Stock Price Reactions to *The Wall Street Journal*'s Securities Recommendations

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Abstract

This paper examines the impact of the "Heard-on-the-Street" (HOTS) column of *The Wall Street Journal* on common stock prices. The results of the study indicate that the HOTS column appears to have an impact on stock prices on the publication day; however, we also find a smaller, but statistically significant, impact on two days preceding the publication. The significant abnormal returns on these days are associated with higher trading volume. The reaction of stock prices is symmetric with respect to the buy and sell recommendations, and the impact of single-company recommendations is greater than the impact of the multi-company recommendations.

I. Introduction

The efficient market hypothesis assumes that security prices fully and instantaneously reflect all available information. Considerable evidence has been accumulated during the past decades in support of the hypothesis. The acceptance of the hypothesis has raised questions about the economic value of professional investment advice. If the market is efficient, then the management of portfolios based on these recommendations should not consistently outperform the market. Why, then, are investors still willing to pay for this information? Examples of the advice include low-cost financial publications, brokerage house recommendations, and subscription financial newsletters that sell for hundreds of dollars.

Recent studies argue that investment advisors can provide information to investors at a lower cost than the investors' cost of information production. Millon and Thakor (1985) develop a model that explains the existence of investment advisory agencies. They argue that if the information of investment advisory agencies permits security analysts to share information about *common* uncertainties that affect the value of firms as a whole (such as the return on the market portfolio), then investment advisory agencies can produce information more cheaply than individual investors. This model is consistent with the study of

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Stickel (1986), who argues that even if investment advice is entirely based on publicly available information, it may affect prices if investors believe their individual marginal cost of gathering and processing information is greater than their individual expected marginal benefits.

Empirical studies provide evidence that financial markets respond to the information provided by investment advisory agencies. For example, Grier and Katz (1976), Griffin and Sanvicente (1982), Holthausen and Leftwich (1986), Ingram, Brooks, and Copeland (1983), and Stickel (1986) find that the announcement of credit rating changes by rating agencies has an impact on bond or stock prices. Black (1973), Copeland and Mayers (1982), Holloway (1981), Huberman and Kandel (1987), Peterson (1987), and Stickel (1985) report that the rankings of the Value Line Investment Survey contain predictive information about stock returns. Bjerring, Lakonishok, and Vermaelen (1983), Givoly and Lakonishok (1979), and Groth, Lewellen, Schlarbaum, and Lease (1979) conclude that the brokerage house securities recommendations generate positive abnormal returns. Lloyd-Davies and Canes (1978) found that low-cost recommendations by analysts reported in the "Heard on the Street" (HOTS) column in *The Wall Street Journal* (*WSJ*) generate statistically significant abnormal returns. These studies suggest that investment advice has economic value.

Our objective is to reexamine the question of whether security recommendations have an impact on common stock prices by examining the *WSJ*'s (HOTS) column. As one of the most widely read features of the *WSJ*, the HOTS column is published daily and, according to the *WSJ*, is designed to "inform readers of market developments affecting the price of individual stocks or groups of stocks. The emphasis is on timeliness and on stocks with high interest for investors ..." The column is meant to "assure the widest possible dissemination of information important to investors." (*WSJ*, April 2, 1984, p. 18:6).[1]

The results of this study contribute additional evidence to the recent literature that financial markets respond to the information provided by investment advisory agencies. More specifically, stock prices react to recommendations in the HOTS column of the *WSJ*. This study extends the Lloyd-Davies and Canes study by using a more recent sample and analyzing the single-company versus multi-company recommendations. We also extend their work by analyzing the trading volumes around the publication day of the HOTS column.

