

Analyst Tipping: Additional Evidence

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ABSTRACT: We investigate whether the price run-up in a company's stock prior to the initiation of analyst coverage with a favorable recommendation is related to the occurrence of an analyst-hosted invitation-only investor conference attended by the company. We document an average abnormal return of 2.41% (0.91%) during the twenty days prior to analyst initiations when conferences are hosted by initiating (non-initiating) analysts and 0.54% in the absence of these conferences. The abnormal returns are concentrated on conference days at 0.58% (0.17%) when conferences are hosted by initiating (non-initiating) analysts. Further, the price run-up and conference day returns predict the level of initiating recommendations. We conclude that investor conferences are significant venues where select investors obtain initiation-related information from initiating analysts or participating companies that other investors obtain when the initiations are publicly announced. Our conclusions are consistent with anecdotal evidence that securities firms communicate their research increasingly with the most profitable clients.

Keywords: *information leakage; equity analysts; investor conferences.*

JEL classification: *G11; G18; G24.*

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I. INTRODUCTION

Sell-side equity analyst research has been shown to influence equity prices and trading volume at the time of its wide distribution, with wide distribution typically defined as third-party research distribution by First Call and I/B/E/S.¹ Analyst communications with investors, however, are hardly limited to third-party research distribution, raising the question of whether and how analysts preferentially distribute their research to select investors. This question is of enormous interest to users of analyst research, brokers, and regulators; the investment value of analyst research to an investor depends on how widely it is distributed when the investor receives it. While brokers' internal policies and Financial Industry Regulatory Authority (FINRA)'s rules and regulations about fair dealings with customers may not allow the pre-release of research to select investors, cases of analysts and sales people pre-releasing research exist (Taylor 1995; Smith 2003; Bray 2008).² Surprisingly, this question has not received its due attention in the academic literature.

A notable exception is Irvine et al. (2006), who argue that analysts have incentives to pre-release their research to select investors (the tipping hypothesis). The authors claim to show evidence consistent with this hypothesis. Specifically, they show elevated institutional trading and price run-up prior to wide distribution of initiating Buy recommendations. Irvine et al. take an important first step toward explaining the process by which information is distributed to investors; the process is not instantaneous and wide distribution of analyst research is merely its end point. Can one therefore conclude that institutional trading and price run-up prior to analyst initiation is the result of analyst research being pre-released?

We have several reasons for answering this question in the negative, leading us to re-visit the analyst tipping hypothesis. First, in competitive information and capital markets

¹ See Ramnath et al. (2008) and Beyer et al. (2010) for a survey of the equity analyst literature.

² FINRA is the self-regulatory organization of financial intermediaries that succeeded the National Association of Securities Dealers (NASD) in 2007 with a mission to promote investor protection and market integrity.

such as the United States markets, information discovered and used by the initiating analyst is likely to be simultaneously discovered by other investors. The existence of institutional trading and price run-up in the pre-initiation period is a necessary but not a sufficient condition to conclude that the initiating analyst leaks information to select clients.

Second, select investors may have obtained the same information from the company without any direct involvement of the initiating analyst. An initiating analyst typically visits with the company's management or has management verify company information that will be included in the initiation report (Reingold 2006, p. 61 and 67). A manager who believes that initiation is likely or imminent may use varying channels to communicate both his belief and the facts on which this belief is based to select investors.

Finally, the tipping hypothesis is far from universally accepted. The recent analyst literature surveys in Ramnath et al. (2008) and Beyer et al. (2010) as well as Bradshaw's (2009) incisive commentary do not discuss the validity of this hypothesis. Altinkilic and Hansen (2009) reject it on the basis of evidence about the match between public information events and subsequent changes to analyst recommendations.³

We seek to extend the extant evidence on the tipping hypothesis by proposing an important venue where tipping about upcoming coverage initiation with a favorable recommendation likely takes place. We argue that select investors interact with a company's management at analyst-hosted, invitation-only investor conferences shortly prior to the initiation. The company presentations at such conferences and private interactions around this event indicate an increased flow of nonpublic information from the hosting analyst or the company to select investors about an upcoming initiation.

³ Altinkilic and Hansen (2009) examine this relation before and after Regulation FD. Regulation FD passed in 2000 bans corporate disclosures of material non-public information to select investors, but still allows meetings with select investors. Since Regulation FD concerns management's nonpublic communications with analysts and investors rather than analyst's nonpublic communications with clients, and the tipping hypothesis concerns only the latter communications, their evidence is at best indirect.

