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# CEO Interviews on CNBC

**J. Felix Meschke**[*]
Arizona State University

[*] Felix Meschke can be reached at Office: 480-965-8074, Fax: 480-965-8539, e-mail: meschke@asu.edu, mail: ASU, Dept. of Finance, P.O. Box 873906, Tempe, AZ 95287-3906, USA. I thank Brian Adams, Ana Balcarcel, Scott Bauguess, John Cesta, Jeff Coles, Dan Deli, Mike Hertzel, John Griffin, Ying Huang, Swami Kalpathy, Patrick Kelly, Jennifer Juergens, Spencer Martin, Federico Nardari, Tod Perry, Muku Santhanakrishnan, Dirk Schiereck, and seminar participants at Arizona State University for their helpful comments and discussions. Any remaining errors are mine.

**CEO Interviews on CNBC**

**Abstract**
This paper examines price and volume reactions to CEO interviews broadcast on CNBC between 1999 and 2001. Since interviews per se are nonevents, an analysis of the market response can be viewed as a simple test of the conjecture that enthusiastic public attention alone may move stock prices away from fundamentals. I document a significant mean price increase of 1.65 percent accompanied by higher trading volume on the day of the interview. Prices exhibit strong mean reversion of minus 2.78 percent during the 10 trading days following the interview. These price dynamics suggest that the financial news media is able to generate transitory buying pressure by catching the attention of enthusiastic investors.

Keywords: CEO interviews; Financial news media; Investor behavior.

JEL classification: G14; G12.

In a recent study, Huberman and Regev (2001) analyze the puzzling case of a *New York Times* article (Kolatka, 1998) that caused a dramatic rise in the stock price of the small biotechnology company EntreMed, although the article did not contain any new information. The authors define incidents like this, which appear to be news events where in fact no new information is released, as "nonevents". They attribute the astounding market reaction to the fact that the article appeared in the upper left corner of the front page, accompanied by the label "A special report" and suggest that enthusiastic public attention may move stock prices in the absence of new information.

This paper investigates whether media attention systematically impacts stock prices by analyzing CEO interviews on CNBC. On average, these CEO interviews should not contain new information for several reasons. First, those interviews are usually triggered by some preceding event. For example, 25% of the interviews in our sample appear on the day of a company's earnings announcement or on the following day and can be understood as CEOs' comment or clarification of news that are already presented. Second, CEO interviews have to be scheduled prior to broadcast and are announced on CNBC's website one day prior to the interview. It is likely that at least some market participants learn of the interview and even of the topics discussed ahead of time. Finally, CEOs have a vital interest in appearing optimistic and putting a positive spin on every question they face due to their career concerns and often substantial stock and option holdings in their own company[1]. Not surprisingly, leading academics discredit the information content of such interviews[2]. CEO interviews on CNBC are therefore viewed as nonevents in the sense of Huberman and Regev (2001)[3].

Rashes (2001) presents an example of investor confusion between the well-known stock MCI Communications (MCIC) and the lesser-known Massmutual Corporate Investors (MCI). He demonstrates that ticker confusion leads to an unusual amount of co-movement between the stocks of these companies and argues that a large proportion of MCI transaction is due to

approximately one percent of the trades that small investors intend to make in MCIC but erroneously enter as trades for MCI. He states: "If this trivial group of noise traders can persistently impact the price of MCI, one could only imagine what would occur if a group of correlated noise traders experienced a change in sentiment regarding a group of stocks" (Rashes, 2001, p.1924).

This study examines the price impact of a group of correlated noise traders who watch CNBC, the financial cable network that is prominently blamed for fueling the "Wall Street Hype Machine.[4] [5]" CNBC claims that due to Internet and cable television the informational advantage of professional traders has disappeared, that its viewers get information as fast as the pros and urges its viewers to "profit from it.[6]" If CNBC viewers believe that they can make money by trading on news, then these viewers must react very quickly because in efficient markets information is quickly incorporated into stock prices. Busse and Green (in press) find that CNBC's audience indeed responds within seconds to analyst's stock recommendation on CNBC's Morning Call and Midday Call segments. The necessity to react immediately in order to profit from a news release does not leave time to analyze and validate the information, which the following incident of June 30, 2000 exemplifies:

> A mistake Friday on financial-news cable channel CNBC ran up shares of MACC Private Equities MACC almost 80%. The ticker of the private investment firm was mistakenly displayed in place of the ticker for chipmaker Applied Micro Circuits, AMCC which had received an analyst upgrade. Shares of MACC Private Equities closed 6% higher at 9 13/16, on more than 300% of its normal volume, or 336,000 shares. Shares at one point traded at 17 1/2, about 50% higher than its previous 52-week high. Applied Micro Circuits rose 2% to 98 3/4 (Anderson, 2000).

The initial assumptions of this study are that CEO interviews are on average nonevents exclusive to CNBC, and that a significant fraction of CNBC's audience believes in making money by trading on news. The market response to these interviews can therefore be viewed as a direct test the conjecture that enthusiastic public attention alone may move stock prices away from

fundamentals, thereby shedding more light on the price impact of the financial news media [Merton (1987); Shiller (2000); Huberman and Regev (2001)].

Specifically, this study considers four hypotheses. The *null hypothesis* assumes that financial markets do not react to CEO interviews because these interviews do not reveal new information. Merton's (1987) *investor recognition hypothesis* suggests that CEO interviews, even without revealing new information, may impact firms' investor base, thereby permanently affecting stock prices: "a newspaper or other mass media story about the firm or its industry that reaches a large number of investors who are not currently shareholders, could induce some of this number to incur the set-up costs and follow the firm. Having done so, in our model, these investors would evaluate the detailed substantive information about the firm, become new shareholders, and the value of the firm would rise. It should be stressed that the current shareholders may already know all the information contained in such stories" (Merton, 1987, p. 500). The *price pressure hypothesis* states that enthusiastic public attention creates temporary price pressure in response to the interview. Merton (1987, p. 503) notes that "media coverage, public relations and other investor marketing activities could play an important causal role in creating and sustaining speculative bubbles and fads among investors." Similar, Shiller (2000, p. 29) argues that "enhanced business reporting leads to increased demand for stocks, just as advertisements for a consumer product make people more familiar with the product, remind them of the option to buy, and ultimately motivate them to buy." Finally, the *information hypothesis* also predicts a permanent change in stock prices, but instead of attributing the price impact to an increase in investor base, it relaxes the notion of CEO interviews being nonevents on average and assumes that CEOs reveal new information[7]. Hence, this study investigates whether prices change at all (null hypothesis), and if they do change, whether the price changes are transitory (due to price pressure) or permanent (due to an increased shareholder base or because CEOs disclose new information) [8].

My results can be summarized as follows. First, I find a significant abnormal return of 1.86 percent and higher trading volume over the two days *prior* to the interview. Market participants seem to react either to a confounding event that triggers the interview, or information about the CEO interview itself is incorporated within this time period. Second, I document a significant mean abnormal return of 1.65 percent and a 169 percent increase in mean abnormal turnover on the day of the interview. Third, prices exhibit strong mean reversion of negative 2.78 percent over the 10 trading days following the interview. Fourth, a simple measure of the "limelight effect" suggests that almost all of the price increase during the two days prior to the interview and on the day of the interview itself is in fact due to media attention. I discuss whether rational traders who expect an option-like payoff from a small subsample of CEO interviews or asymmetric information can explain these findings. However, the empirical evidence and the fact that I cannot find support for alternative explanations leads me to conclude that on average, the appearance of CEOs on CNBC creates transitory buying pressure by enthusiastic investors. This conclusion is in line with Huberman and Regev's (2001) conjecture that enthusiastic public attention can move stock prices away from the fundamentals. But in contrast to their case study, I find that the price impact of CEO interviews is only transitory and prices quickly mean revert. Because a strategy that tries to take advantage of this transitory price pressure involves on average short sells, it may take some time for market participants to verify that the observed stock increase is just due to media hype and not to new information. This may explain why we observe mean reversion from the day following the interview.

The findings are also are consistent with several studies reporting short-term overreaction in the initial price response to analyst recommendations that are subsequently followed by price reversals. Stickel (1985) documents positive abnormal returns for two days after the publication of the Value Line rankings followed by a reversal on day three. Barber and Loeffler (1993) and Liang (1999) report a similar pattern for stock picks in the Wall Street Journal's "Dartboard"

column. Busse and Green (in press) use intra-daily data to examine the market reaction to analyst's stock recommendation on CNBC's Morning Call and Midday Call segments. They find that prices respond within seconds of the initial mention, with positive reports fully incorporated within one minute. This one-minute response (41 basis points during Midday Call and 6.8 basis points during Morning Call) is then followed by a small reversal during the next three minutes.

The remainder of the paper proceeds as follows. Section 2 describes the CEO interview data and provides summary statistics. Section 3 examines the price dynamics and trading activity around CEO interviews and presents the main empirical findings. Section 4 investigates the robustness of the results by analyzing various subsamples, decomposing the price dynamics into effects due to information and media attention, and discussing alternative explanations of the findings. Section 5 summarizes and discusses some important implications of the results. Details about sample selection procedure and event study methodology are included in the Appendix.

## I. Sample Description

### A. *Sample Selection*

Since its creation on April 17, 1989, CNBC has become the world's most popular business television channel. 77 million households in the U.S. and Canada (160 million households worldwide) can watch it. Viewership during trading days approaches 500,000 households (Nielsen Media Research). CNBC's regular programming features several interviews with CEOs of publicly traded companies during the day. After extracting this interview data from CNBC's website and merging the interview sample with the stock database of the Center for Research in Security Prices (CRSP), and the Standard & Poor's COMPUSTAT database, I obtain a final sample of 3641 interviews from CEOs of 1491 different companies. A detailed description of the selection process is provided in Appendix A.

The sample period consists of the years 1999 through 2001. Figure 1 shows that during this period the NASDAQ Composite Index experienced substantial volatility: The index rose from 2207.54 on January 4, 1999 to its all-time high of 5132.52 on March 10, 2000. Subsequently, it decreased by over 50 percent. On the other hand, the New York Stock Exchange (NYSE) Index remained relatively stable over the sample period. As reported in Table III, 52 percent of the interviews deal with firms traded on NASDAQ while 46 percent of the interviews concern firms traded on the NYSE; this sample period therefore provides an interesting setting to examine the price impact of CEO appearances on CNBC[9].

Although transcripts and videotapes are available for many of the interviews in the sample, a content analysis of these interviews would be a very challenging task. The language used in the interviews is very casual, which makes the categorization by keywords highly unreliable. Additionally, viewers might trade on nonverbal signals like the posture of the CEO interviewed. Finally, the character of many interviews is primarily evaluative and predictive, which would require a highly subjective scaling of those qualitative predictions. For all these reasons, I do not attempt to analyze the content of the interviews. However, 104 merger-related interviews and 898 earnings-related interviews are identified because they occur within one trading day to the merger or earnings announcement, respectively.

*B. Timing of CEO Interviews*

Table I contains summary statistics for the 3641 CEO Interviews on CNBC along the time dimension. Panel A reports the monthly distribution of CEO interviews throughout the sample period between January 1999 and December 2001. It shows that in 2000, CNBC aired 50 percent more CEO interviews then in 1999 or 2001. A strong monthly patter, however, is not apparent. Panel B shows that the number of CEO interviews is lowest on Mondays and Fridays and highest on Wednesdays.

Panel C shows the distribution of interviews across CNBC's daily broadcasting schedule. *Today's Business* reports on overnight developments and major business stories abroad and previews key issues which could potentially move the market. *Squawk Box* is designed as a "pre-game" jump on the business day with live reports from major investment banks and the floor of the New York Stock Exchange. It contains the segment "CEO Call" where host Mark Haines interviews CEOs prior to market opening. *Market Watch* reports economic and corporate news during the morning. Segments include "Global Market Watch", "Stocks to Watch", Morning Call", Winners & Losers" and "The Market Watcher". 33.5 percent of the CEO interviews take place during *Power Lunch*, which is hosted by Bill Griffeth and produced by Joel Franklin. *Market Wrap* analyzes the day's business news, reports extended hours updates and includes in-studio interviews. *Business Center* is CNBC's signature evening business newscast that reviews the day's top business and financial market headlines. CEO interviews take place as part of the segment "CEO Spotlight". The hosts and producers of these shows are likely to have quite an impact on the amount and quality of information that is disseminated during CEO interviews as well as the timing of the interviews.

While the timing of CEO interviews is in part determined by CNBC's broadcasting schedule, the distribution of these interviews seems to correspond also to the overall flow of public information. Mitchell and Mulherin (1994) and Berry and Howe (1994) find that the flow of financial news seems to be higher on Tuesdays, Wednesdays, and Thursdays, and the distribution of CEO appearances on CNBC across weekdays reflects this pattern[10]. Berry and Howe (1994) also report the average number of information observations by time of day. They find a significant increase of stories 90 minutes prior to market opening, even more stories during the morning trading hours and a decrease during lunchtime. Most of the daily news arrives during the first 90 minutes after the market has closed. Consistent with their findings, Figure 2 shows a large number of interviews just prior to market opening at 9:30 a.m. and during

the 90 minutes following market closing. However, 34 percent of the CEO interviews air during lunchtime. CNBC might choose to interview most of the CEOs during lunchtime because CEOs may be more available, viewership is higher and less new information is arriving.

