on the merits of cases but by other factors, perhaps insurance coverage. While the types of companies sued and the circumstances vary widely, settlement outcomes do not."



9. Tinic (1988) argues that IPO underpricing serves as an efficient form of insurance against legal liability for issuers and their agents: the lower the IPO price, the smaller the likelihood of a post-offering stock price decline and a related stockholder lawsuit.

10. Consider the following examples from The Wall Street Journal: (1) "When Oracle Systems Corp. stock plunged 30% last March after a surprisingly bad earnings report, lawyers representing aggrieved shareholders swarmed into court, filing 14 lawsuits against the company within a week" (February 1, 1991, at B1); (2) "Shareholders sued (BankAmerica) in July 1985 immediately after it reported a \$338 million second-quarter loss, reflecting an \$892 million provision for future loan losses. The loss, which stunned analysts and shareholders, turned out to be the first of several quarterly debacles...the suits alleged that BankAmerica officers and directors violated disclosure provisions of the federal securities laws, as well as laws covering fraud, by allegedly failing to fully disclose the extent of its lending practices and problems." (December 17, 1987, p. 39)

11. O'Brien and Bhushan (1990, pp. 63-64) argue that the law provides institutional money managers with a similar asymmetric loss function: "the possibility of lawsuits for lack of prudence is clearly greater for large losses than for gains...Percent-of-assets compensation arrangements combined with potentially large "downside" legal liability may induce institutional money managers to be more averse to negative outcomes than are other investors."

12. The argument here is related to King, Pownall and Waymire's (1990) discussion of the "expectations-adjustment" hypothesis. King, Pownall and Waymire argue that by disclosing important earnings news voluntarily, managers are able to reduce the information asymmetry that exists between investors, and so enhance the liquidity of the market for their firm's stock. This is similar to the argument here because if stocks are "out of favor" with money managers,

analysts, and other investors, the most direct cost of this may be the reduction in stock-market liquidity that results. However, the King, Pownall and Waymire argument does not suggest that asymmetries exist in discretionary disclosure practices.

13. See also R. King, "The Liar's Discount," Forbes, May 30, 1988, who suggests that firms that obtain a reputation for being less than forthcoming about impending bad news trade at a discount to other stocks, and R. L. Rose, "SEC Investigating Harley Stock Plunge; Angry Investors See Leak of Results," The Wall Street Journal, October 25, 1991, A6, which documents the anger of analysts and money managers after Harley Davidson failed to warn them in advance of a large negative earnings surprise.

14. Trueman (1986) also provides a model in which managers disclose both good and bad news. Under Trueman's model, managers release earnings forecasts to signal their ability to anticipate changes in their firm's economic environment and to adjust production plans accordingly.

15. See King, Pownall and Waymire (1990) for review of these papers.

16. In fact, as noted above, a legitimate defense in a failure to disclose case is that the information is not sufficiently reliable (ie., not "hard" enough) to disclose. Thus, as in Pastena and Ronen, managers can legitimately defer the disclosure of bad news. Conversely, it is probably preferable to disclose good news when it is "soft" or less quantifiable because then it is more difficult for shareholders to bring suit if the forecast later turns out to be overly optimistic.

17. Although Ajinkya and Gift (1984, p. 443) argue that "the major (disclosure) traffic is through the financial analyst channel and switches to the direct channel *only under exceptional circumstances*" (my emphasis). Thus, legally-induced bad news disclosures (which presumably

only occur under "exceptional circumstances") may also be voluntarily disclosed by large firms, notwithstanding their close analyst following.

18. The O'Brien and Hodges (1991) study provides some evidence on the types of firms that get sued. Of their sample of 328 firms that were the subject of some type of securities law class action lawsuit, 150 (46%) are listed on the NYSE, 31 (9%) are listed on the ASE, 123 (38%) are NASDAQ firms, and 24 (7%) are other OTC firms. Of course, not all these suits are of the type discussed in section 2.

19. McNichols (1989) and Pownall, Wasley and Waymire (1991) also use the DJNRS to collect earnings forecast data. Pownall, Wasley and Waymire (1991, note 5) indicate that of their sample of 444 earnings forecasts, only 126 (28%) are available in the Wall Street Journal Index.