Our hypothesis that initiation-related information is released at investor conferences makes several empirical predictions. First, the price run-up in the company stock would be higher when the initiation is preceded by the company participation at an analyst-hosted conference. Second, the price run-up would be concentrated on conference days relative to non-conference days. Third, the price run-up would correlate with the level of recommendation of the upcoming initiation. Finally, these effects would be more pronounced when the initiating analyst hosts the conference.

Empirically, we investigate the existence of analyst-hosted conferences during the twenty trading days prior to Buy initiations (which include both Strong Buy and Buy initiations on a five-tier rating system). The total number of Buy initiations that meet our data requirements between years 2004 and 2008 is 21,424; of which 4,480 are preceded by analyst-hosted conferences and 182 are preceded by conferences hosted by initiating analysts. In other words, about 22% of all favorable coverage initiations are shortly preceded by conferences in which companies make a presentation, suggesting the prevalence of this nonpublic communication channel among select investors, analysts, and companies.

Consistent with our predictions, the price run-up during the twenty trading days prior to initiations (the tipping period henceforth) strongly depends on whether a conference takes place and whether the conference is hosted by the initiating analyst. The average cumulative abnormal return (CAR[-20,-1]) is 0.54% for initiations without conferences, 0.91% for initiations preceded by conferences hosted by non-initiating analysts, and 2.41% for initiations preceded by conferences hosted by initiating analysts. The differences in abnormal returns are statistically significant, and persist after controlling for company characteristics, management forecasts and research by other analysts disseminated during the tipping period.

Additionally, if conferences are hosted by initiating analysts, the average abnormal return on conference days (three days surrounding conference days) is 0.58% (1.08%), while

the average abnormal return on no-conference days of the tipping period is 0.10%. This suggests that the information flow on conference days is approximately six times as large as that on other days. Similarly, if conferences are hosted by initiating analysts, the average abnormal return on conference days (three days surrounding conference days) is 0.17% (0.19%), approximately six times as large as that observed on no-conference days, 0.03%.

We also calculate cumulative abnormal returns from conference day through one day before the initiations ($CAR[C,-1]$) in order to assess whether initiation-related information substantially begins flowing to select investors on and after conference days. In the sample where initiating analysts host conferences, we document an average $CAR[C,-1]$ of 3.08%, an amount significantly higher than the 20-day CAR of 2.41%. In the sample where non-initiating analysts host conferences, the average $CAR[C,-1]$ is 0.62%, which compares with 20-day CAR of 0.91%. We conclude that the flow of initiation-related information to select investors begins at conference days, especially when conferences are hosted by initiating analysts.

Finally, we expand our sample to include initiations with Hold and Sell recommendations, and explore whether conference day returns are explained by the level of upcoming recommendations that have not yet been widely distributed. We should observe a systematic relationship between the two only if information concerning the level of the upcoming recommendation is released during the conference. In the sample of conferences hosted by the initiating analyst, we document three-day conference day returns to be positive and significant for Buy recommendations, insignificant for Hold initiations, and negative and significant for Sell initiations. A similar pattern emerges when we analyze one-day conference returns. The related findings are significantly weaker for conferences hosted by non-initiating analysts.

Collectively, we find strong evidence that the price run-up prior to analyst initiations is larger when to-be-initiated companies present at analyst-hosted conferences, and that conference day returns are many times larger than non-conference day returns. We also find that more information is impounded in prices when conferences are hosted by initiating analysts than when they are hosted by non-initiating analysts. Our explanation for this difference is that initiating analysts in effect initiate coverage at the conference, i.e., they make it known to investors that they will almost surely initiate coverage shortly (within 11 trading days on average). In contrast, the initiation event remains uncertain when conferences are hosted by non-initiating analysts, despite some evidence of private communications from the company management about an upcoming initiation.

A competing explanation for our findings is that initiating analysts and select investors obtain private information from company management at conferences and that this private information simultaneously prompts analysts to initiate coverage and investors to trade. This explanation is less likely, because analysts have to make substantial investments in company research and broker-related compliance before announcing initiations of coverage, a process possibly taking longer than the average 11-day gap between the conference and the initiation. Yet, initiating analysts may pre-screen and invite only those potential companies that may get initiated based on information these companies disseminate during the conference. Such pre-screening may enable analysts to initiate shortly after the conferences. Similar to our explanation, this competing explanation also suggests that analysts organizing conferences in effect initiate coverage on the conference day, though in some cases with some uncertainty based on company-based information at the conferences. Both explanations emphasize the role of analyst-hosted conferences in delivering initiation-related information to select investors.