In summary, while the intra-daily distribution of interviews seems to be driven by CNBC's broadcasting schedule, the distribution of interviews across weekdays reflects the overall number of financial news stories as documented in earlier studies.

*C. Popular Firms and Industries*

Table II reports descriptive statistics for the sample of 1491 firms whose CEO appeared on CNBC between January 1999 and December 2001. Panel A describes the frequency distribution of CEO interviews for the sample firms. The average (median) number of interview is 2.44 (1); the distribution is clearly skewed to the right. Panel B examines the right tail of the distribution by listing the 15 companies whose CEO appeared most often on CNBC during the sample period. If two different CEOs represented the same company during the time period, the table reports both names. Panel B shows that James Morgan (Applied Materials), Philip Condit (Boing), Jeff Bezos (Amazon.com) and other popular CEOs appeared on CNBC regularly and that Nasdaq and computer stocks (SIC Code 737) are particularly popular.

Panel C describes the frequency distribution of CEO interviews by three-digit Standard Industry Classification (SIC) Code. The mean (median) number of interviews per industry is 17.2 (4), but this distribution too is skewed to the right. Panel D therefore lists the top 10 industries by number of CEO interviews during the sample period. The 726 interviews with firms from the "Computer Programming and Data Processing Industry" (SIC Code 737) account for approximately 20 percent of total interviews. Panel E shows the distribution of CEO interviews by size and book-to-market ratio. Each observation is ranked into deciles by its

market capitalization six trading days prior to the interview, and its recent book-to-market ratio, provided that the last fiscal year has been completed for at least 4 months[11]. In Table V, the lowest three deciles (1-3) are labeled 'Small Cap', while the largest three deciles (8-10) are labeled 'Large Cap'. The four deciles in between are labeled "Mid Cap'. 57 percent of the interviews are from 'Large Cap' companies, while almost 40 percent of interviews are with firms that rank in the lowest book-to-market decile.

*D. Stock Exchanges, Merger & Acquisition and Earnings Announcements*

Table III shows that CNBC interviewed more Nasdaq than NYSE firms during 1999 and 2000. In 2001, however, as many NYSE firms as Nasdaq firms were interviewed. For all stock exchanges, the total number of firms interviewed declined over the sample period, thereby increasing the average appearance per firm from 1.55 in 1999 to 4.28 in 2001.

In order to determine which interviews are related to companies' earnings announcements, the number of trading days is calculated between each interview and the closest earnings announcement as recorded in the I/B/E/S Actual dataset. 898 interviews are aired within a day of the earnings announcement. Merger-related interviews are classified analogously. 104 interviews are broadcasted within one trading day of a merger or acquisition announcement as recorded on the Securities Data Corpopration's (SDC) Merger and Acquisition database.

## II. Price Dynamics and Trading Activity around CEO Interviews

*A. Price Dynamics*

In order to assess the impact of CEO interviews on security prices of sample firms, this study employs standard event study methodology. During the estimation period of an event study, the expected (normal) returns of the sample securities are estimated. These estimated

returns are then compared to actual returns in the event period surrounding the firm's CEO appearance on CNBC.

Results are based on the market model, which relates the return of any given stock *i* to the return of the market portfolio. However, because every day CNBC broadcasts several interviews, and a given company's CEO can appear several times on CNBC, an event consists of a unique date-firm combination. Therefore, the index *i* does not just refer to a particular firm, but to a particular firm at a particular date where the firm's CEO appears on CNBC. The term 'event' is used in this sense.

Hence, for any stock at a given interview date *i*,

$$R_{it} = \alpha_i + \beta_i R_{mt} + \varepsilon_{it}, \quad (1)$$

where $R_{it}$ and $R_{mt}$ are the period-*t* returns on stock at a given interview date and the market portfolio, respectively, and $\varepsilon_{it}$ is the stochastic error term for event *i* on day *t*. This methodology treats the stock return of sample firm *i*, $R_{it}$, as conditional on the market's overall performance and controls for systematic risk via the estimate of $\beta_i$ for each security.

For each event *i*, prediction errors, $PE_{it}$, are calculated for each day in the event period,

$$PE_{it} = R_{it} - (\hat{\alpha}_i + \hat{\beta}_i R_{mt}). \quad (2)$$

The prediction errors are estimates of the abnormal returns to the stockholders of the sample firms for each of the 61 days centered around the day of the interview. Average prediction errors, $APE_t$, across all observations (N) are calculated for each day in the event period. These averages are cumulated, $CAPE_k$, to provide a series of cumulative average prediction errors in the event period,

$$APE_t = \frac{1}{N} \sum_{i=1}^{N} PE_{it}, \quad (3)$$

$$CAPE_k = \sum_{t=-20}^{k} APE_t. \quad (4)$$

A more detailed discussion of this event study methodology is provided in Appendix B.

Average prediction errors for intervals around the CEO interviews are presented in Table IV. CEO interviews on CNBC tend to be preceded by positive prediction errors, especially during the two days prior to the interview day. After the interview prediction errors become negative. Using the CRSP value-weighted index as proxy for the market portfolio, the cumulative average abnormal return prior to CEO interviews is 1.86 for the window [-2, -1] and 1.65 percent for the event day [0]. In contrast, the cumulative average abnormal return for the window [+1, +10] is negative 2.78 percent. *t*-statistics are calculated using several different methods, which are also described in Appendix B. However, the results are robust to different adjustments.

*B. Trading Activity*

Price change, as Beaver (1968) points out, reflects the average change in traders' beliefs due to an announcement, whereas trading volume reflects the sum of the differences in traders' reactions to this announcement. The stock price evidence described in the previous section suggests that traders *revise their beliefs* in response to the interview on CNBC. Trading volume captures *differential belief revisions* among traders. When all traders' belief revisions are the same, the price movement is parallel and there is no volume reaction[12]. Also, Barber and Odean (2002) use abnormally high volume to proxy for investor attention.

Growth in volume around some CEO appearances could be the result of an increase in the number of shares outstanding. One way to disentangle the effect of growth in outstanding shares from higher volume due to differential belief revision is to compute share turnover, the ratio of daily volume to the number of shares outstanding (Miller, 1977) [13].

Define average turnover $AT_i = \frac{1}{100} \sum_{t=-106}^{-6} T_{it}$, (5)

as the sum of share-weighted turnover during the estimation period (day – 106 through day – 6). Daily excess turnover, $DET_{ik}$, is defined as the difference between average turnover and daily turnover for every day $k$ of the event period. Average daily excess turnover, $ADET_k$ equals the sum of daily excess turnover across observations:

$$DET_{ik} = T_{ik} - AT_i, \quad (6)$$

$$ADET_k = \sum_{i=1}^{N} DET_{ik}. \quad (7)$$

Figure 3 shows that the average (median) daily excess turnover around CEO interviews on CNBC increases from 16 (-11) percent two days prior to interviews to 56 (0) percent one day prior. Average (median) daily excess turnover increases by 169 (59) percent on the day of the CEO appearance and 65 (12) percent one day after the interview.

The increase in trading volume prior to the time when CNBC publishes its broadcasting schedule accompanies a positive abnormal return of 1.86% for the two days preceding the interview. This run-up could be due to the fact that many interviews are in fact a reaction to confounding events that precedes the interview, such as earnings announcements. In that case, increased trading volume and price run-up are not caused by the CEO interview. On the other hand, market participants may learn about upcoming CEO interviews before CNBC releases this information and trade on this news. Further analysis needs to be done to distinguish between these two possibilities.

. On aggregate, the appearance of CEOs on CNBC seems to capture the attention of CNBC's audience. The documented price dynamics are consistent with transitory buying pressure due to increased media attention.

## III. Robustness

This section investigates whether the findings presented in the previous section are robust across subsamples and proposes a simple decomposition of the observed price dynamics into an information effect due to information release and a limelight effect due to media attention. It also discusses whether rational traders who expect an option-like payoff from the announcement of CEO appearances on CNBC could drive the documented price dynamics. Finally, the price dynamics surrounding CEO interviews are related to characteristics commonly associated with asymmetric information.

### *A. Significance and Robustness of the Results*

Every event study has to make distributional assumptions about abnormal returns in order to test whether these returns are significantly different from zero. If these assumptions are not met in applied work, tests of significance may be misspecified and potentially reject the null-hypothesis of zero abnormal return too often. The test-statistic that appears least likely to be misspecified in the context of this study is due to Boehmer, Musumeci, and Poulsen (1991) and corrects for serial correlations, event clustering, and event-induced heteroskedasticity. However, this study verifies that the choice of different tests of significance does not alter the reported findings. The specifics of the different tests employed are discussed in Appendix B, the results are documented in Table IV.

To further investigate whether a particular group of stocks drives these results, event studies are conducted for several subsamples. Summary results of these studies are reported in Table V and document that the described pattern of positive abnormal returns prior to the interview and negative abnormal returns afterwards prevails throughout all subsamples except NYSE firms in 2000. The magnitude of these price dynamics is larger for Nasdaq firms then for NYSE firms and also larger for small cap stocks then for large cap stocks. The pattern also

prevails for CEO interviews that are confounded by an earnings- or M&A-announcement within one trading day of the interview. The results hold when using the value-weighted CRSP index or the equal-weighted CRSP index as proxies for the market. In conclusion, the documented price dynamics are robust to the choice of test-statistics and prevail throughout almost all subsamples.

*B. Decomposition of Information Effect and Limelight Effect*

This subsection further discusses the initial assumption of CEO interviews being nonevents on average. Suppose instead that CEOs on average reveal information. As soon as the market learns about an upcoming CEO interview, traders gather additional information and update their believes about potential news being announced in the near future. While individual CEOs may either exceed or do not meet market expectations once they actually appear on television, the market's expectations should be correct on average, because systematic over- or underreaction results in a profitable investment opportunity. According to the information hypothesis, prices should not exhibit drift on average after the new information has been incorporated into prices.

Under this premise, it is possible to decompose the price dynamics into an information effect due to information release and a limelight effect due to media attention. Results in Table IV suggest that the market reaction during the two days prior to the CEO interview and on the interview date itself captures the *total effect* of both the price dynamics due to information release and due to media attention. The *information effect* measures the degree of permanence in the market reaction to CEO interviews. The *limelight effect* measures the degree to which price dynamics are transient and is calculated as follows:

$$\text{Limelight effect} = -\frac{r_2}{\frac{r_1}{1+r_1}} = -\frac{r_2(1+r_1)}{r_1} \tag{8}$$

where $r_1$ is the abnormal return due to the total effect, $\frac{r_1}{1+r_1}$ is the return necessary to completely undo the total effect, and $r_2$ is the actual price dynamic following the interview. The negative sign accounts for the fact that the total effect and the actual price dynamic following the interview usually have opposite signs. A limelight measure of 1 signifies a nonevent because is suggests that the price dynamics are completely transitory and hence no information were revealed. In contrast, a limelight measure close to zero suggests a permanent price change due to the information content of an announcement. This approach is potentially biased against identifying all price dynamics due to media attention if the news media has in fact a permanent price impact, as documented by Huberman and Regev (2001).

Table V reports the limelight measure for the complete sample and various subsamples. As a proxy for the total effect, $r_1$, the cumulative abnormal return over the 2 days prior to the interview and on the interview date itself, CAR[-2,0] is used. The abnormal cumulative return during the following 10 trading days, CAR[+1,+10], proxies for $r_2$, the price dynamics due to media attention. For the whole sample, the limelight measure suggests that 82 (98) percent of the initial price response is due to media attention, when the value-weighted (equally-weighted) CRSP index is used to proxy for the market portfolio. The limelight effect is stronger for large cap companies then for mid cap and small cap companies. The subsamples by weekday reveal that although both the abnormal return on the interview day and the number of CEO interviews are highest on Wednesdays, the limelight effect is actually weaker compared to the beginning and the end of the week. This finding suggests that the informativeness of CEO interviews increases slightly during the week, which may be due to the fact that the overall flow of information increases as well (Mitchell and Mulherin, 1994 and Berry and Howe, 1994). While only NYSE stocks in 2000 do not exhibit a limelight effect, Nasdaq stocks in 2000 and large cap

stocks actually have a limelight measure that is greater than one, signifying a reversal stronger than the initial increase.

Even under the restrictive assumption that the entire price impact of increased media attention disappears within 10 trading days following the CEO interviews, results based on the limelight measure suggests that, on average, CEO interviews come pretty close to being nonevents. However, a small fraction of the observed price dynamics may be due to information disclosure. The next subsection examines whether information content of interviews can help explaining the documented pattern.