20. For a similarly sized sample (91 firms) over a similar period (1979-1987), Pownall, Wasley, and Waymire (1991) obtain a sample of 1,167 disclosures, around three times as many as I observe. However, their sample includes only firms covered by Value Line, and includes NYSE-ASE as well as NASDAQ firms, and so is likely to contain systematically larger firms than my sample.

21. Perhaps the most relevant of these is Waymire (1985), who compares "repeat" forecasters with firms that forecast relatively infrequently, and finds that the former firms have less volatile earnings series. Waymire argues that this relation is due to the legally-imposed need for forecast accuracy and that accuracy is more important for good news forecasts (similar to the argument in section 2, the legal costs of failing to meet good news forecasts are likely to be higher than those associated with bad news forecasts). Consistent with this, the negative relation between forecast frequency and earnings volatility holds only for good news forecasts.

22. The abnormal returns are two-day market-adjusted abnormal returns (cumulated over days -1 and 0 relative to the disclosure date from the DJNRS), where the market portfolio is the CRSP NYSE-ASE equal-weighted portfolio.

23. I also checked on the accuracy of my subjective good vs. bad. vs. no news classification scheme for voluntary disclosures by comparing my classification to the sign of the corresponding change in split-adjusted quarterly earnings. The classifications were consistent (eg., a good news disclosure preceded an increase in split-adjusted EPS) around 85% of the time.

24. Since the |News| variable exhibits considerable skewness, I also estimated the logit regressions after "winsorizing" this variable such that observations with a value of greater than one were set equal to one. This procedure affects 13 out of the 2,647 sample observations and does not greatly affect the regression results.

25. This is in the spirit of DeAngelo, DeAngelo and Skinner (1992), who find that losses are important in explaining managers' decisions to reduce dividends, and that this result holds even after for controlling for what losses say about changes in earnings levels.

26. Pownall, Wasley and Waymire (1991) reach a similar conclusion.

27. There are some existing studies that examine other types of announcements and disclosures. For example, Hoskin, Hughes and Ricks (1986) examine a variety of disclosures that are made concurrently with annual earnings announcements, and Thompson, Olsen and Dietrich (1987) examine all types of firm-specific news that is reported in The Wall Street Journal Index.

Table 1

**Descriptive Information on the Earnings-Related Voluntary Disclosures of 93 NASDAQ-NMS Firms Over the Period 1981-1990.**

	Obs = 375 <sup>1</sup>	Obs = 469 <sup>1</sup>
A. Horizon <sup>2</sup>		
Annual	109 (29.1%)	203 (43.3%)
Quarterly	172 (45.9%)	266 (56.7%)
Both	94 (25.1%)	NA
B. Preliminary Estimate? <sup>3</sup>		
Yes	135 (36.0%)	181 (38.6%)
No	240 (64.0%)	288 (61.4%)
C. Type of Forecast		
Point	NA	123 (26.2%)
Range	NA	74 (15.8%)
Minimum	NA	83 (17.7%)
Maximum	NA	87 (18.6%)
Qualitative	NA	102 (21.7%)
D. Type of News <sup>4</sup>		
Good News	159 (42.4%)	192 (40.9%)
Bad News	196 (52.3%)	251 (53.5%)
No News	20 (5.3%)	26 (5.5%)

<sup>1</sup>There are a total of 375 disclosures for these firms over the 1981-1990 period (although not all of these firms survive through 1990). This set of observations forms the basis of the statistics that I report in the right-hand column. As evident from panel B, 94 disclosures contain forecasts of both annual and quarterly earnings, yielding a total of  $375 + 94 = 469$  disclosures about particular earnings realizations. This set of observations forms the basis of the statistics that I report in the left-hand column.

<sup>2</sup>Horizon indicates whether the forecast relates to annual earnings, quarterly earnings, or both annual and quarterly earnings.

<sup>3</sup>A preliminary estimate is a forecast released after the end of the relevant fiscal period but before the official release date of earnings for that period.