Our study contributes to the literature on analyst tipping by identifying a particular institutional arrangement, analyst-hosted conferences, that govern private information exchanges among companies, analysts, and select investors before initiations of analyst coverage. This is an important contribution because neither studies promoting the tipping hypothesis (Irvine et al. 2006; Christophe et al. 2009; Juergens and Lindsey 2009), nor studies rejecting it (Altinkilic and Hansen, 2009) account for actual interactions that take place before initiations, raising doubts on prior evidence on tipping.

Most importantly, our study deepens our understanding of the information intermediary role of equity analysts. Prior academic literature focuses on widely distributed research, giving the impression that all clients equally benefit from analyst research. Our evidence that analyst-hosted invitation-only investor conferences explain the price run-up prior to initiations, in combination with anecdotal evidence that equity analysts actively communicate with select investors and provide select investors with access to management (Schack 2007; Groysberg 2010) refutes this impression and suggests that analyst activities benefit some clients more than others. Our study is well-timed: According to Schack (2007), securities firms' response to recent regulatory reforms has been to deemphasize the distribution of research to all clients and emphasize the provision of special services to select clients.

We acknowledge that the informational role of conferences is likely broader than tipping. Investors attending analyst conferences may benefit from significant cost savings and information externalities due to their meetings with the management teams of companies in the same industry. Conferences may also help attendees better interpret various information and corporate events as well as hosting analyst research.

The rest of the paper proceeds as follows. Section 2 provides background and develops our hypotheses. Section 3 reports our empirical analysis, and Section 4 concludes.

II. HYPOTHESES

We first discuss prior work on analyst tipping and present institutional facts that explain the limitations of the original analyst tipping hypothesis. We then present our hypotheses and empirical predictions.

Background

If an analyst distributes research to all clients at the same time, information is quickly impounded in prices, and, assuming no limits to arbitrage, expected profits of the clients are zero (Grossman and Stiglitz 1980; Holden and Subrahmanyam 1992; Foster and Viswanathan 1996). In this setting, clients would not pay high commissions, and brokerage business would be unable to recover the cost of equity research.⁴ Analysts therefore have incentives to distribute information to select clients; this is the essence of the analyst tipping hypothesis articulated and tested first by Irvine et al. (2006).⁵

Evidence of analyst tipping consists of elevated institutional trading prior to wide distribution of analyst Buy initiations (Irvine et al. 2006), and increased short selling prior to wide distribution of analyst downgrades (Christophe et al. 2009). In addition, Juergens and Lindsey (2009) report abnormal selling volume at market makers employing analysts prior to analyst downgrades. Institutional investors and short sellers behave as if they are tipped by analysts regarding upcoming initiations and downgrades.

The analyst tipping hypothesis correctly emphasizes the existence of analyst incentives to distribute information to select investors, but does not expose mechanisms of tipping. The question remains exactly when and how an analyst distributes information to select investors. Absent answers to these questions, the evidence of price run-ups and trading

⁴ See Sidhu et al. (2008) for a discussion of the same issue in the context of Regulation FD.

⁵ Guttman (2010) develops a model that assumes tipping and predicts timing of analyst forecasts.

shortly before analyst activity can be explained alternatively by investors receiving and acting upon information without any role of the analysts.

Research Services Provided to Select Investors

Brokerage houses spend significant resources to identify and service exclusively their most profitable clients.⁶ Examples of research services provided to select clients are phone calls and instant messages from analysts (and sales people), as well as invitations to analyst “webcasts” where analysts discuss their research and answer questions. Also, analysts organize meetings between investors and company management; these meetings may take place at company headquarters, analyst-hosted invitation-only conferences, or other locations. Finally, analysts sometimes provide select investors with written commentaries on uncovered companies.

Special services are not against brokerage houses’ internal policies and regulations. The rules concern the distribution of published research, not the distribution of unpublished research or commentaries,⁷ and they only require that published research be distributed to all clients at the same time. The fact that select clients are not given early access to published research does not mean that they are not given any information useful for anticipating the content of a research report that has yet to be distributed.

Unsurprisingly, the above special services provided to select investors are valued more than services provided to all investors such as the distribution of published research. In fact, the former attribute has consistently dominated the latter on the list of the most desirable

⁶ The discussion borrows from Schack (2007), Groysberg (2010), and Barclays Capital Inc. v. TheFlyOnTheWall.com.