Consistent with the Lloyd-Davies and Canes study, we find significant abnormal returns for both buy and sell recommendations on the publication day; however, we find that investors were responding earlier to the information in the column in the more recent period. The single-company recommendations had significantly greater impact on stock prices than multi-company recommendations. We also detected significantly higher trading volume around the publica-

[1] The study was, in part, motivated by the insider trading scandal related to a HOTS column author. On March 29, 1984, it was revealed that R. Foster Winans, an author of the HOTS column, leaked advance information about the timing and the content in the forthcoming HOTS column to four stock brokers and then shared the illegal gains with the brokers. The SEC subsequently filed criminal charges against them. They were eventually convicted of fraud and conspiracy for taking part in a scheme of illegally profiting from market-sensitive information. That Winans and his co-conspirators made illegal profits based on the advance information in the column suggests that the column has an impact on stock prices.

tion day. The remainder of the paper is organized as follows. Section II discusses the data and methodology, Section III presents the empirical results, and Section IV concludes the paper.

II. Data and Methodology

A. Data

The analysis is based upon data covering the period September 1, 1982, through September 30, 1985.[2] The daily HOTS column during the sample period was classified into a buy or a sell recommendation according to whether the overall content of the column was favorable or unfavorable. If on a given day the column was ambiguous or the security analysts quoted were not unanimous in their opinions, then the column was excluded from analysis. This procedure resulted in a total of 1,134 company buy and sell recommendations. The final sample was restricted to firms listed on the NYSE and AMEX that have stock return data on the Center for Research in Security Prices (CRSP) tape. The final sample consists of 852 company recommendations—comprising 566 buy recommendations and 286 sell recommendations. Each recommendation was further classified according to whether it pertained to the only stock featured in the column (single-company HOTS) or was one of several stocks featured (multi-company HOTS). Generally, there were three to four companies mentioned in a multi-company analysis in the column. The 852 recommendations came from 534 columns.

B. Methodology

The impact of the HOTS column on stock prices is examined by employing the event study methodology. Thus, the abnormal return for security j on event day t, AR_{jt}, is calculated as

$$(1) \qquad AR_{jt} = R_{jt} - \left(\hat{\alpha}_j + \hat{\beta}_j R_{mt}\right),$$

where R_{jt} is the return on security j for day t, R_{mt} is the return on the CRSP equally weighted market index for day t, and $\hat{\alpha}_j$ and $\hat{\beta}_j$ are the ordinary least-squares estimates for firm j's market model parameters.[3] The market model was estimated over 250 days beginnng $t = -270$ through $t = -21$, where $t = 0$ is the publication day of HOTS.

[2] The columns two weeks before and after the revealing of the scandal mentioned in footnote 1 and the companies that were included in Winans' indictment as insider trades were excluded.

[3] The use of OLS estimation procedure with daily returns data may cause bias in the market parameters α_j and β_j (see Scholes and Williams (1977)). We, therefore, replicated the market model estimation using a procedure suggested by Scholes and Williams (1977) that attempts to eliminate this bias. The adjustment, however, did not change the final results significantly. The results based on the Scholes and Williams procedure for the total sample of the study are available from the authors upon request.

For a sample of N securities, the average daily abnormal return, $\overline{\mathrm{AR}}_t$, for day t is calculated as

$$\overline{\mathrm{AR}}_t = \frac{1}{N}\sum_{j=1}^{N} \mathrm{AR}_{jt} \qquad t = -10,\ldots,+10\ , \tag{2}$$

and the average cumulative daily abnormal return from day $T1$ to day $T2$, $\overline{\mathrm{CAR}}_{T1,T2}$ is calculated as

$$\overline{\mathrm{CAR}}_{T1,T2} = \sum_{t=T1}^{T2} \overline{\mathrm{AR}}_t\ . \tag{3}$$

To test the statistical significance of $\overline{\mathrm{AR}}_t$ and $\overline{\mathrm{CAR}}_{T1,T2}$, we calculated the standardized abnormal return for security j on day t, SAR_{jt}, and the standardized cumulative abnormal return over the interval $T1$ to $T2$, SCAR_j, where

$$\mathrm{SAR}_{jt} = \mathrm{AR}_{jt}/S_j \tag{4}$$

and

$$\mathrm{SCAR}_j = \sum_{t=T1}^{T2} \mathrm{SAR}_{jt}/(T2-T1+1)^{1/2}. \tag{5}$$