*D. Information Content of CEO Interviews*

Assume that most CEO interviews are nonevents, but that a certain percentage of interviews contain information that permanently increases stock prices by a large magnitude. If traders cannot assess which interviews will cause a large price increases until they analyze the actual interview, it may be rational to buy the stock of every firm whose CEO is expected to appear on CNBC in order to capture the option-like payoff of a few high-magnitude price increases. The increased demand would drive up prices prior to the interview. Because most interviews do not contain information, most stocks would exhibit a price reversal as the option expires valueless.

To examine the validity of such reasoning, all interviews are sorted into bins based on whether they exhibit positive or negative abnormal returns prior to the event [-2,-1], on the event date [0], and over the following ten trading days [+1,+10]. Table VI reveals that for 461 interviews, abnormal returns are indeed positive over the entire period [-2,+10]. For these interviews, the average (median) abnormal return over the ten days following the interview is 8.07 (5.49) percent. However, Table VI also indicates that even after conditioning on pre-event and event abnormal returns, more interviews exhibit price reversals then price continuation and

that the average and median magnitude of the negative abnormal return is larger than the average and median magnitude of the positive abnormal return. These results suggest that the observed price dynamics cannot be explained by rational traders anticipating an option-like payoff from a subsample of CEO interviews.

*E. Asymmetric Information*

If the price dynamics surrounding CEO interviews on CNBC are driven by information disclosure, one might expect that firms that choose CNBC as a venue for voluntary disclosure share some cross-sectional characteristics commonly associated with a larger degree of informational asymmetry between management and market participants.

To investigate this possibility, this section reports results from a simple OLS regression of the two 2-day cumulative abnormal returns surrounding the interview, CAR[-2,-1] and CAR[+,1+2], as well as the abnormal return on the interview day, AR[0], to examine whether companies with high asymmetric information drive the results. All abnormal returns are estimated using the CRSP value weighted index as a proxy for the market model. The independent variables are the following. LN_AGE is the natural logarithm of 1 plus the number of years the firm is listed on the CRSP files. LN_SIZE is the natural logarithm of the market capitalization 6 trading days prior to the interview. TURNOVER is the average turnover over 100 trading days 6 trading days prior to the interview. RESEARCH and ADVERTISING are research and advertising expenditures scaled by sales, respectively. BTM is the book-to-market ratio. FORBES is a dummy variable equal to 1 if the firm is part of the Forbes 500 list[14]. EARNINGS and MERGER are dummy variables equal to one if the interview is earnings- or merger and acquisition-related, respectively. NASDAQ is a dummy variable equal to one if the firm is trading on Nasdaq. NEGBTM is a dummy variable equal to one if the firm has negative book value. ADR is a dummy variable equal to one if a foreign firm's American Depository

Receipts or American Depository Shares are traded on an American exchange. The regression controls for the six industry groups that had the largest number of interviews during the sample period. Because the White-Heteroskedasticity Test rejects the null hypothesis of homoskedasticity, t-statistics are computed with heteroskedasticity consistent standard errors.

Table VII reports the results of the three regressions. The Adjusted $R^2$ are very low and most coefficients commonly associated with higher asymmetric information are insignificant. Overall, these preliminary results are in line with the notion that the price and turnover dynamics observed are due to an increase in attention rather than to CEOs appearing on television to reduce asymmetric information.

## IV. Summary and Conclusion

While financial markets seem to underreact to corporate events, one can observe large stock price movements without any apparent news. Since Shiller's (1981) classic account of a mismatch between news and stock price movements, the apparent "excess volatility" in asset prices has been attributed to noise trading, suggesting that investors may overreact to unobserved stimuli. Although the financial news media has long been suspected of stimulating noise traders, accounts that document media hype by relating the financial news media to excess volatility, have been rare and mostly anecdotal.

To analyze the role of the media on the price formation of stock prices, this paper takes a closer look at how the market reacts to CEO appearances on CNBC, which are taken as nonevents that do not contain new information. Consistent with price pressure, this study documents a significant mean price increase of 1.65 percent and higher trading volume on the day of the interview. Prices exhibit strong mean reversion of negative 2.78 percent over the 10 trading days following the interview. These findings suggest that the increased attention due to CEO interviews creates transitory buying pressure by enthusiastic investors. These results

support the conjecture that enthusiastic public attention may move stock prices away from fundamentals and are consistent with the popular notion of media hype. But in contrast to Huberman and Regev's (2001) case study, the price impact of CEO interviews is only transitory and prices quickly mean revert. Because a strategy that tries to take advantage of this transitory price pressure involves on average short sells, it may take some time for market participants to verify that the observed stock increase is just due to media hype and not to new information. This may explain why we observe mean reversion from the following day on.

A great part of CNBC's success is probably due to the fact that viewers consider it to be an important source for breaking news. CNBC claims that viewers get the latest financial news as they occur, that CNBC has leveled the playing field between individual and institutional investors by even-handedly providing real-time information to its viewers. However, the documented price dynamics around CEO interviews are consistent with the notion that, on average, these interviews do not contain any new information. In addition, the substantial price and volume dynamics prior to these interviews may indicate that even if CEOs would be willing to disclose new information live to the public, CNBC is actually unable to prevent information leakage prior to CEO appearances on television. Further analysis is required to reliably attribute the price dynamics prior to CEO interviews to either a confounding event or to information leakage, but investors may be cautioned by these findings when considering whether to trade on supposedly breaking news.

Recent behavioral asset pricing models assume that individuals underreact to public news and overreact to private information [i.e., Daniel, Hirshleifer, and Subrahmanyam (1998); Hong and Stein (1999)]. In contrast, the findings in this paper suggest that investors overreact to CEO interviews on CNBC. It may be worthwhile examining whether the reported price dynamics are specific to CNBC's broadcast or whether other media outlets cause overreaction as well. If

markets in fact underreact to corporate events and overreact to media-transmitted nonevents, one may find interesting implications for the behavioral models mentioned above.

Huberman (2001) documents that investors prefer investing in assets they feel familiar with and Barber and Odean (2002) find that individual investors are more likely to be net buyers of attention-grabbing stocks than are institutional investors. Cohen, Gompers and Vuolteenaho (2001) show that individual investors underreact to positive cash-flow news while institutions exploit the underreaction pattern by buying shares from individual investors. An interesting question for future research could be to investigate whether individual investors (e.g., day traders) overreact to CEO appearances, thus driving up stock prices, while institutional investors sell off (or even short) stocks after interviews, thereby causing the price reversal.

**Appendix A: Sample Selection Procedure**

From January 1999 until March 2001, CNBC's programming schedule was available on CNBC's website. For the period from January 1999 until December 2000, the schedule lists 13,886 entries, 3,835 of which are concerned with publicly traded companies (interviews, reports, analyst recommendations). 3,051 are CEO interviews, and 526 are interviews with non-CEO executives and CEOs of subsidies (i.e., interviews with Bob Wright, CEO of NBC, which is owned by General Electric).

In 2001 CNBC changed its database provider, and thereby the format of its website. First, time stamps are unavailable for all interviews between April and December 2001. Second, the complete programming schedule is no longer available. Instead, CNBC classifies all interviews, and "CEO Interview" is one of the categories. Hence, 347 CEO interviews from January through March 2001 were extracted from the programming schedule and 896 interviews between April and December 2001 where downloaded using CNBC's classification. To keep the sample clean, this study focuses exclusively on interviews with CEOs.

For the entire sample period from January 1999 through December 2001, 4,294 CEO interviews are available. 4,183 could be matched with the stock database of the Center for Research in Security Prices (CRSP). Stock price data are required to be available for the 300 trading days prior to the interview in order to estimate the parameters of the market model over one year (255 trading days), which reduces the sample to 3,945 interviews. After intersecting these interviews with the Standard & Poor's COMPUSTAT database. The final sample consists of 3,641 interviews with CEOs from 1,491 different companies. While these requirements eliminate several hundred observations, they ensure that the results reported in this study are not driven by very small stocks or newly listed companies.

**Appendix B: Event Study Methodology**

This appendix discusses the event study methodology employed in this paper in more detail. An examination of the impact of CEO Interviews on the price dynamics of sample firms requires a measure of abnormal return. The abnormal return, $AR_{i\tau}$, is the actual return of the security *i*, $R_{i\tau}$, minus the normal return, $E(R_{i\tau} \mid X_\tau)$, where normal return is defined as the expected return without conditioning on the CEO interview:

$$AR_{i\tau} = R_{i\tau} - E(R_{i\tau} \mid X_\tau) \qquad \text{(A1)}$$

Models for measuring normal performance can be categorized as statistical and economic. While both categories require statistical assumptions, *economic models* use economic restrictions to calculate more precise measures of normal returns. The two common economic models are the Capital Asset Pricing Model (CAPM) and the Arbitrage Pricing Theory (APT). However, the empirical evidence of deviations CAPM implies that restrictions imposed by the CAPM are questionable. Adding additional economic factors to the market factor within an APT framework adds little explanatory power (Brown and Weinstein, 1985). Therefore, most event studies employ *statistical models* for modeling the abnormal return. The two common choices are the constant mean return model and the market model. The constant mean return model assumes that the mean return of a given security *i*, $R_{it}$, is constant through time (indexed by *t*):

$$R_{it} = \mu_i + \xi_{it}, \qquad \text{where } E(\xi_{it}) = 0 \text{ and } \text{var}(\xi_{it}) = \sigma^2_{\xi_t} \qquad \text{(A2)}$$

The market model assumes a stable linear relationship between the market return, $R_{mt}$, and the security return, $R_{it}$:

$$R_{it} = \alpha_i + \beta_i R_{mt} + \varepsilon_{it}, \qquad \text{where } E(\varepsilon_{it}) = 0 \text{ and } \text{var}(\varepsilon_{it}) = \sigma^2_{\varepsilon_t} \qquad \text{(A3)}$$

By removing the portion of the return $R_{it}$ that is related to variation in the market's return, $\beta_i R_{mt}$, the variance of the abnormal return is reduced. The gain from using the market model

instead of the constant mean return model depends upon the $R^2$ of the market model regression (A3). Chandra, Moriarty and Willinger (1990) find that tests with the constant mean return model are less powerful than tests with the market model. Recent event studies employ the Fama-French 3-factor model (i.e., Barber and Odean, 2002) to further reduce the variance of the abnormal return. However, MacKinlay (1997) argues that the marginal explanatory power of additional factors is small unless sample firms share a common characteristic.

This paper uses the market model (A3) to measure normal performance. For each sample observation, calendar time is converted to event time by defining the date of the CEO interview as event day 0. The regression coefficients $\alpha_i$ and $\beta_i$ are estimated in an ordinary least squares (OLS) regression during the *estimation period* one year (255 trading days) prior to the event period (event days – 300 through – 46). The *event period* consists of 61 trading days centered on the telecast (– 30 through + 30). However, the paper reports abnormal returns only for the 21 trading days centered on the telecast (– 10 through + 10) and the discussion focuses on the symmetric 5-day window (– 2 through + 2). As proxy for the market portfolio $R_{mt}$, both the CRSP value-weighted index, and the CRSP equal-weighted index are used.

Under standard assumptions, OLS is a consistent estimation procedure for the market model parameter. Under the assumption that asset returns are jointly multivariate normal and independently and identically distributed (iid.), OLS is also efficient. The prediction errors, $PE_{it}$, of the market model are simply the OLS residuals, $\hat{\varepsilon}_{it}$,

$$PE_{i\tau} \equiv \hat{\varepsilon}_{i\tau} = R_{i\tau} - (\hat{\alpha}_i + \hat{\beta}_i R_{m\tau}) \qquad \text{(A4)}$$

with

$$\hat{\sigma}^2_{\varepsilon_t} = \frac{1}{255-2} \sum_{\tau=t-299}^{t-46} \left( R_{i\tau} - \hat{\alpha}_i - \hat{\beta}_i R_{m\tau} \right)^2 \qquad \text{(A5)}$$

which is used as an estimator of the abnormal return, $AR_{i\tau}$. In other words, the abnormal return is the residual term of the market model calculated on an out of sample basis. Let $AR_{i\tau}$, $\tau$ = t – 30, t – 29, …, t + 29, t + 30, be the sample of 61 abnormal returns for firm *i* in the event window. Under the null hypothesis, conditional on the event window market returns, the abnormal returns will be jointly normally distributed with a zero conditional mean and conditional variance:

$$AR_{i\tau} \sim N\left(0, \sigma^2(AR_{i\tau})\right) \tag{A6}$$

The conditional variance $\sigma^2(AR_{i\tau})$ has two components. The first component is the disturbance $\hat{\sigma}^2_{\varepsilon_t}$ from (A5), and the second component is additional variance due to the sampling error in estimating the market model parameters $\alpha_i$ and $\beta_i$:

$$\sigma^2(AR_{i\tau}) = \sigma^2_{\varepsilon_t} + \frac{1}{255}\left[1 + \frac{(R_{m\tau} - \overline{R}_m)^2}{\hat{\sigma}^2_m}\right] \quad \text{where } \overline{R}_m = \frac{1}{255}\sum_{\tau=t-299}^{t-46} R_{m\tau} \tag{A7}$$

Because we have chosen the estimation window to be large (255 trading days), we assume that the contribution of the second component to $\sigma^2(AR_{i\tau})$ is zero.