⁷ Bolland (2007) warns analysts that information provided in a research report must not be the same as information provided in an earlier commentary because “this would give rise to accusations of front-running or unfair treatment of clients” (p. 154). It is hard to imagine, however, that information provided in an initiation report would be orthogonal to information provided in an earlier commentary.

attributes of analyst research according to Institutional Investor Magazine's annual investor polls.

What percentage of all clients receives special services? According to Morgan Stanley's own estimation, 7,000 institutional and 100,000 individual investors (225,000 separate people) receive their published research, but only approximately 200 institutions account for more than two thirds of the firm's resources devoted to the distribution of research (Barclays Capital Inc. v. TheFlyOnTheWall.com, p. 11). Therefore, special services' benefits largely accrue to approximately 3% of Morgan Stanley's institutional clients. The actual number of clients attending any given analyst webcast or meeting with management is likely even smaller, further preserving the investment value of the information obtained at these events. While all clients likely receive published research at the same time, preferential information flows to select investors almost continuously at various analyst-organized venues. This information may originate with either the analyst or the company. This study's thesis is that information provided earlier to select investors by the analyst or the company at various analyst-hosted events overlaps with information the analyst provides later to all investors.

Predictions

We examine the role of analyst-hosted conferences in disseminating information about upcoming Buy initiations. Analyst-hosted conferences are invitation-only investor conferences where select investors get the opportunity to obtain nonpublic information from the analyst or the attending companies. For instance, while the number of Merrill Lynch clients is probably as large as the number of Morgan Stanley clients, 225,000, only 700 clients attended Merrill Lynch's 1999 Global Telecom CEO investor conference, an even

smaller group of 25 clients met Steve Case, AOL's Chairman and CEO (Reingold 2006).⁸ According to Reingold (2006), such private meetings are common at analyst-hosted conferences, and are arranged for the most profitable clients (p. 159). Therefore, even though the conferences are often webcast and participating companies have to disclose the content of their presentations shortly after the conferences according to Reg FD, the physical presence of analysts, investors, and companies and private exchanges among the parties render conferences an important venue for investors to receive preferential information.

Following Irvine et al. (2006), we focus on the 20-day period prior to the date of analyst Buy initiations where a Buy initiation is defined as a particular analyst's first-ever Strong Buy or Buy recommendation on a particular company. We consider two types of analyst-hosted conferences: conferences hosted by initiating analyst and attended by the company (type A), and conferences hosted by analysts other than the initiating analyst and still attended by the company (type B). Our hypothesis is that the flow of information to select investors about upcoming Buy initiations is higher when initiations are preceded by analyst conferences, with the highest flow observed in a sample of initiations preceded by type A conferences.

Type A conferences bring select clients together with two highly informed parties, the initiating analyst and the company management; either party may disseminate initiation-related information that initiating analyst subsequently disseminates to all investors. Type B conferences bring select investors together with the company management, the only one party likely to possess information regarding upcoming analyst initiations. Non-initiating analysts cannot be presumed to have knowledge of the initiating analyst's decision and the content of the initiation report, but the company management potentially possesses this information, because it is not uncommon for analysts to visit the company's management

⁸ The author of the book, Dan Reingold, was the analyst who hosted the conference and the meeting with Steve Case. He was an "All-star" telecommunications industry analyst from 1989 to 2003.

prior to initiation, or even have the management fact check initiation reports with investment ratings redacted.⁹ The initiation of coverage with a favorable recommendation generally increases firm value, and the management may therefore choose to share with select investors the increased likelihood of coverage initiation and information that overlaps with that provided earlier in private meeting(s) with the initiating analyst. This scenario, which highlights the role of the company as a source of information for select investors, is overlooked by the original analyst tipping hypothesis.

We use cumulative abnormal returns during the 20-day interval prior to analyst Buy initiations as a measurement of information conveyed to select clients. We predict large cumulative abnormal returns if the occurrence of conferences prior to analyst Buy initiations signifies a larger flow of information to select clients. In addition, if more information flows to select investors on conference days than on non-conference days, abnormal returns on conference days would be larger than those on non-conference-days. Finally, these effects would be strongest when these conferences are hosted by initiating analysts, since only initiating analysts know whether and with what content they will initiate coverage.