In Equation (4), S_j is the (time series) residual standard deviation for security j estimated from the market model regression.[4] The average standardized abnormal return, $\overline{\mathrm{SAR}}_t$, and the average standardized cumulative abnormal return, $\overline{\mathrm{SCAR}}$, are given, respectively, by

$$\overline{\mathrm{SAR}}_t = \frac{1}{N}\sum_{j=1}^{N} \mathrm{SAR}_{jt} \tag{6}$$

and

$$\overline{\mathrm{SCAR}} = \frac{1}{N}\sum_{j=1}^{N} \mathrm{SCAR}_j\ . \tag{7}$$

Assume that the abnormal returns, AR_{jt}, are independent and identically distributed with finite variance, then the test statistics for a sample of N securities on day t, $T(t,t)$ and the test statistics over the period $T1$ to $T2$, $T(T1,T2)$, will be distributed Student-t in the absence of abnormal performance

$$T\,(t,t) = \overline{\mathrm{SAR}}_t \cdot (N)^{1/2} \tag{8}$$

and

$$T\left(T_1,T_2\right) = \overline{\mathrm{SCAR}} \cdot (N)^{1/2}. \tag{9}$$

[4] Theoretically, the estimated residual variance from the market model should be adjusted to allow for prediction of returns outside of the estimation period. Following Brown and Warner, (1980), (1985), however, this adjustment is ignored as it does not alter the results significantly.

III. Empirical Results

Table 1 presents the average daily abnormal returns ($\overline{AR}_t$), average cumulative abnormal returns ($\overline{CAR}$), and t-statistics for the combined sample and the buy and sell recommendations. Figure 1 presents the average daily abnormal returns for the combined sample. The abnormal returns for the combined sample have been aggregated by multiplying the AR_{jt} of the sell recommendation by -1, and then averaging them with the buy recommendations.

The results indicate that the publication of the HOTS column has a significant impact on stock prices. For example, the average publication day abnormal return is 1.69 percent (t-value = 22.28). The abnormal returns, though relatively smaller in magnitude, also are significant at the 0.01 level on days $t = -2$ and $t = -1$. The cumulative abnormal return for the three days (-2 to 0) is 3.09 percent. The significant abnormal returns immediately preceding the publication of the column may, in part, be due to the nature of the column itself. The column generally focuses on stocks that have been recently in the news. An example would be the effect of OPEC decisions on oil stocks. The articles in the column are developed from many sources as the name of the column implies. According to a former author of the column, Winans ((1986), p. 10):

> The column tried to follow the action in the market as closely and as quickly as possible. If Apple started sinking fast, we tried to ferret out why people were trashing the stock and say so in the column.

The abnormal returns on day $t = -2$ and $t = -1$ may also, however, in part, be due to the advance trading based upon speculation or knowledge about the contents of the forthcoming HOTS column. This may be true since the column authors frequently solicit market information from security analysts about the stocks to be featured in the column. According to the *WSJ* (April 2, 1984, p. 18):

> Reporters for the Heard column, who sometimes include Journal industry specialists as well as certain full-time columnists, seek to detect, verify and publish such information. This can be controversial because it involves dealing in rumors and self-serving tips from market participants. In addition, the mere process of reporting requires questioning and discussion that can generate its own rumors about what the Journal plans to publish.

This process of collecting information and preparing the column could tip the analysts about the nature of forthcoming columns. Although the *WSJ* maintains that it takes several precautionary measures to reduce the risk of advance trading based on speculation, discussion with *WSJ* staff members supported the position that the preparation time for a column was one to two days, which corresponds to the time interval in which the adjustments of stock prices were found in the study.[5] Again, according to Winans ((1986), p. 12):

> I knew that sources sometimes speculated on what we were going to write about the next day. I also knew that some of them would have done backflips to know in ad-

[5] The precautionary measures, according to the *WSJ*, include: "Heard reporters are instructed to be discreet in their questioning and to avoid hinting at the content or publication date of a possible column," and "[t]he column itself is written and processed late in the Journal's publication day to reduce the possibility of early exposure." (The *WSJ*, April 2, 1984, p. 18)