To draw inferences about the average price impact of an event, abnormal return observations have to be aggregated across securities and through time. Average abnormal returns $AAR_\tau$ are formed by aggregating abnormal returns $AR_{i\tau}$ for each event period, $\tau$ = t – 30, t – 29, …, t + 29, t + 30. Given N events,

$$AAR_\tau = \frac{1}{N}\sum_{i=1}^{N} AR_{\tau i} \tag{A8}$$

Under the assumption that average abnormal returns are independent across securities, the asymptotic variance equals to

$$\text{var}\left(AAR_\tau\right) = \frac{1}{N^2}\sum_{i=1}^{N} \sigma^2_{\varepsilon_t} \tag{A9}$$

For part of the analysis, these average abnormal returns are aggregated through time

$$CAAR_i(\tau_1\tau_2) = \sum_{\tau=\tau_1}^{\tau_2} AAR_{i\tau} \tag{A10}$$

Under the assumption the event windows of the N securities do not overlap, the covariance terms are set to zero and the variance equals to

$$\text{var}\left(CAAR_i(\tau_1\tau_2)\right) = \sum_{i=1}^{N} \text{var}\left(AAR_\tau\right) \tag{A11}$$

Hypothesis Testing

Under the assumption described above,

$$CAAR_i(\tau_1\tau_2) \sim N\left(0, \text{var}\left(CAAR_i(\tau_1\tau_2)\right)\right) \tag{A12}$$

can be used to test the null hypothesis that the abnormal returns are zero. Because $\sigma_{\varepsilon_t}^2$ is unknown, it has to be estimated. One possible choice is the sample variance measure of $\sigma_{\varepsilon_t}^2$ from the market model regression in the estimation window, (A5). Using $\hat{\sigma}_{\varepsilon_t}^2$ in (A9), test statistics can be constructed using

$$\theta_1 = \frac{CAAR_i(\tau_1\tau_2)}{\sqrt{\text{var}\left(CAAR_i(\tau_1\tau_2)\right)}} \sim N(0,1) \tag{A13}$$

However, (A13) is not appropriate if securities' abnormal returns are cross-sectionally correlated, which may be the case if the securities have a common event date. Because every day several CEOs appear on CNBC, this could cause a potential problem. Brown and Warner (1985) suggest a 'crude dependence adjustment' which uses the variance of portfolio residuals from the estimation period rather than the sum of the variances of residuals for individual securities. Therefore, the estimated variance of $AAR_\tau$ is

$$\hat{\sigma}_{AAR}^2 = \frac{\sum_{\tau=t-299}^{t-46}\left(AAR_\tau - \overline{AAR}\right)^2}{255-2} \quad \text{where} \quad \overline{AAR} = \frac{\sum_{\tau=t-299}^{t-46} AAR_\tau}{255}. \tag{A14}$$

The portfolio test statistic for day τ in event time is

$$t = \frac{AAR_\tau}{\hat{\sigma}^2_{AAR}} \tag{A15}$$

T-statistics in Table IV with the column header *Standard-t* are calculated based on (A15). Assuming time-series independence, the test statistic for $CAAR_i(\tau_1\tau_2)$ is

$$t = \frac{CAAR_i(\tau_1\tau_2)}{\sqrt{(\tau_2 - \tau_1 + 1)}\hat{\sigma}_{AAR}} \tag{A16}$$

If clustering is present, this portfolio approach will impound any residual cross-sectional correlation in its estimate of portfolio residual's standard deviation.

However, besides being cross-sectionally correlated, the abnormal return estimators often have different variances across firms. A common way of addressing this problem is the standardized residual method (Patell, 1976). Define the *standardized abnormal return*, $SAR_{i\tau}$ as

$$SAR_{i\tau} = \frac{AR_{i\tau}}{\hat{\sigma}_{MLE_{i\tau}}} \tag{A17}$$

where

$$\hat{\sigma}_{MLE_{i\tau}} = \hat{\sigma}^2_{\varepsilon_t}\left(1 + \frac{1}{T} + \frac{\left(R_{m\tau} - \overline{R_m}\right)^2}{\sum_{\tau=t-299}^{t-46}\left(R_{m\tau} - \overline{R_m}\right)}\right) \tag{A18}$$

is the maximum likelihood estimate of the variance. Under the null hypothesis each $SAR_{i\tau}$ follows a Student's t distribution with T – 2 degrees of freedom. Summing the $SAR_{i\tau}$ across the sample yields

$$ASAR_{i\tau} = \sum_{i=1}^{N} SAR_{i\tau} \text{ where } ASAR_{i\tau} \sim N(0, Q_\tau) \tag{A19}$$

The Z-test statistic for the null hypothesis that $CAAR_i(\tau_1\tau_2) = 0$ is

$$Z(\tau_1\tau_2)=\frac{1}{\sqrt{N}}\sum_{i=1}^{N}Z_i(\tau_1\tau_2)\ \text{ where }\ Z_i(\tau_1\tau_2)=\frac{1}{\sqrt{(\tau_2-\tau_1+1)\dfrac{T-2}{T-4}}}\sum_{\tau=\tau_1}^{\tau_2}SAR_{i\tau} \qquad \text{(A20)}$$

Table IV reports test statistics based on (A20) under the column header *Standard Z*.

The two test statistics so far discussed use the variance estimate from the market model during the estimation period to estimate the variance of the abnormal return estimator. But frequently events increase the variance of returns, so that the event-period variance is greater than the estimation-period variance. Two common proposals for coping with event-induced variance are the cross-sectional standard deviation method proposed by Brown and Warner (1985) and the standardized cross-sectional test developed by Boehmer, Musumeci, and Poulsen (1991). The cross-sectional standard deviation method substitutes a daily cross-sectional standard deviation for the portfolio time-series standard deviation. The portfolio test statistic for day t in event time is

$$t=\frac{AAR_t}{\hat{\sigma}_{AAR_t}\big/\sqrt{N}}\ \text{ where }\ \hat{\sigma}^2_{AAR_t}=\frac{1}{N-1}\sum_{i=1}^{N}\left(AR_{i\tau}-\frac{1}{N}\sum_{i=1}^{N}AR_{i\tau}\right)^2 \qquad \text{(A21)}$$

The results of using (A21) are reported in Table IV under the column header *Adjusted-t*. The standardized cross-sectional method is a hybrid of the standardized-residual and the cross-sectional approach:

$$Z_t=\frac{ASAR_t}{\hat{\sigma}_{SAR_t}\big/\sqrt{N}}\ \text{ where }\ \hat{\sigma}^2_{SAR_t}=\frac{1}{N-1}\sum_{i=1}^{N}\left(SAR_{i\tau}-\frac{1}{N}\sum_{i=1}^{N}SAR_{i\tau}\right)^2 \qquad \text{(A21)}$$

Table IV reports test statistics based on (A21) under the column header *Adjusted-Z*. Boehmer, Musumeci, and Poulsen (1991) use simulations to document the empirical properties of (A21). They find that (A21) has more power than (A20) and is essentially unaffected by the presence of event-date clustering.

**References**


Abarbanell and Lehavy, 2000, Commercial database adjustments to earnings and forecasts: Implications for research on analyst forecast rationality, earnings management and earnings response coefficient, Working Paper, UNC/UC-Berkeley.

Anderson, Mark W., 2000, Stocks on the move: 06/30/00, http://news.morningstar.com/doc/news/ 0,2,7535,00.html

Barber, Brad M. and Douglas Loeffler, 1993, The "Dartboard" column: Second-hand information and price pressure, *Journal of Financial and Quantitative Analysis* 28, 273-284.

Barber, Brad M. and Terrance Odean, 2002, All that glitters: The effect of attention and news on the buying behavior of individual and institutional investors, Working Paper, UC Davis/UC Berkeley

Bartiromo, Maria and Catherine Fredman, 2001, *Use the News: How to separate the noise from the investment nuggets and make money in any economy*, New York, NY: HarperCollins

Beaver, William H., 1968, Market prices, financial ratios, and the prediction of failure, *The Journal of Accounting Research,* 179-192.

Beltz, Jess and Robert Jennings, 1997, "Wall Street Week with Louis Rukjeyser" Recommendations: Trading activity and performance, *Review of Financial Economics* 6, 15-27.

Beneish, Messod D., 1991, Stock prices and the dissemination of analysts' recommendation, *Journal of Business* 64, 393-416.

Bernard, Victor L., 1992, Stock price reactions to earnings announcements, in: Richard Thaler (ed.), *Advances in Behavioral Finance*, New York, Sage.

Bernstein, Richard, 2001, *Navigate the Noise: Investing in the New Age of Media and Hype*, New York, NY: Wiley

Berry, Thomas D. and Keith M. Howe, 1994, Public information arrival, *Journal of Finance* 49, 1331-1346.

Black, Fischer, 1986, Noise, in: Richard H. Thaler (ed.), *Advances in Behavioral Finance*, New York, NY: Sage.

Boehmer, Ekkehart, Jim Musumeci, and Annette B. Poulsen, 1991, Event-Study methodology under conditions of event-induced variance, *Journal of Financial Economics* 30, 253-272.

Busse, Jeffrey A. and T. Clifton Green, in press, Market efficiency in real-time, *Journal of Financial Economics*, forthcoming.

Byrd, John, Johnson, Marilyn F. and Mark S. Johnson, 1997, CEO presentation strategies and the investor base, Working Paper, University of Michigan

Campbell, John Y. and Albert S. Kyle, 1993, Smart money, noise trading, and stock price behaviour, *Review of Economic Studies* 60, 1-34.

Chan, Wesley S., 2001, Stock price reaction to news and no-news: Drift and reversal after headlines, M.I.T. Working Paper

Cohen, Randolph B., Gompers Paul A. and Tuomo Vuolteenaho, 2001, Who underreacts to cash-flow news? Evidence from trading between individuals and institutions, Working Paper, NBER and Harvard University.

Daniel, Kent, David Hirshleifer, and Avanidhar Subrahmanyam, 1998, Investor psychology and security market under- and overreactions, *Journal of Finance* 53, 1839–86.

De Long, J. Bradford, Andrei Shleifer, Lawrence H. Summers, and Robert J. Waldmann, 1990, Noise trader risk in financial markets, in: Richard H. Thaler (ed.), *Advances in Behavioral Finance*, New York, NY: Sage.

French, Kenneth R. and Richard Roll, 1986, Stock return variances: The arrival of information and the reaction of traders, *Journal of Financial Economics* 17, 5-26.

Gompers, Paul, and Josh Lerner, 1998, Venture capital distributions: Short-run and long-run reactions, *Journal of Finance* 53, 2161-83.

Hong, Harrison, and Jeremy C. Stein, 1999, A unified theory of underreaction, momentum trading and overreaction in asset markets, *Journal of Finance* 54, 2143–84.

Huberman, Gur and Tomer Regev, 2001, Contagious speculation and a cure for cancer: A nonevent that made stock prices soar, *Journal of Finance* 56, 387-396.

Ikenberry, David L., Josef Lakonishok, and Theo Vermaelen, 1995, Market underreaction to open market share repurchases, Journal of Financial Economics, 39, 301-39.

Ikenberry, David L., and Sundaresh Ramnath, 2001, Underreaction to self-selected news events: The case of stock splits, Working Paper, Rice University

Kolata, Gina, 1998, Hope in the lab: A special report; A cautious awe greets drugs that eradicate tumors in mice, *New York Times*, May 3, 1:1.

Kurtz, Howard, 2000, *The Fortune Tellers: Inside Wall Street's Game of Money, Media, and Manipulation*, New York, NY: Free Press.

Liang, Bing, 1999, Price pressure: Evidence from the "Dartboard" Column, *Journal of Business* 72, 119-134.

Lloyd Davies, Peter and Michael Canes, 1978, Stock prices and the publication of second-hand information, *Journal of Business* 51, 42-56.

Loughran, Tim, and Jay R. Ritter, 1995, The new issues puzzle, *Journal of Finance* 50, 23-52.

Merton, Robert C., 1987, A simple model of capital market equilibrium with incomplete information, *Journal of Finance* 42, 483-510.

Michaely, Roni, Thaler, Richard H. and Kent L. Womack, 1995, Price reactions to dividend initiations and omissions: Overreaction or Drift? *Journal of Finance* 50, 573-608.

Mikkelson, Wayne H. and M. Megan Partch, 1988, Withdrawn security offerings, *Journal of Financial and Quantitative Analysis* 23, 119-134; Errata, *JFQA* 23, 487.

Miller, Edward M., 1977, Risk, uncertainty, and divergence of opinion, *Journal of Finance* 32, 1151 – 1168.

Mitchell, Mark L. and J. Harold Mulherin, 1994, The impact of public information on the stock market, *Journal of Finance* 49, 923-950.

Patell, James M., 1976, Corporate forecasts of earnings per share and stock price behavior: Empirical tests, *Journal of Accounting Research* 14, 246-274.

Philbrick, Donna R., and William Ricks, 1991, Using value line and IBES analyst forecasts in accounting research, *Journal of Accounting Research* 29, 397-417.