<sup>4</sup>As discussed in the text, the classification of forecasts into those that convey good news, bad news, and no news is done based on the researcher's assessment of the information contained in a particular announcement but is usually fairly straightforward.

Table 2

**The Relation Between the Nature of Forecast News, Disclosure Horizon, and the Type of Forecast. Analysis Based on 443 Disclosures for 93 NASDAQ-NMS firms over the period 1981-1990.<sup>1</sup>**

	Good News <sup>2</sup>	Bad News <sup>2</sup>
A. Horizon <sup>3</sup>		
Annual	105 (54.7%)	86 (34.3%)
Quarterly	87 (45.3%)	165 (65.7%)
$\chi^2_1 = 18.50, \quad p < .001.$		
B. Type of Forecast		
Point	57 (29.7%)	54 (21.5%)
Range	48 (25.0%)	24 (9.6%)
Minimum	62 (32.3%)	19 (7.6%)
Maximum	1 (0.5%)	84 (33.5%)
Qualitative	24 (12.5%)	70 (27.9%)
$\chi^2_4 = 128.89, \quad p < .001.$		
C. Preliminary Estimate? <sup>4</sup>		
Yes	80 (41.7%)	92 (36.7%)
No	112 (58.3%)	159 (63.3%)
$\chi^2_1 = 1.15, \quad p = .283.$		

<sup>1</sup>There are a total of 375 disclosures for these firms over the 1981-1990 period (although not all of these firms survive through 1990). However, 94 disclosures contain forecasts of both annual and quarterly earnings, yielding a total of  $375 + 94 = 469$  disclosures about particular earnings realizations. I drop from this set 26 observations for which the announcement did not unambiguously convey good or bad news about earnings.

<sup>2</sup>As discussed in the text, the classification of forecasts into those that convey good news, bad news, and no news is done based on the researcher's assessment of the information contained in a particular announcement and is usually fairly straightforward.

<sup>3</sup>Horizon indicates whether the forecast relates to annual or quarterly earnings.

<sup>4</sup>A preliminary estimate is a forecast released after the end of the relevant fiscal period but before the official release date of earnings for that period.



Table 3

**Descriptive Statistics on the two-day market-adjusted abnormal returns associated with 333 Earnings-Related Voluntary Disclosures for 93 NASDAQ-NMS Firms over the Period 1981-1990. In each category I report the average abnormal return, the median abnormal return (in parentheses), and the number of observations [in square brackets].**

		Good News <sup>1</sup> -----	Bad News <sup>1</sup> -----	No News <sup>1</sup> -----
<u>A. All Disclosures (N=333)</u>				
	-1.68% <sup>**</sup> (-.70%) <sup>**</sup> [333]	1.85% <sup>**</sup> (1.16%) <sup>**</sup> [136]	-4.48% <sup>**</sup> (-2.39%) <sup>**</sup> [179]	-.47% (1.27%) [18]
<u>B. Disclosures partitioned by disclosure horizon (N=333)<sup>2</sup></u>				
Annual	-1.10% (-.58%) [85]	1.05% (1.52%) [54]	-3.72% (-2.13%) <sup>*</sup> [26]	-.42% (-4.60%) [5]
Quarterly	-1.52% <sup>*</sup> (-1.01%) <sup>*</sup> [160]	3.55% <sup>**</sup> (2.77%) <sup>**</sup> [50]	-3.91% <sup>**</sup> (-2.47%) <sup>**</sup> [102]	-2.73% (-.66%) [8]
Both	-2.53% <sup>*</sup> (-.40%) [88]	2.15% <sup>**</sup> (1.65%) <sup>**</sup> [32]	-6.02% <sup>**</sup> (-4.24%) <sup>**</sup> [51]	3.10% (2.98%) [5]
<u>C. Disclosures partitioned by disclosure type (N=245)<sup>3</sup></u>				
Point	.00% (.44%) [70]	2.80% <sup>**</sup> (1.90%) <sup>**</sup> [37]	-3.95% <sup>*</sup> (-2.66%) <sup>*</sup> [25]	-.63% (.29%) [8]
Range	-.50% (-1.03%) [34]	1.24% (1.00%) [26]	-6.20% (-4.33%) <sup>*</sup> [8]	NA
Minimum	1.53% (.12%) [28]	1.88% (1.74%) [26]	-2.94% (-2.94%) [2]	NA
Maximum	-4.59% <sup>*</sup> (-2.49%) <sup>**</sup> [42]	-9.87% (-9.87%) [1]	-4.46% <sup>*</sup> (-2.13%) <sup>**</sup> [41]	NA
Qualitative	-2.37% <sup>*</sup> (-1.13%) <sup>*</sup> [71]	.61% (.24%) [14]	-3.04% <sup>*</sup> (-1.51%) <sup>**</sup> [52]	-3.80% (-4.64%) [5]