TABLE 1

Average Daily Abnormal Returns, *t*-Statistics, and Cumulative Abnormal Returns for the Combined Group, and Buy and Sell Recommendations surrounding the Publication Day of the "Heard on the Street" Column in *The Wall Street Journal* from September 1, 1982, to September 30, 1985

Event Day	Buy and Sell Combined (N = 852)				Buy Recommendations (N = 566)				Sell Recommendations (N = 286)			
	$\overline{AR}$(%)	*t*-Value	$\overline{CAR}$(%)	*t*-Value	$\overline{AR}$(%)	*t*-Value	$\overline{CAR}$(%)	*t*-Value	$\overline{AR}$(%)	*t*-Value	$\overline{CAR}$(%)	*t*-Value
−10	0.052	0.99	0.052	0.99	0.017	0.04	0.017	0.04	−0.121	−1.77	−0.121	−1.77
−9	0.112	1.65	0.164	1.87	0.197	2.13	0.214	1.54	0.054	0.16	−0.067	−1.14
−8	0.026	0.43	0.190	1.77	0.104	1.26	0.318	1.99	0.129	1.04	0.062	−0.33
−7	0.244	2.68	0.434	2.88	0.238	1.91	0.556	2.67	−0.256	−1.94	−0.194	−1.26
−6	0.019	0.64	0.453	2.86	0.006	0.47	0.562	2.60	−0.044	−0.44	−0.238	−1.33
−5	0.007	0.85	0.460	2.61	−0.041	−0.36	0.521	2.23	−0.102	−0.97	−0.340	−1.61
−4	0.038	0.76	0.498	3.03	0.110	1.58	0.631	2.66	0.104	0.91	−0.236	−1.14
−3	0.097	1.42	0.595	3.33	0.160	1.84	0.791	3.14	0.028	0.15	−0.208	−1.02
−2	0.658	8.84	1.253	6.09	0.679	7.38	1.470	5.42	−0.615	−4.87	−0.823	−2.58
−1	0.739	11.46	1.992	9.40	0.594	8.02	2.064	7.68	−1.027	−8.49	−1.850	−5.14
0	1.693	22.28	3.685	15.68	1.543	16.37	3.607	12.26	−1.989	−15.46	−3.839	−9.56
1	0.209	2.68	3.894	15.78	0.244	2.58	3.851	12.48	−0.140	−1.00	−3.979	−9.44
2	0.053	1.16	3.947	15.49	−0.014	−0.38	3.837	11.88	−0.186	−1.47	−4.615	−9.48
3	−0.084	−0.25	3.863	14.86	−0.100	−0.19	3.737	11.40	0.052	0.16	−4.113	−9.09
4	−0.006	−0.30	3.857	14.28	−0.032	−0.68	3.705	10.84	−0.047	−0.44	−4.160	−8.89
5	−0.070	−0.46	3.787	13.71	−0.039	−0.29	3.666	10.42	0.131	1.19	−4.029	−8.31
6	−0.073	−1.06	3.714	13.04	−0.076	−1.17	3.590	9.83	0.065	0.19	−3.964	−8.02
7	−0.274	−4.11	3.440	11.71	−0.222	−2.57	3.368	8.95	0.375	3.48	−3.589	−6.97
8	−0.055	−0.16	3.385	11.36	−0.229	−1.73	3.319	8.31	−0.288	−2.71	−3.877	−7.41
9	0.028	0.54	3.413	11.19	−0.149	−1.09	2.990	7.86	−0.380	−2.46	−4.259	−7.77
10	−0.039	−0.40	3.374	10.83	−0.080	−0.53	2.910	7.55	−0.040	−0.06	−4.297	−7.60