Rashes, Michael S., 2001, Massively confused investors making conspicuously ignorant choices (MCI-MCIC), *Journal of Finance* 56, 1911-1927.

Roll, Richard, 1977, A critique of the asset pricing theory's tests, *Journal of Financial Economics* 6, 349-357.

Salinger, Michael, 1992, Standard errors in event studies, *Journal of Financial and Quantitative Analysis* 27, 39-53.

Shiller, Robert J., 2000, *Irrational Exuberance*, Princeton, NJ: Princeton University Press

———— , 1984, Stock prices and social dynamics, in: Richard H. Thaler (ed.), 1993, *Advances in Behavioral Finance*, New York, NY: Sage.

———— , 1981, Do stock prices move too much to be justified by subsequent changes in dividends?, *American Economic Review* 71, 421-498.

Shleifer, Andrei, 2000, *Inefficient Markets*, New York, NY: Oxford University Press

Stickel, Scott E., 1985, The effect of value line investment survey rank changes on common stock prices, *Journal of Financial Economics* 14, 121-143.

Strauss, Robert, 2001, As markets yo-yo, CNBC steadily rises, *Los Angeles Times*, April 24, 2001

Thaler, Richard H., editor, 1993, *Advances in Behavioral Finance*, New York, NY: Sage.

Thompson, Robert B., Olsen, Chris and J. Richard Dietrich, 1987, Attributes of news about firms: Firm-specific news reported in the Wall Street Journal Index, *Journal of Accounting Research* 25, 245-74.

Vickers, Marcia and Gary Weiss, 2000, Wall Street's hype machine, *BusinessWeek*, April 3, 2000.

Womack, Kent L., 1996, Do brokerage analysts' recommendations have investment value? *Journal of Finance* 51, 137-167.[15]

**Footnotes**

[1] CNBC's anchor Maria Bartiromo communicates this to her audience as follows: "So a publicly traded company's agenda is, simply, to make money and get its stock price up. Consequently, it wants to deliver information that makes the company look good so that more money is raised for the company and the best talent wants to work for the company." (Bartiromo and Fredman, 2001, p.134)

[2] For example, Wharton Professor Jeremy Siegel recently told the LA Times: "I generally stop listening when I see a CEO on [CNBC]." Robert Strauss, 2001, As Markets Yo-Yo, CNBC Steadily Rises, LA Times, Tuesday, April 24, 2001

[3] On can, of course, always argue that an event may contain *new information* without revealing *new facts*. Hearing previously known facts strait from the CEO may serve as certification, while simply repeating facts may be seen as validation. The litmus test for information content will be the *degree of permanence in the market reaction* to CEO interviews. Underreaction or overreaction alone would not signify a nonevent. But if one finds, on average, *no permanence at all* in the price response, the definition of a nonevent applies. Section 4.2 proposes a simple measure to decompose information and "limelight" effect.

[4] Vickers, Marcia and Gary Weiss, 2000, Wall Street's hype machine, *Business Week*, April 3, 2000.

[5] Geert De Lombaerde, 2000, CNBC appearance sent shares of MedPlus skyrocketing, briefly, *Business Courier* September 22, 2000.

[6] CNBC's tag line is: "CNBC – Profit from it". CNBC's credo is reflected in the opening paragraph of Maria Bartiromo's book *Use the News*: "We live in an extraordinary time for ordinary investors. Wall Street has gone from an institutional club admitting only

select professionals to a game that's wide open to individuals." (Bartiromo and Fredman, 2001, p.1)

[7] Merton's (1987) *investor recognition hypothesis* also predicts a permanent shift in security prices. But in contrast to the *information hypothesis*, his "model is consistent with the observation that stock price sometimes reacts to a broad and widely-circulated report about the firm, even when all the substantive information in the report has been previously announced" (Merton, 1987, p. 501).

[8] Price pressure and information hypothesis also have been tested in the context of analysts' recommendations, see, i.e., Barber and Loeffler (1993) and Liang (1999). Merton (1987, Footnote 24) suggests that one can distinguish between the investor recognition hypothesis and the "fads hypothesis by determining whether the price changes are transient or permanent, provided, of course, that the half-lives of fads are not too long."

[9] Only one percent of the interviews concern stocks traded on the American Stock Exchange (AMEX). This may be due to the fact that AMEX stocks account for 10 percent of all stocks, but for less than one percent of total market capitalization.

[10] Mitchell and Mulherin (1994) and Berry and Howe (1994) analyze the effect of public information on market activity. While Mitchell and Mulherin (1994) use the number of stories per day reported by Dow Jones on the *Broadtape* and in the *Wall Street Journal*, Berry and Howe (1994) use the number of stories per day sent via the North American wire by Reuter's News Service for information proxies. Both report significant fewer news stories on Mondays and Fridays and the most stories on Tuesdays and Thursdays. Thompson, Olsen, and Dietrich (1987) analyze firm-specific news reported in the *Wall Street Journal Index* for all stocks listed on the New York Stock Exchange (NYSE) and

American Stock Exchange (AMEX). They also find significantly fewer news items on Mondays. Due to the time lag of the print medium, however, they do not report fewer news items on Fridays.

[11] Monthly size and annual book-to-market breakpoints are based on the New York Stock Exchange and where downloaded from Ken French's website.

[12] For example, Jain (1988) reports that the announcements of certain macroeconomic variables such as money supply and consumer price index induce significant abnormal returns but no abnormal volume.

[13] Turnover can be computed either on a dollar-weighted basis, by dividing the dollar value of trading by the market capitalization of outstanding shares, or on a share-weighted basis, by dividing the number of shares traded by the number of shares outstanding. This paper uses share-weighted turnover.

[14] Sales is COMPUSTAT data item 6, research expenditure is data item 46, advertising is data item 45, book value of equity is data item 60, and the FORBES ranking is data item 279. For every interview, the most recent accounting data available are used, provided that at least four months have passed between companies' fiscal yearend and the interview in question. This ensures that the accounting information is available to investors by the time of the interview.

**Figure 1**
**NASDAQ and NYSE Index**

This figure plots the NASADAQ Composite index and the New York Stock Exchange (NYSE) index for the three years between 1999 and 2001. Both indices are normalized to a value of 100 for the beginning of the sample period by dividing each index value by the index value of the first trading day of 1999 and multiplying by 100.

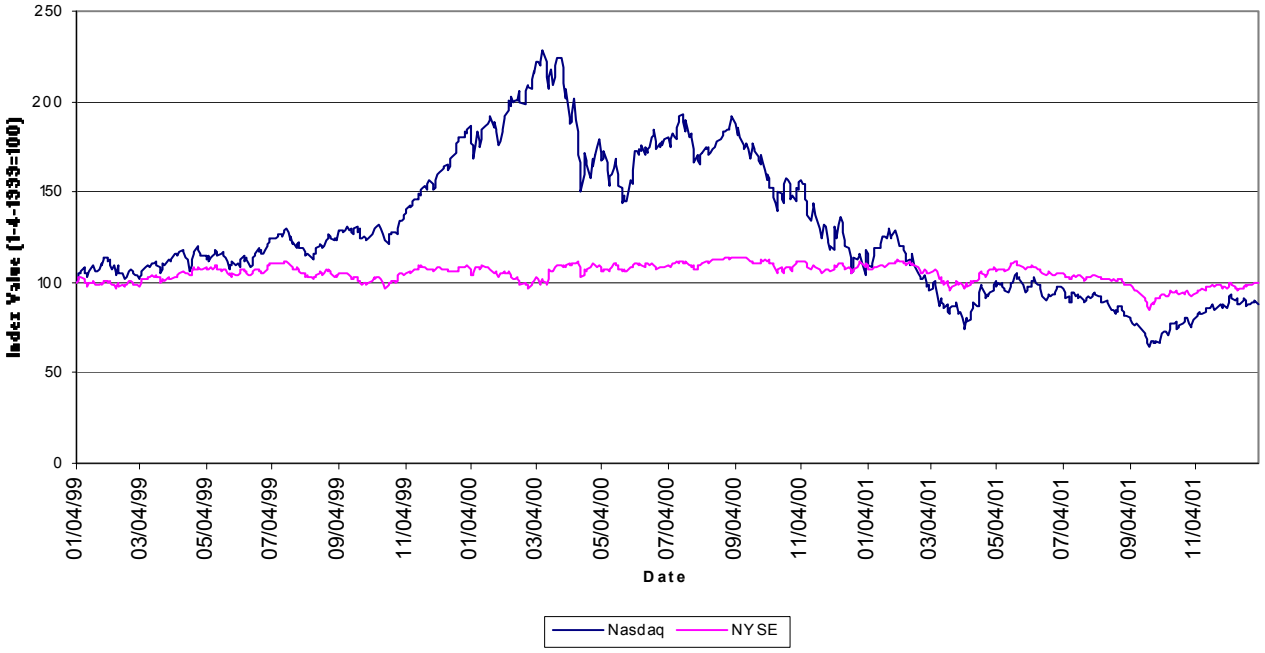


**Figure 2**
**Frequency Distribution of CEO Interviews on CNBC by Time of the Day**

This figure plots the number of interviews broadcast on CNBC by time of the day for 3039 interviews where time stamps are available. Time is measured in five minutes intervals as CNBC reports its time stamps for CEO interviews in five minutes increments.

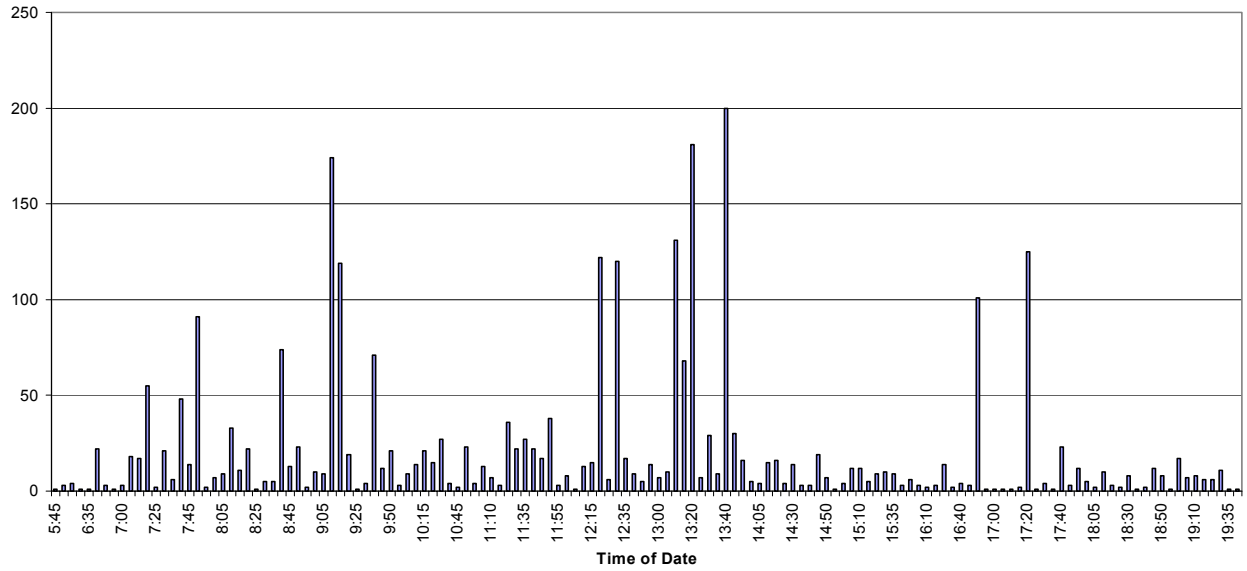

**Figure 3**
**Average Daily Excess Turnover around CEO Interviews on CNBC**

This figure plots average daily excess turnover, $ADET_k$, around CEO interviews on CNBC. Average turnover, $AT_i$, is defined as the sum of share-weighted turnover, $T_{it}$, during the estimation period (day – 105 through day – 6):

$$AT_i = \frac{1}{100} \sum_{t=-105}^{-6} T_{it}.$$

Daily excess turnover, $DET_{ik}$, is defined as the difference between average turnover and daily turnover for every day $k$ of the event period. Average daily excess turnover, $ADET_k$ equals the sum of daily excess turnover across observations:

$$DET_{ik} = T_{ik} - AT_i, \text{ and } ADET_k = \sum_{i=1}^{N} DET_{ik}.$$

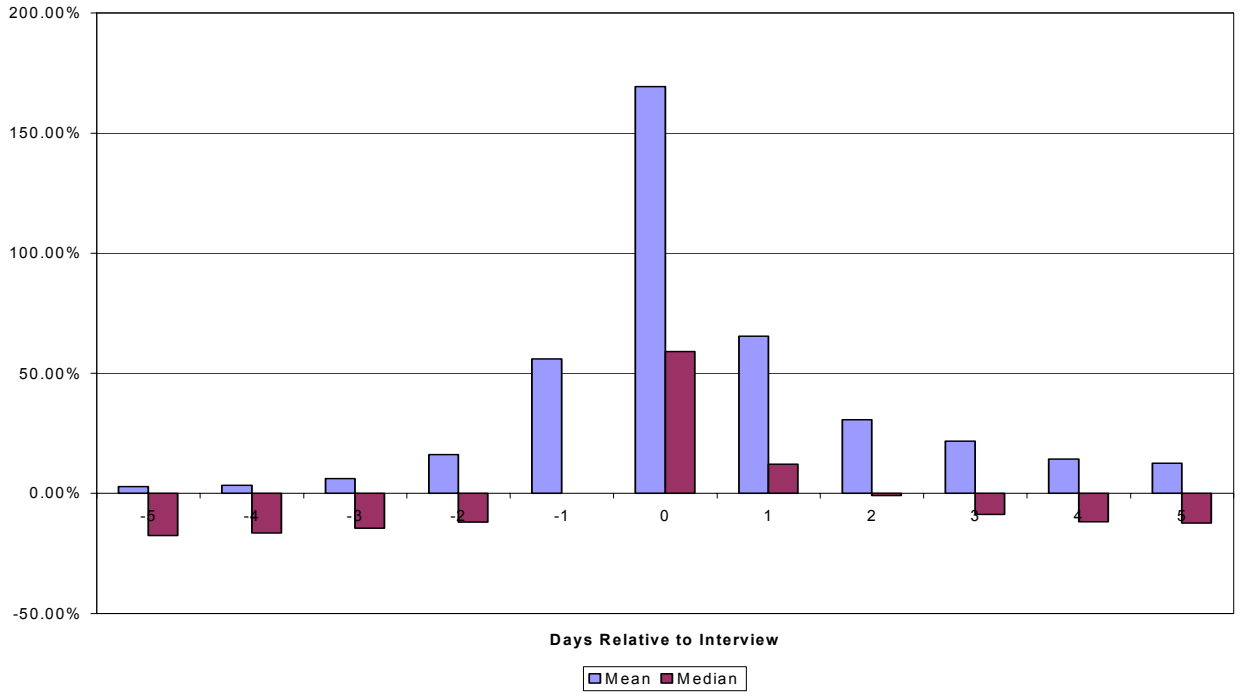

**Table I**
**Descriptive Statistics of CEO Interviews on CNBC Across Time**

This table reports summary statistics for 3641 CEO Interviews on CNBC by 1491 Firms between January 1999 and December 2001. Panel A reports the distribution of interviews by month. Panel B reports the distribution of interviews by weekday. Panel C reports how CEO interviews between January 1999 and March 2001 are distributed across CNBC's daily program schedule (no time stamps are available for the remainder of the sample, which reduces the sample size in Panel C to 3039 observations). Column five reports the total number of CEO interviews broadcast during the time slot reported in column one. 9 interviews were broadcast after 19:30 when CNBC's program schedule varies by weekday and hence do not show up in this table. The three programs *Market Watch*, *Street Signs*, and *Market Wrap* each consist of two hours. Because the hosts change after an hour (and in the case of *Market Wrap* even the producer), this table reports the two segments of each of the shows as separate program items.

**Panel A: Distribution of CEO Interviews by Month**

| | CEO Interviews On CNBC | | | | |
|---|---|---|---|---|---|
| **Month** | **1999** | **2000** | **2001** | **Total** | **% of Total** |
| January | 54 | 124 | 115 | 293 | 8.0 |
| February | 110 | 106 | 98 | 314 | 8.6 |
| March | 56 | 119 | 82 | 257 | 7.1 |
| April | 88 | 118 | 123 | 329 | 9.0 |
| May | 78 | 169 | 119 | 366 | 10.1 |
| June | 82 | 123 | 101 | 306 | 8.4 |
| July | 104 | 149 | 63 | 316 | 8.7 |
| August | 101 | 158 | 107 | 366 | 10.1 |
| September | 68 | 126 | 45 | 239 | 6.6 |
| October | 118 | 167 | 122 | 407 | 11.2 |
| November | 95 | 89 | 49 | 233 | 6.4 |
| December | 94 | 74 | 47 | 215 | 5.9 |
| **Total** | **1048** | **1522** | **1071** | **3641** | **100.0** |
| **% of Total** | **28.8** | **41.8** | **29.4** | **100.0** | |

**Panel B: Distribution of CEO Interviews by Weekday**

| | CEO Interviews On CNBC | |
|---|---|---|
| **Weekday** | **Number** | **% of Total** |
| Monday | 619 | 17.0 |
| Tuesday | 787 | 21.6 |
| Wednesday | 900 | 24.7 |
| Thursday | 784 | 21.5 |
| Friday | 551 | 15.1 |
| **Total** | **3641** | **100.0** |

**Panel C: Distribution of CEO Interviews across CNBC's Programming Schedule**

| Time | Program | Host(s) | Producer | Total No. of CEO Interviews | % of Total |
|---|---|---|---|---|---|
| 5:00 - 7:00 | Today's Business | Bob Sellers<br>Liz Claman | Gary Kanofsky | 36 | 1.2 |
| 7:00 - 10:00 | Squawk Box | Mark Haines<br>Tyler Mathisen | Matt Quale | 922 | 30.3 |
| 10:00 - 11:00 | Market Watch I | Martha MacCallum<br>Bob Sellers | Karin Annus | 118 | 3.9 |
| 11:00 - 12:00 | Market Watch II | Consuelo Mack | Karin Annus | 192 | 6.3 |
| 12:00 - 14:00 | Power Lunch | Bill Griffeth | Joel Franklin | 1018 | 33.5 |
| 14:00 – 15:00 | Street Signs I | Maria Bartiromo | Andy Hoffman | 91 | 3.0 |
| 15:00 - 16:00 | Street Signs II | Ted David<br>Bill Griffeth | Andy Hoffman | 70 | 2.3 |
| 16:00 - 17:00 | Market Wrap I | Liz Claman<br>Maria Bartiromo | Dan Clark | 133 | 4.4 |
| 17:00 - 18:00 | Market Wrap II | Tyler Mathisen<br>Ron Insana | Rich Fisherman | 174 | 5.7 |
| 18:00 - 19:30 | Business Center | Sue Herera | Rob Contino | 285 | 9.4 |
| *Total Number of CEO Interviews* | | | | **3039** | **100.0** |

**Table II**
**Descriptive Statistics Across Firms Whose CEO Appeared On CNBC**

This table reports descriptive statistics for the sample of 1491 firms with 3641 CEO interviews on CNBC between January 1999 and December 2001. Panel A reports the frequency of CEO interviews by sample firms. Panel B reports top 15 companies whose CEO (or CEOs) appeared 14 times or more on CNBC between January 1999 and December 2001. If two CEO names appear in column eight, then the company was represented by two different CEOs during the time period. Panel C reports the frequency of CEO interviews per sample industries. Panel D reports top 10 industry groups ranked by number of CEO appearances on CNBC between January 1999 and December 2001. Industries are classified by three-digit Standard Industry Classification (SIC) code. Panel E reports the distribution of CEO interviews by size.

**Panel A: Frequency of CEO Interviews per Sample Firm**

| CEO Interviews on CNBC | Firms | Mean | Median | Std. Dev. | Min | Max |
|---|---|---|---|---|---|---|
| 3641 | 1491 | 2.44 | 1 | 2.59 | 1 | 22 |

**Panel B: Top 15 Companies Ranked by CEO Appearance on CNBC between January 1999 and December 2001**

| | | CEO Interviews on CNBC | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Rank** | **Ticker** | **1999** | **2000** | **2001** | **Total** | **Company Name** | **CEO Name** | **SIC** | **Exchange** |
| 1 | AMAT | 6 | 7 | 9 | 22 | Applied Materials | James Morgan | 3550 | NASDAQ |
| 1 | BA | 3 | 9 | 10 | 22 | Boeing | Philip Condit | 3721 | NYSE |
| 3 | AMZN | 3 | 8 | 9 | 20 | Amazon.com | Jeff Bezos | 7370 | NASDAQ |
| 4 | CPQ | 6 | 10 | 3 | 19 | Compaq Computer | Eckhard Pfeiffer, Michael Capellas | 7379 | NYSE |
| 5 | EBAY | 5 | 7 | 6 | 18 | eBay | Meg Whitman | 7380 | NASDAQ |
| 5 | YHOO | 5 | 7 | 6 | 18 | Yahoo! | Timothy Koogle | 7375 | NASDAQ |
| 7 | EDS | 4 | 7 | 6 | 17 | Electronic Data Systems | Richard Brown | 7379 | NYSE |
| 8 | EMC | 5 | 7 | 3 | 15 | EMC | Michael Ruettgers | 3572 | NYSE |
| 8 | FNM | 2 | 6 | 7 | 15 | Fannie Mae | Franklin Raines | 6111 | NYSE |
| 8 | INKT | 7 | 6 | 2 | 15 | Inktomi | David Peterschmidt | 7370 | NASDAQ |
| 8 | LCOS | 11 | 4 | | 15 | Lycos | Robert Davis | 7375 | NASDAQ |
| 8 | RHAT | 2 | 7 | 6 | 15 | Red Hat Software | Matthew Szulik Robert Young | 7372 | NASDAQ |
| 8 | SUNW | 5 | 2 | 8 | 15 | Sun Microsystems | Scott McNealy | 3570 | NASDAQ |
| 14 | HGSI | 2 | 7 | 5 | 14 | Human Genome Sciences | William Haseltine | 2830 | NASDAQ |
| 14 | RNWK | 4 | 5 | 5 | 14 | Realnetworks Inc. | Rob Glaser | 7370 | NASDAQ |

**Panel C: Frequency of CEO Interviews per Sample Industry**

| CEO Interviews on CNBC | Industry | Mean | Median | Std. Dev. | Min | Max |
|---|---|---|---|---|---|---|
| 3641 | 212 | 17.2 | 4 | 57.1 | 1 | 726 |

**Panel D: Distribution of CEO Interviews across the 10 largest Industry Groups**

| | | | CEO Interviews on CNBC | | | | |
|---|---|---|---|---|---|---|---|
| **Rank** | **SIC** | **Industry Group** | **1999** | **2000** | **2001** | **Total** | **% Total** |
| 1 | 737 | Computer Programming, Data Processing | 201 | 321 | 204 | 726 | 19.9 |
| 2 | 283 | Drugs | 45 | 101 | 74 | 220 | 6.0 |
| 3 | 357 | Computer and Office Equipment | 67 | 85 | 53 | 205 | 5.6 |
| 4 | 367 | Electronic Components and Accessories | 37 | 94 | 62 | 193 | 5.3 |
| 5 | 481 | Telephone Communications | 50 | 66 | 28 | 144 | 4.0 |
| 6 | 366 | Communication Equipments | 28 | 58 | 38 | 124 | 3.4 |
| 7 | 671 | Holding Offices | 37 | 32 | 21 | 90 | 2.5 |
| 8 | 738 | Miscellaneous Business Services | 21 | 43 | 22 | 86 | 2.4 |
| 9 | 384 | Surgical, Medical and Dental Instruments | 20 | 24 | 19 | 63 | 1.7 |
| 10 | 371 | Motor Vehicles and Motor Vehicle Equipment | 12 | 27 | 15 | 54 | 1.5 |
| **Total** | | | **518** | **851** | **536** | **1905** | **52.3** |

**Panel E: Distribution of CEO Interviews by Size**

| | Company Size | | Book to Market Size | |
|---|---|---|---|---|
| **Size Rank** | **Interviews** | **% of Total** | **Interviews** | **% of Total** |
| 1 | 67 | 1.8 | 1411 | 38.8 |
| 2 | 134 | 3.7 | 541 | 14.9 |
| 3 | 186 | 5.1 | 314 | 8.6 |
| 4 | 254 | 7.0 | 243 | 6.7 |
| 5 | 261 | 7.2 | 226 | 6.2 |
| 6 | 328 | 9.0 | 170 | 4.7 |
| 7 | 338 | 9.3 | 140 | 3.8 |
| 8 | 459 | 12.6 | 106 | 2.9 |
| 9 | 613 | 16.8 | 109 | 3.0 |
| 10 | 1001 | 27.5 | 133 | 3.7 |
| Negative | | | 248 | 6.8 |
| **Total** | **3641** | **100.0** | **3641** | **100.0** |

**Table III**
**Distribution of CEO Interviews on CNBC by Stock Exchange**

This table reports descriptive statistics for sample of 3641 CEO interviews on CNBC by stock exchange between January 1999 and December 2001. Panel A reports the number of CEO interviews broadcasted on CNBC between 1999 and 2001 and their distribution by stock exchange. Panel B reports the total number of firms traded on the New York Stock Exchange (NYSE), the American Stock Exchange (AMEX) and on NASDAQ that appeared on CNBC between 1999 and 2001.