\*Significantly different from zero at the 5% level, two-tailed test.

\*\*Significantly different from zero at the 1% level, two-tailed test.

The abnormal returns are two-day market-adjusted abnormal returns (cumulated over days -1 and 0 relative to the disclosure date from the DJNRS), where the market portfolio is the CRSP NYSE-ASE equal-weighted portfolio.

<sup>1</sup>As discussed in the text, the classification of forecasts into those that convey good news, bad news, and no news is done based on the researcher's assessment of the information contained in a particular announcement and is usually fairly straightforward.

<sup>2</sup>The disclosures are classified according to the earnings horizon to which they relate, so that annual disclosures are those that have implications for annual earnings, quarterly disclosures are those that have implications for quarterly earnings, and both denotes disclosures that simultaneously provide information about annual and quarterly earnings.

<sup>3</sup>It is not possible to uniquely assign the 88 disclosures that have implications for both annual and quarterly earnings to particular disclosure type categories because these disclosures typically are of two different types (eg., a range estimate of annual EPS might be accompanied by a minimum forecast for first quarter earnings). These observations are therefore dropped for the analyses in panel C.

Table 4

**Descriptive Analysis of How the Frequency with which Quarterly Earnings News is Preempted Varies as a Function of the Earnings News. Observations comprise 2,647 earnings announcements for 93 NASDAQ firms during 1981-1990.**

Percentage Earnings Change <sup>1</sup>	Total Firm-quarters	Number (%) of firm-quarters that are preempted by a voluntary corporate disclosure
<u>Panel A. Earnings News Partitioned into Very Bad, Intermediate, and Very Good News.</u>		
< -.05	156	39 (25.0%)
-.05 to .05	2,369	237 (10.0%)
> .05	122	6 (4.9%)
<u>Panel B. Earnings News Partitioned into Deciles.</u>		
< -.0272	264	58 (22.0%)
-.0272 to -.0080	264	47 (17.8%)
-.0080 to -.0022	265	34 (12.8%)
-.0022 to .0000	191	18 (9.4%)
.0000 to .0013	339	24 (7.1%)
.0013 to .0024	263	15 (5.7%)
.0024 to .0041	265	17 (6.4%)
.0041 to .0078	266	23 (8.6%)
.0078 to .0194	264	23 (8.7%)
> .0194	266	23 (8.6%)

<sup>1</sup>Percentage earnings change is the change in split-adjusted quarterly earnings-per-share (from the corresponding quarter of the prior year) deflated by stock price 60 days prior to the earnings announcement.

Table 5

Maximum likelihood estimates of logistic regressions of the probability that the information conveyed by the earnings announcement for a given firm/quarter is preempted by a voluntary corporate disclosure. Observations comprise 2,647 earnings announcements for 93 NASDAQ firms during 1981-1990. The table shows estimated coefficients with asymptotic t-statistics in parentheses.

	Intercept	Loss dummy	Sign dummy	INewsl	Sign dummy*  Nnewsl	Regression p-value
	-----	-----	-----	-----	-----	-----
1.	2.15 (33.67)			.46 (2.44)		.0064
2.	2.25 (31.17)	.53 (3.46)		.40 (2.29)		.0001
3.	2.17 (33.36)			-.04 (-.10)	2.06 (2.94)	.0001
4.	2.51 (26.84)		.78 (5.98)	.13 (.41)	1.11 (1.82)	.0000
5.	2.52 (26.73)	.09 (.51)	.76 (5.50)	.13 (.41)	1.04 (1.67)	.0000

1 The dependent variable is coded 1 for those earnings announcements that are preempted by a voluntary corporate disclosure and 0 otherwise. The loss dummy is coded 1 for those earnings announcements in which the firm reports a bottom-line loss and zero otherwise. The sign dummy is coded 1 for those earnings announcements in which the firm reports a decline in split-adjusted quarterly earnings-per-share and 0 otherwise. |Nnewsl is the absolute value of the change in split-adjusted quarterly earnings-per-share (from the corresponding quarter of the prior year) deflated by stock price 60 days prior to the earnings announcement.