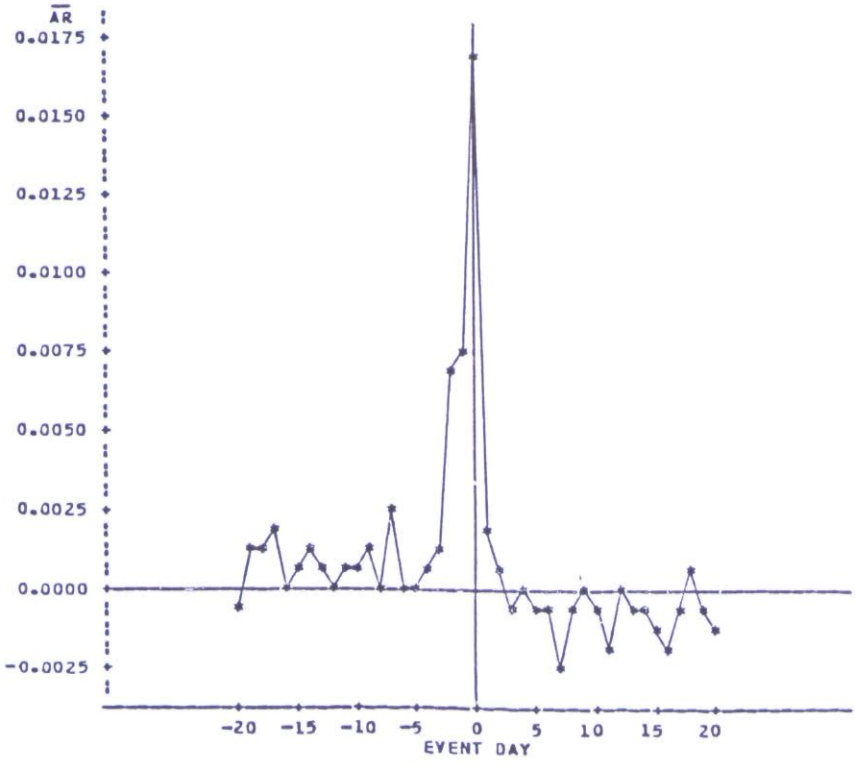

FIGURE 1

Average Daily Abnormal Returns ($\overline{AR}$) for Stocks surrounding the Publication Day (day 0) of the "Heard on the Street" Column in *The Wall Street Journal* from September 1, 1982, to September 30, 1985

vance . . . but the *Journal* wanted to avoid anyone knowing in advance what would be in the paper. At times, this was impossible.

Many recent studies have found that increased trading volume was associated with the release of information. For example, Karpoff (1986) developed a theoretical model to provide a rationale for the use of trading volume in event studies that attempt to identify the information content of an event. Bamber (1986), Beaver (1968), Morse (1980), (1981), Pincus (1983), and Woodruff and Senchack (1988) reported that trading volume increased significantly around firms' annual earnings announcements. Jarrell and Poulsen (1988) found that trading volumes of targets of tender offers increased significantly during the weeks preceding the announcement of the bid. Asquith and Krasker (1985), and Richardson, Sefcik, and Thompson (1986) concluded that there was a significant increase in trading volume surrounding the announcement of change in dividend policy. Lakonishok and Vermaelen (1986) examined trading volume around ex-dividend days and reported that trading volume increased significantly around ex-dividend day.

To further investigate the response of the market to the HOTS column on days $t = -2$ and $t = -1$, the trading volume for days $t = -5$ to $t = +3$ for a subsample of companies was analyzed. Initially, five recommendations per month were selected, giving a total of 180 recommendations. Eleven of these

recommendations were excluded because they were companies included in Winans' indictment as insider trades. The resulting subsample of 169 recommendations had approximately the same proportions of buy and sell recommendations as the total sample. The trading volume data were obtained from daily *WSJ* issues. Day $t = 0$ was used as the base trading volume for each stock, and each day's volume was expressed as a percentage of day $t = 0$ volume. The results are presented in Table 2. The relative volumes on days $t = -5, -4, -3, 1, 2$, and 3 are significantly less than $t = 0$ trading volume; however, the volumes on days $t = -2, -1$, and 0 are not significantly different from each other. These results indicate that the higher returns on days $t = -2, -1$, and 0 also are associated with relatively higher volume. The results are consistent with previous studies that investigate the trading volume reactions to the release of information.