**Panel A: Number of CEO Interviews on CNBC by Stock Exchange**

| | CEO Interviews on CNBC | | | | |
|---|---|---|---|---|---|
| **Exchange** | **1999** | **2000** | **2001** | **Total** | **% of Total** |
| NYSE | 457 | 647 | 556 | 1660 | 45.6 |
| AMEX | 33 | 17 | 13 | 63 | 1.7 |
| NASDAQ | 558 | 858 | 502 | 1918 | 52.7 |
| **Total** | **1048** | **1522** | **1071** | **3641** | **100.0** |

**Panel B: Number of Firms with CEO Interviews on CNBC by Stock Exchange**

| | Firms Appeared on CNBC | | | | |
|---|---|---|---|---|---|
| **Exchange** | **1999** | **2000** | **2001** | **Total** | **% of Total** |
| NYSE | 292 | 216 | 123 | 631 | 42.3 |
| AMEX | 25 | 12 | 5 | 42 | 2.8 |
| NASDAQ | 359 | 338 | 122 | 819 | 54.9 |
| **Total** | **676** | **566** | **250** | **1492** | **100.0** |

## Table IV
## Percentage Average Prediction Errors to Stocks whose CEOs Appear on CNBC

This table reports average and median prediction errors (PE) as a proxy for average and median abnormal returns to CEO appearances on CNBC. The sample consists of 3641 interviews broadcasted on CNBC between January 1999 and December 2001. The day of the CEO interview is day 0. Percentage average and median prediction errors are calculated from the market model using both the CRSP equally weighted market index (columns 2 to 7) and the CRSP value weighted market index (columns 8-13). Columns 14 to 17 report average and median unadjusted raw returns. The alphas and betas for the market model are estimated during a 100-day estimation period from day – 300 to day – 46. Standard t-Statistics are based on the 'crude dependence adjustment' methodology of Brown and Warner (1985). Standard Z-Statistics are calculated by using the standardized residual method (Patell, 1976). Adjusted t-Statistics are calculated using the cross-sectional standard deviation method (Brown and Warner, 1985). Adjusted Z-Statistics are based on the standardized cross-sectional test of Boehmer, Musumeci, and Poulsen (1991).

| | Market Model EW Index | | | | | | Market Model VW Index | | | | | | Unadjusted Raw Returns | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Average PE | Median PE | Standard t-Statistic | Adjusted t-Statistic | Standard Z-Statistic | Adjusted Z-Statistic | Average PE | Median PE | Standard t-Statistic | Adjusted t-Statistic | Standard Z-Statistic | Adjusted Z-Statistic | Average PE | Median PE | Standard t-Statistic | Adjusted t-Statistic |
| -10 | 0.10% | -0.21% | 1.13 | 0.99 | 1.59$ | 1.32$ | 0.10% | -0.17% | 1.19 | 1 | 1.69* | 1.51$ | 0.30% | 0.00% | 3.25*** | 2.97** |
| -9 | 0.00% | -0.26% | -0.04 | -0.04 | -0.23 | -0.19 | 0.09% | -0.20% | 1.04 | 0.8 | 0.8 | 0.73 | 0.28% | 0.00% | 3.06** | 3.03** |
| -8 | -0.05% | -0.22% | -0.58 | -0.6 | -0.67 | -0.63 | -0.03% | -0.17% | -0.33 | -0.29 | 0.24 | 0.23 | 0.32% | 0.00% | 3.56*** | 3.69*** |
| -7 | -0.02% | -0.28% | -0.28 | -0.28 | 0.12 | 0.1 | 0.03% | -0.23% | 0.4 | 0.37 | 1.28 | 1.14 | 0.27% | 0.00% | 2.94** | 2.77** |
| -6 | 0.02% | -0.25% | 0.25 | 0.25 | 0.13 | 0.11 | 0.12% | -0.17% | 1.44$ | 1.36$ | 1.62$ | 1.48$ | 0.28% | -0.03% | 3.12*** | 3.00** |
| -5 | 0.09% | -0.12% | 0.98 | 0.96 | -0.4 | -0.33 | 0.18% | -0.11% | 2.11* | 1.52$ | 0.71 | 0.64 | 0.31% | 0.00% | 3.36*** | 3.16*** |
| -4 | 0.03% | -0.20% | 0.34 | 0.34 | -0.17 | -0.14 | 0.10% | -0.20% | 1.2 | 1.03 | 0.78 | 0.72 | 0.41% | 0.00% | 4.46*** | 4.24*** |
| -3 | 0.26% | -0.05% | 2.92** | 2.38** | 3.56*** | 2.84** | 0.35% | 0.04% | 4.15*** | 3.13*** | 4.29*** | 3.58*** | 0.60% | 0.10% | 6.54*** | 5.17*** |
| -2 | 0.54% | -0.01% | 6.07*** | 3.95*** | 5.79*** | 4.00*** | 0.54% | 0.02% | 6.40*** | 3.83*** | 6.32*** | 4.59*** | 0.87% | 0.12% | 9.58*** | 6.16*** |
| -1 | 1.23% | 0.27% | 13.68*** | 8.63*** | 14.20*** | 7.70*** | 1.33% | 0.29% | 15.65*** | 8.90*** | 14.16*** | 8.28*** | 1.49% | 0.46% | 16.30*** | 10.15*** |
| 0 | 1.68% | 0.69% | 18.75*** | 9.28*** | 20.04*** | 8.93*** | 1.65% | 0.68% | 19.51*** | 9.05*** | 20.88*** | 9.78*** | 1.94% | 0.82% | 21.32*** | 10.39*** |
| 1 | -0.48% | -0.49% | -5.33*** | -4.67*** | -2.79** | -2.19* | -0.44% | -0.42% | -5.18*** | -4.29*** | -2.38** | -1.88* | -0.24% | -0.28% | -2.61** | -2.28* |
| 2 | -0.50% | -0.44% | -5.55*** | -6.27*** | -5.47*** | -4.85*** | -0.44% | -0.39% | -5.20*** | -5.37*** | -4.65*** | -4.44*** | -0.25% | -0.28% | -2.76** | -3.01** |
| 3 | -0.22% | -0.36% | -2.45** | -2.63** | -2.21* | -1.88* | -0.12% | -0.31% | -1.45$ | -1.29$ | -1.12 | -1.09 | 0.08% | -0.12% | 0.87 | 0.91 |
| 4 | -0.29% | -0.24% | -3.22*** | -3.62*** | -1.52$ | -1.32$ | -0.25% | -0.24% | -3.01** | -3.05** | -1.48$ | -1.49$ | -0.09% | -0.18% | -0.99 | -1.11 |
| 5 | -0.22% | -0.24% | -2.46** | -2.75** | -1.47$ | -1.48$ | -0.15% | -0.23% | -1.74* | -1.34$ | -1.38$ | -1.43$ | 0.01% | 0.00% | 0.06 | 0.07 |
| 6 | -0.35% | -0.28% | -3.91*** | -4.31*** | -3.88*** | -3.97*** | -0.28% | -0.26% | -3.34*** | -3.01** | -3.34*** | -3.37*** | -0.07% | -0.07% | -0.75 | -0.81 |
| 7 | -0.46% | -0.40% | -5.18*** | -5.76*** | -4.75*** | -4.65*** | -0.42% | -0.37% | -4.91*** | -5.31*** | -4.40*** | -4.45*** | -0.17% | -0.18% | -1.87* | -2.02* |
| 8 | -0.22% | -0.27% | -2.41** | -2.62** | -2.71** | -2.74** | -0.12% | -0.23% | -1.41$ | -1.01 | -2.23* | -2.22* | -0.02% | -0.14% | -0.25 | -0.27 |
| 9 | -0.19% | -0.31% | -2.11* | -2.30* | -2.63** | -2.44** | -0.17% | -0.30% | -2.04* | -2.13* | -1.85* | -1.82* | -0.05% | -0.22% | -0.51 | -0.53 |
| 10 | -0.35% | -0.30% | -3.85*** | -4.15*** | -4.45*** | -3.37*** | -0.38% | -0.28% | -4.53*** | -3.76*** | -3.71*** | -3.36*** | -0.17% | -0.23% | -1.88* | -2.02* |

$ Significant at the 10% level, * Significant at the 5% level, ** Significant at the 1% level, *** Significant at the 0.1% level.

## Table V

## Percentage Cumulative Average Prediction Error to Stocks whose CEOs Appear on CNBC

This table reports cumulative average prediction errors (as proxies for cumulative mean abnormal returns) to CEO interviews on CNBC for the complete sample and various sub samples. The day of the CEO interview is day 0 and the three windows [-2,-1], [0], and [+1,+2] indicate the number of trading days relative to day 0. Percentage cumulative average prediction errors (PCAPE) in the three windows are calculated from the market model using both the CRSP equally weighted market index (columns 2 to 4) and the CRSP value weighted market index (columns 5-7). Columns 8 to 10 report cumulative average unadjusted raw returns. The alphas and betas for the market model are estimated during a 255-day estimation period from day – 300 to day –46. Test-statistics are corrected for serial correlations, event clustering and event-induced heteroskedasticity according to Boehmer, Musumeci, and Poulsen (1991).

| | | **Market Model, EW Index** | | | | | Market Model, VW Index | | | | | Unadjusted Raw Return | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Type of Event Study** | **N** | **[-2, -1]** | **[0]** | **[+1, +2]** | **[+1,+10]** | **Limelight** | [-2, -1] | [0] | [+1, +2] | [+1,+10] | Limelight | [-2, -1] | [0] | [+1, +2] | [+1,+10] | Limelight |
| All Interviews | 3641 | 1.77 | 1.68 | -0.97 | -3.27 | 0.98 | 1.86 | 1.65 | -0.87 | -2.78 | 0.82 | 2.36 | 1.94 | -0.49 | -0.97 | 0.24 |
| | | *8.69**** | *9.28**** | *-7.63**** | *-10.96**** | | 9.13*** | 9.05*** | -7.02*** | -7.9*** | | 11.21*** | 10.39*** | -3.76*** | -3.74*** | |
| **Subsamples by Stock Exchange** | | | | | | | | | | | | | | | | |
| Nasdaq Interviews in 1999 | 558 | 4.99 | 2.4 | -2.34 | -6.52 | 0.95 | 5.15 | 2.29 | -1.73 | -3.61 | 0.52 | 6.29 | 3.2 | -0.92 | -0.22 | 0.03 |
| | | *6.18**** | *4.35**** | *-5.23**** | *-6.79**** | | 6.33*** | 4.05*** | -3.86*** | -2.22* | | 7.70*** | 5.64*** | -2.12* | -0.3 | |
| Nasdaq Interviews in 2000 | 858 | 2.58 | 2.31 | -1.75 | -5.95 | 1.28 | 2.6 | 2.12 | -2.14 | -7.46 | 1.66 | 3.43 | 2.4 | -1.13 | -3.23 | 0.59 |
| | | *4.82**** | *4.43**** | *-5.5**** | *-7.14**** | | 4.77*** | 4.04*** | -6.9*** | -9.06*** | | 6.15*** | 4.46*** | -3.42*** | -4.59*** | |
| Nasdaq Interviews in 2001 | 502 | 0.78 | 2.2 | -1.28 | -3.02 | 1.04 | 1.31 | 2.37 | -0.76 | -1.5 | 0.42 | 1.52 | 2.76 | -0.92 | -1.57 | 0.38 |
| | | *1.78** | *4.09**** | *-3.65**** | *-4**** | | 3.07** | 4.38*** | -2.24* | -2.18* | | 3.22*** | 4.88*** | -2.43** | -1.92* | |
| NYSE Interviews in 1999 | 457 | 0.5 | 0.68 | -0.43 | -1.63 | 1.40 | 0.64 | 0.74 | -0.31 | -0.77 | 0.57 | 0.8 | 0.83 | -0.11 | -0.08 | 0.05 |
| | | *1.89** | *2.72*** | *-2.14** | *-4.16**** | | 2.52** | 2.98** | -1.56$ | -1.98* | | 3.07** | 3.33*** | -0.53 | -0.2 | |
| NYSE Interviews in 2000 | 647 | 0.77 | 1.29 | 0.35 | -0.03 | 0.01 | 0.56 | 1.28 | 0.27 | 0.06 | -0.03 | 0.74 | 1.28 | 0.28 | 0.11 | -0.06 |
| | | *2.56*** | *4.81**** | *1.54$* | *-0.07* | | 1.94* | 4.79*** | 1.24 | 0.15 | | 2.47** | 4.66*** | 1.23 | 0.27 | |
| NYSE Interviews in 2001 | 556 | 0.3 | 0.89 | 0.05 | -1.01 | 0.86 | 0.38 | 0.93 | 0.19 | -0.55 | 0.43 | 0.65 | 1.05 | 0.31 | 0.52 | -0.31 |
| | | *1.45$* | *3.99**** | *0.28* | *-2.4*** | | 1.9* | 4.14*** | 1.06 | -1.35$ | | 2.83** | 4.62*** | 1.59$ | 1.15 | |

$ Significant at the 10% level, * Significant at the 5% level, ** Significant at the 1% level, *** Significant at the 0.1% level.