Table 6

**Ordinary-Least-Squares Regressions of Earnings Announcement-Period Abnormal Stock Returns on Measures of the Earnings Surprise. Observations comprise 2,645 earnings announcements for 93 NASDAQ firms during 1981-1990. The table shows estimated coefficients with t-statistics in parentheses.<sup>1</sup>**

	Intercept -----	News -----	News*D -----	Adj. R <sup>2</sup> -----
<i>A. All 2,645 observations, without modification</i>				
1.	-.001 (-1.06)	.019 (4.98)		.89%
2.	-.001 (-1.02)	.015 (2.69)	.008 (1.01)	.89%
<i>B. All 2,645 observations, after "winsorizing" outliers<sup>2</sup></i>				
3.	-.001 (-.98)	.095 (9.18)		3.05%
4.	-.001 (-.93)	.088 (7.04)	.020 (.91)	3.04%
<i>C. The 2,632 observations remaining after deleting outliers<sup>2</sup></i>				
5.	-.001 (-1.17)	.087 (5.94)		1.30%
6.	-.001 (-1.49)	.112 (7.00)	-.148 (-3.81)	1.79%

<sup>1</sup>The dependent variable is the two-day market-adjusted abnormal return (cumulated over days - 1 and 0 relative to the earnings announcement date from the WSJI), where the market portfolio is the CRSP NYSE-ASE equal-weighted portfolio. News is the change in split-adjusted quarterly earnings-per-share (from the corresponding quarter of the prior year) deflated by stock price 60 days prior to the earnings announcement. D is an indicator variable that takes a value of one for earnings announcements that are preempted by voluntary disclosures and zero otherwise.

<sup>2</sup>The distribution of the News variable is skewed, resulting in relatively small coefficient estimates and R-square values in panel A. Consequently, in panel B I winsorize extreme observations, ie., for those observations for which the News variable takes a value of greater (less) than one (minus one) I set news equal to one (minus one). As an alternative, in panel C I simply delete these extreme observations before estimating the regressions.

Table 7

Maximum likelihood estimates of logistic regressions of the probability that the information conveyed by the earnings announcement for a given firm/quarter is preempted by a voluntary corporate disclosure. Observations comprise 2,233 earnings announcements for 81 NASDAQ firms that have less than ten disclosures per firm during 1981-1990. The table shows estimated coefficients with asymptotic t-statistics in parentheses.

	Intercept -----	Loss dummy -----	Sign dummy -----	INewsl -----	Sign dummy* INewsl -----	Regression p-value -----
1.	2.41 (31.24)			.49 (2.54)		.0047
2.	2.52 (28.46)	.56 (3.16)		.44 (2.33)		.0002
3.	2.44 (30.91)			-.07 (-.15)	2.39 (2.90)	.0000
4.	2.77 (24.06)		.74 (4.69)	.10 (.24)	1.52 (2.10)	.0000
5.	2.78 (23.96)	.12 (.58)	.71 (4.24)	.09 (.24)	1.42 (1.94)	.0000

1The dependent variable is coded 1 for those earnings announcements that are preempted by a voluntary corporate disclosure and 0 otherwise. The loss dummy is coded 1 for those earnings announcements in which the firm reports a bottom-line loss and zero otherwise. The sign dummy is coded 1 for those earnings announcements in which the firm reports a decline in split-adjusted quarterly earnings-per-share and 0 otherwise. INewsl is the absolute value of the change in split-adjusted quarterly earnings-per-share (from the corresponding quarter of the prior year) deflated by stock price 60 days prior to the earnings announcement.

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