TABLE 2

The Average Relative Trading Volume,[1] the Standard Deviation,and *t*-Statistics[2] for a Subsample of 169 Companies Recommended in the "Heard on the Street" Column in *The Wall Street Journal* from September 1, 1982, to September 30, 1985

Event Day	Average Relative Volume	Standard Deviation	*t*-Statistic
−5	0.82	0.944	−2.55*
−4	0.76	0.909	−3.38**
−3	0.84	0.988	−2.08*
−2	0.98	0.897	−0.22
−1	1.06	0.721	1.10
0	1.00	0.000	--
+1	0.83	0.750	−2.94**
+2	0.76	0.583	−5.34**
+3	0.82	0.729	−3.21**

[1] Each stock's daily volume is divided by the stock's volume on day $t = 0$. The average relative volume is the mean for all stocks on the respective date.

[2] The *t*-statistic is for a test for a difference between the day's average relative volume and day $t = 0$'s volume.

* Significant at the 0.05 level of confidence.
** Significant at the 0.01 level of confidence.

The average abnormal returns for buy and sell recommendations presented in Table 1 indicate that the difference in abnormal returns between buy and sell recommendations on day $t = 0$ is not statistically significant.[6] In comparing these results with the Lloyd-Davies and Canes study, which covers 1970 and

[6] The *t*-statistic for testing the null hypothesis that the publication day average abnormal returns for buy and sell recommendations are equal is calculated as follows (Daniel and Terrell (1983), p. 217),

$$t = \frac{\overline{AR}_b - \overline{AR}_s}{\left[\frac{S_b^2(N_b - 1) + S_s^2(N_s - 1)}{N_b + N_s - 2}\right]^{1/2} \cdot \left[\frac{1}{N_b} + \frac{1}{N_s}\right]^{1/2}},$$

where $\overline{AR}_b$ and $\overline{AR}_S$ are the publication day average abnormal returns for buy and sell recommendations, respectively, N_b and N_s are number of buy and sell recommendations, and S_B^2 and S_s^2 are the variance of the publication day AR_j's for buy and sell recommendations.

1971, both studies found a significant impact on the publication day for buy and sell recommendations. For the buy recommendations, Lloyd-Davies and Canes also found significant abnormal returns on days $t = -1, +1$, and $+2$, while this study finds significant abnormal returns on days $t = -2, -1$, and $+1$. For the sell recommendations, Lloyd-Davies and Canes also found significant returns on day $t = +1$, while this study finds significant returns on days $t = -2$ and -1. These results suggest that investors were responding earlier to the information in the column in the more recent period. Using a difference of means test between the Lloyd-Davies and Canes results and the results presented here, the abnormal returns on days $t = -2$ and -1 for both the buy and sell recommendations were significantly higher in this study than in the Lloyd-Davies and Canes article.

Lloyd-Davies and Canes found a tendency for the cumulative average residual to adjust in the opposite direction during days $t = +3$ to $t = +20$. This study also finds that tendency, but the tendency was limited to the buy, multi-company recommendations.

We also examined single-company versus multi-company columns to determine if the impact of single-company columns is greater than that of multi-company columns. Single-company HOTS represents cases in which a single stock was featured in the column and it generally focuses on firm-specific information, whereas multi-company HOTS refers to cases in which several stocks were mentioned in one column, and it often relates to information about industry developments. Due to the differences among firms, the magnitude of the impact of industry-related information may not be the same for all the companies in the same industry. For example, an event may have a very strong positive impact on one company and a weak positive impact on another company. The average impact may be decreased due to the different impacts. If this line of reasoning were correct, then one would expect the average impact of the single-company columns to be greater than the impact of the multi-company columns.

The results of a separate analysis on single-company and multi-company HOTS are presented in Table 3. As shown in Table 3, the publication day abnormal return of single-company HOTS is 2.35 percent (t-value = 14.63), compared to 1.47 percent (t-value = 17.25) for multi-company HOTS, indicating that single-company recommendations, on average, have 0.88 percentage points higher abnormal return than multi-company recommendations. This 0.88 difference is significant at the 0.01 level of confidence (t-value = 3.35). The abnormal returns over the three-day period from $t = -2$ to $t = 0$ are 5.11 percent and 2.39 percent for single- and multi-company, respectively. Also, this difference is statistically significant at the 0.01 level.