| | | Market Model, EW Index | | | | | Market Model, VW Index | | | | | Unadjusted Raw Return | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Type of Event Study** | **N** | **[-2, -1]** | **[0]** | **[+1, +2]** | **[+1,+10]** | **Limelight** | [-2, -1] | [0] | [+1, +2] | [+1,+10] | Limelight | [-2, -1] | [0] | [+1, +2] | [+1,+10] | Limelight |
| **Subsamples by Week Day** | | | | | | | | | | | | | | | | |
| Interviews on Mondays | 619 | 1.71 | 1.51 | -0.77 | -3.48 | 1.12 | 2.2 | 1.33 | -0.94 | -3.9 | 1.14 | 3.02 | 1.56 | -0.87 | -1.64 | 0.37 |
| | | *2.64*** | *3.42**** | *-2.17** | *-5.19**** | | 3.36*** | 2.97** | -2.7** | -5.6*** | | 4.53*** | 3.42*** | -2.42** | -2.44** | |
| Interviews on Tuesdays | 787 | 1.96 | 1.78 | -0.58 | *-3.64* | 1.01 | 2.12 | 1.78 | -0.44 | -2.99 | 0.80 | 2.8 | 1.95 | 0.13 | -0.83 | 0.18 |
| | | *4.63**** | *4.98**** | *-2.15** | -5.57*** | | 5.00*** | 4.98*** | -1.72* | -4.88*** | | 6.44*** | 5.28*** | 0.5 | -1.38$ | |
| Interviews on Wednesday | 900 | 1.38 | 1.93 | -0.84 | *-2.32* | 0.72 | 1.23 | 1.9 | -0.54 | -2.14 | 0.71 | 1.59 | 1.97 | 0.12 | -0.07 | 0.02 |
| | | *4.09**** | *5.05**** | *-3.3**** | *-4.26**** | | 3.63*** | 4.95*** | -2.18* | -4.29*** | | 4.53*** | 4.99*** | 0.48 | -0.14 | |
| Interviews on Thursday | 784 | 1.8 | 1.63 | -1.47 | -3.28 | 0.99 | 1.89 | 1.42 | -1.32 | -1.88 | 0.59 | 2.09 | 2.19 | -0.97 | -0.75 | 0.18 |
| | | *4.04**** | *4.42**** | *5.49**** | *-4.26**** | | 4.22*** | 3.78*** | -5.01*** | -1.56$ | | 4.57*** | 5.69*** | -3.62*** | -1.44$ | |
| Interviews on Friday | 551 | 2.13 | 1.38 | -1.27 | -4.03 | 1.19 | 2.12 | 1.73 | -1.33 | -3.53 | 0.95 | 2.61 | 1.94 | -1.25 | -2.21 | 0.51 |
| | | *4.76**** | *2.73*** | *-4.47**** | *-5.98**** | | 4.74*** | 3.41*** | -4.67*** | -5.64*** | | 5.45*** | 3.77*** | -4.21*** | -3.41*** | |
| **Subsample by Firm Size** | | | | | | | | | | | | | | | | |
| LargeCap Interviews | 2073 | 0.5 | 0.95 | -0.54 | -2.86 | 2.00 | 0.61 | 0.96 | -0.49 | -2.46 | 1.59 | 1.19 | 1.24 | 0 | -0.12 | 0.05 |
| | | *3.02*** | *5.39**** | *-3.75**** | *-8.00**** | | 3.73*** | 5.45*** | -3.61*** | -7.47*** | | 6.71*** | 6.72*** | -0.04 | -0.42 | |
| MidCap Interviews | 1177 | 3.03 | 2.58 | -1.12 | -3.81 | 0.72 | 3.08 | 2.49 | -0.92 | -2.92 | 0.55 | 3.63 | 2.84 | -0.61 | -1.85 | 0.30 |
| | | *7.01**** | *7.69**** | *-4.47**** | *-6.72**** | | 7.03*** | 7.27*** | -3.63*** | -3.44*** | | 8.07*** | 8.16*** | -2.41** | 3.62*** | |
| SmallCap Interviews | 387 | 4.67 | 2.81 | -2.88 | -4.07 | 0.58 | 4.87 | 2.78 | -2.86 | -4.13 | 0.58 | 4.75 | 2.9 | -2.67 | -2.7 | 0.38 |
| | | *4.47**** | *2.89*** | *-5.92**** | *-3.86**** | | 4.63*** | 2.84** | -5.91*** | -3.93*** | | 4.53*** | 2.95** | -5.54*** | -2.73** | |
| **Earnings-related** | 898 | 1.76 | 1.23 | -0.8 | -2.39 | 0.82 | 1.89 | 1.22 | -0.58 | -1.25 | 0.41 | 2.38 | 1.49 | -0.17 | 0.33 | -0.09 |
| **Interviews** | | *4.17**** | *3.73**** | *-3.28**** | *-4.21**** | | 4.49*** | 3.70*** | -2.43** | -2.5** | | 5.39*** | 4.31*** | -0.7 | 0.7 | |
| **M & A related Interviews** | 104 | 4.35 | 5.12 | -2.79 | -6.38 | 0.74 | 3.93 | 5.18 | -2.73 | -6.98 | 0.84 | 4.73 | 5.6 | -2.61 | -4.54 | 0.48 |
| | | *3.49**** | *2.37*** | *-2.63*** | *-2.86*** | | 3.15*** | 2.41** | -2.66** | -3.6*** | | 3.74*** | 2.54** | -2.43** | -2.29* | |

$ Significant at the 10% level, * Significant at the 5% level, ** Significant at the 1% level, *** Significant at the 0.1% level.

**Table VI**

**Percentage Cumulative Average and Median Prediction Error to Stocks whose CEOs Appear on CNBC**

This table reports cumulative average and median prediction errors (as proxies for cumulative mean abnormal returns) to CEO interviews on CNBC for the complete sample. Pre-Event indicates the two days preceding the interview [-2,-1], Event indicates the event data [0], and Post-Event indications the ten days following the event [+1,+10]. The day of the CEO interview is day 0 and the six windows [-2,-1], [0], [+1,+2], [+1,+3], [+1,+5], and [+1,+10] indicate the number of trading days relative to day 0. Percentage cumulative average prediction errors (PCAPE) in the six windows are calculated from the market model using the CRSP value weighted market index. The alphas and betas for the market model are estimated during a 255-day estimation period from day – 300 to day –46.

**Panel A: Mean Abnormal Returns**

| Pre-Event | Event | Post-Event | N | [-2,-1] | [0] | [+1,+2] | [+1,+3] | [+1,+5] | [+1,+10] |
|---|---|---|---|---|---|---|---|---|---|
| | positive | positive | 461 | 6.040% | 6.440% | 1.853% | 2.861% | 3.925% | 8.071% |
| positive | N = 1093 | negative | 632 | 8.375% | 7.997% | -3.021% | -4.137% | -6.672% | -12.337% |
| | negative | positive | 351 | 7.515% | -4.856% | 1.997% | 3.690% | 6.721% | 12.592% |
| N = 1998 | N = 905 | negative | 554 | 7.547% | -5.364% | -3.343% | -4.386% | -6.052% | -10.833% |
| | positive | positive | 436 | -4.263% | 6.032% | 2.210% | 3.576% | 5.614% | 9.092% |
| negative | N = 943 | negative | 507 | -5.558% | 7.639% | -2.936% | -3.900% | -6.189% | -12.158% |
| | negative | positive | 298 | -4.312% | -5.067% | 2.524% | 3.441% | 5.048% | 9.853% |
| N = 1641 | N = 698 | negative | 400 | -5.341% | -5.773% | -3.060% | -4.564% | -6.316% | -12.944% |

**Panel B: Median Abnormal Returns**

| Pre-Event | Event | Post-Event | N | [-2,-1] | [0] | [+1,+2] | [+1,+3] | [+1,+5] | [+1,+10] |
|---|---|---|---|---|---|---|---|---|---|
| | positive | positive | 461 | 3.503% | 3.775% | 1.240% | 2.087% | 2.814% | 5.489% |
| positive | N = 1093 | negative | 632 | 3.920% | 4.460% | -2.337% | -2.749% | -4.674% | -8.724% |
| | negative | positive | 351 | 4.070% | -2.991% | 1.227% | 1.769% | 3.213% | 6.468% |
| N = 1998 | N = 905 | negative | 554 | 4.601% | -3.022% | -2.483% | -2.990% | -4.256% | -7.285% |
| | positive | positive | 436 | -3.233% | 3.471% | 1.489% | 2.266% | 4.132% | 6.855% |
| negative | N = 943 | negative | 507 | -3.414% | 4.301% | -2.304% | -3.035% | -4.395% | -8.061% |
| | negative | positive | 298 | -2.958% | -2.376% | 1.204% | 2.740% | 3.942% | 6.707% |
| N = 1641 | N = 698 | negative | 400 | -3.509% | -3.604% | -2.149% | -2.869% | -4.234% | -8.037% |

**Table VII**
**Asymmetric Information and Abnormal Returns**

This table presents results from cross-sectional regressions of (cumulative) abnormal returns on variables commonly assumed to be associated with the degree of asymmetric information between companies and investors. Columns 2 and 3 show results from a regression on the cumulative abnormal returns during the two days preceding the interview. Columns 4 and 5 show results from a regression on the abnormal return of the interview date. Columns 6 and 7 show results from a regression on the cumulative abnormal returns during the two days following the interview. LN_AGE is the natural logarithm of 1 plus the number of years the firm is listed on the CRSP files. LN_SIZE is the natural logarithm of the market capitalization 6 trading days prior to the interview. TURNOVER is the average turnover over 100 trading days 6 trading days prior to the interview. RESEARCH and ADVERTISING are research and advertising expenditures scaled by sales, respectively. BTM is the book-to-market ratio. FORBES is a dummy variable equal to 1 if the firm is part of the Forbes 500 list. EARNINGS and MERGER are dummy variables equal to one if the interview is earnings- or merger&acquisition-related, respectively. NASDAQ is a dummy variable equal to one if the firm is trading on Nasdaq. NEGBTM is a dummy variable equal to one if the firm has negative book value. ADR is a dummy variable equal to one if a foreign firm's American Depository Receipts or American Depository Shares are traded on an American exchange. The regression controls for the six industry groups that had the largest number of interviews during the sample period. Because the White-Heteroskedasticity Test rejects the null hypothesis of homoskedasticity, t-statistics are computed with heteroskedasticity consistent standard errors.

| | **CAR(-2,-1)** | | **AR(0)** | | **CAR(+1,+2)** | |
|---|---|---|---|---|---|---|
| **Dependent Variable** | **Coefficient** | **t-Statistic** | **Coefficient** | **t-Statistic** | **Coefficient** | **t-Statistic** |
| Constant | 0.213136 | 6.434381 | 0.160068 | 6.24738 | -0.042449 | -3.248134 |
| LN_AGE | 0.0008 | 0.309667 | 0.002082 | 0.944098 | 0.002962 | 1.880259 |
| LN_SIZE | -0.014357 | -5.833693 | -0.010613 | -5.959246 | 0.002259 | 2.478212 |
| TURNOVER | 0.000183 | 1.040033 | -5.30E-05 | -0.471657 | -0.000177 | -2.203803 |
| RESEARCH | 8.57E-06 | 0.029263 | -0.000151 | -0.979739 | -0.000176 | -1.589842 |
| ADVERTISE | -0.001617 | -1.654079 | 0.003466 | 1.143181 | 6.82E-05 | 0.074711 |
| BTM | -5.92E-05 | -1.319971 | 1.92E-07 | 0.007355 | 2.50E-05 | 1.009399 |
| FORBES | 0.021154 | 3.895567 | 0.013444 | 2.698535 | -0.000862 | -0.268514 |
| EARNINGS | 0.00192 | 0.387356 | -0.003534 | -0.912881 | 0.005582 | 1.957865 |
| MERGER | 0.015535 | 1.221029 | 0.036797 | 1.749563 | -0.009796 | -0.922978 |
| NASDAQ | 0.010802 | 2.562917 | 0.003425 | 0.808232 | -0.006614 | -2.152329 |
| NEGBTM | 0.014562 | 1.331779 | -0.005332 | -0.528667 | -0.006182 | -0.738954 |
| ADR | -0.015934 | -1.782793 | -0.004134 | -0.376707 | 0.017167 | 2.326386 |
| SIC283 | -0.003662 | -0.401648 | 0.014334 | 1.1219 | -0.003778 | -0.639761 |
| SIC357 | 0.000874 | 0.124707 | 0.011819 | 1.5258 | 0.000154 | 0.026827 |
| SIC366 | 0.008658 | 0.784356 | 0.012943 | 1.432302 | -0.015354 | -2.299667 |
| SIC367 | -0.008051 | -0.705115 | 0.015248 | 1.74188 | 0.008839 | 1.436852 |
| SIC481 | 0.041769 | 1.639284 | 0.001975 | 0.211774 | -0.003553 | -0.614223 |
| SIC737 | 0.009325 | 1.430359 | 0.017114 | 2.758765 | -0.002022 | -0.445585 |
| **Adjusted R-squared** | 0.040842 | | 0.025549 | | 0.020497 | |
| **White Heteroskedasticity Test:** | | | | | | |
| F-statistic | 4.759897 | | 2.796291 | | 1.376381 | |
| Obs*R-squared | 649.6566 | | 412.2023 | | 215.3422 | |