IV. Conclusion

The fundamental conclusion to be drawn from this paper is that the publication of the HOTS column appears to have an impact on stock prices. This conclusion is consistent with a previous study by Lloyd-Davies and Canes (1978). The impact of buy and sell recommendations seems to be symmetric. The impact of single-company columns, however, is significantly greater than that of multi-company columns.

TABLE 3

Average Daily Abnormal Returns, Cumulative Average Abnormal Returns, and *t*-Statistics for Single- and Multi-Company Recommendations surrounding the Publication Day of the "Heard on the Street" Column in *The Wall Street Journal* from September 1, 1982, to September 30, 1985

Event Day	Single-Company (N = 219)				Multi-Company (N = 633)			
	$\overline{AR}$(%)	*t*-Value	$\overline{CAR}$(%)	*t*-Value	$\overline{AR}$(%)	*t*-Value	$\overline{CAR}$(%)	*t*-Value
−10	0.011	0.49	0.011	0.49	0.066	0.86	0.066	0.86
−9	0.205	2.29	0.216	1.97	0.080	0.56	0.146	1.01
−8	0.004	0.18	0.220	1.71	0.033	0.39	0.179	1.05
−7	0.293	1.42	0.513	2.19	0.227	2.28	0.406	2.05
−6	0.083	0.51	0.596	2.19	−0.003	−0.44	0.403	2.03
−5	0.247	2.22	0.843	2.90	−0.076	−0.32	0.327	1.72
−4	0.041	1.08	0.884	3.10	0.037	0.25	0.364	1.69
−3	0.348	2.51	1.232	3.78	0.010	0.17	0.374	1.64
−2	1.240	9.01	2.472	6.57	0.457	4.96	0.831	3.20
−1	1.524	12.47	3.996	10.18	0.468	5.95	1.299	4.92
0	2.349	14.63	6.345	14.12	1.466	17.25	2.765	9.89
1	0.110	0.11	6.455	13.55	0.243	3.05	3.008	10.35
2	−0.017	−0.32	6.438	12.93	0.078	1.16	3.086	10.26
3	−0.197	−0.97	6.241	12.20	−0.045	0.28	3.041	9.97
4	0.088	0.09	6.329	11.81	−0.038	−0.40	3.003	9.53
5	0.029	0.55	6.358	11.57	−0.104	−0.85	2.899	9.01
6	−0.012	−0.41	6.346	11.13	−0.094	−1.47	2.805	8.38
7	−0.589	−4.06	5.757	9.86	−0.165	−2.39	2.640	7.59
8	−0.151	−1.10	5.606	9.34	−0.022	−0.84	2.618	7.58
9	−0.007	−0.43	5.599	9.01	0.041	0.37	2.659	7.47
10	−0.008	−0.08	5.591	8.77	−0.051	−0.42	2.608	7.19

The results in the paper document significant abnormal returns on the publication day, the day before the publication, and two days before publication. The cumulative abnormal return over the three-day period from two days before publication to the publication day (-2 to 0) is 3.09 percent. The cumulative abnormal returns over the same three-day period for single-company and multi-company recommendations are 5.11 percent and 2.39 percent, respectively.

The significant abnormal returns for the three-day period from two days before publication to the day of publication (-2 to 0) also are associated with relatively higher trading volume. Our results indicated that the average relative daily trading volumes on days (-2, -1, 0) are significantly greater than those on days (-5, -4, -3), and days ($+1$, $+2$, $+3$). Many recent studies have found that the release of information not only has an impact on stock prices, but also has an impact on trading volumes. The results in this paper are consistent with previous studies. This increase in trading volume may be due to two possibilities. The first possibility is that the column usually focuses on stocks that have been recently in the news; however, we cannot exclude the second possibility—that is, the advance tradings by insiders between the time the column authors solicit information and the column publication.

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