Our hypothesis does not assume that conferences are the only venue where select investors obtain information about upcoming initiations. As discussed in the previous section, analysts communicate with select investors via e-mail, phone, and face-to-face; they can arrange a meeting with management at company's headquarters or some other location. Therefore, our hypothesis only assumes the occurrence of a conference represents an increase in the flow of nonpublic information to select investors.

⁹ For example, in his book Mr. Reingold discusses two initiations of coverage both preceded by company visits several weeks prior to initiation of coverage (p. 61 and 67). He states that "it is the analyst obligation to use the first visit to a public company to "thoroughly kick the tires of the company, to determine whether or not launch coverage of the stock and, if so, where the gray areas and potential weaknesses lie." (p. 61).

III. DATA

Broker-Hosted Conferences

We obtain conference presentations from January 2004 to December 2008 using the Bloomberg Corporate Events Database. The database includes information on the conference name, date, and hosting organization, as well as the presenting company name and ticker for 80,575 presentations by 6,260 companies at 2,891 conferences hosted by various organizations (e.g., brokerage firms, industry associations, stock exchanges, and investor relations firms).¹⁰ After eliminating conferences not hosted by I/B/E/S-listed equity research providers,¹¹ we merge presenting companies by name or ticker with the CRSP and COMPUSTAT databases. We then eliminate company presentations that were made within three days of earnings announcements. We also exclude observations if company stock prices were less than \$1 on the day of the presentations. The resulting sample comprises 49,853 presentations by 4,479 companies at 2,248 conferences hosted by 87 distinct brokers. We conclude that analyst-hosted conferences are prevalent, and that developing and testing hypotheses concerning their consequences is an important research endeavor.

Most brokerages (103) do not host investor conferences, prompting us to explore whether market shares of sample brokers are larger than those not holding conferences. Panels A and B of Table 1 contrast brokers hosting and not hosting conferences on three traditional measures of a broker's share in the market for equity research: number of analysts employed, number of companies followed, and number of recommendations published in a year. Brokers hosting conferences dominate other brokers on all three dimensions. The average number of equity analysts employed by brokers hosting (not hosting) conferences is

¹⁰ Bushee et al. (2010) discuss the types of organizations that host investor conferences.

¹¹ We exclude brokers employing less than five analysts in order to ensure that our sample includes reputable research providers. There is also concern that data from small providers may be of poorer quality—submitted with a delay, subject to more error, etc. Only five percent of the conferences are organized by brokers employing fewer than five analysts, and including these conferences does not affect our results.

40 (12). The average number of companies followed by brokers hosting (not hosting) conferences is 236 (68). The average number of recommendations issued by brokers hosting (not hosting) conferences is 330 (96). While fewer brokers host conferences, they collectively employ more analysts, follow more companies, and publish more research.

Panel A also documents significant variation in conference activity among the sample brokers. The average (median) number of conferences in a year is 6 (3), with 5th (95th) percentile at 1 (25). The average (median) number of conference presentations is 139 (70), with 5th (95th) percentile at 2 (540). The mean (median) number of companies presenting is 128 (69), with a 5th (95th) percentile of 2 (479). In fact, the top ten most active brokers host 49% of all conferences where 44% of all presentations take place.¹² Finally, there is a large positive correlation (over 0.80) between indicators of conference activity and the above three measures of broker market share, i.e., number of analysts employed, companies followed, and recommendations. This further supports our conjecture of a positive relationship between broker size and conference activity, a special service that caters to the needs of select clients.

Analyst Initiations

An analyst initiation is the first-ever recommendation on a particular stock by an IBES analyst in the sample period from 2004 to 2008, which is determined by the availability of conference data.¹³ We eliminate initiations that are within three days of an earnings announcement; that are on companies with a stock price less than \$1 on initiation day; and that are issued by brokers employing fewer than five analysts. This returns a sample of 39,555 initiations with different recommendation levels on 5,317 companies issued by 190

¹² These brokers are Bank of America, Bear Stearns, Citigroup, Credit Suisse, Deutsche Bank, Goldman Sachs, J.P. Morgan, Merrill Lynch, Morgan Stanley, and UBS.

¹³ Following Irvine et al. (2006), we back check all recommendations on the company during two years prior to this initiation to ensure that the initiating analyst did not previously cover the stock.

brokers. Brokers with conference activity account for a disproportionately large share of these initiations—31,681 initiations on 5,116 companies.

We next investigate the frequency and recommendation levels of initiations that are preceded within twenty or hundred trading days by analyst conferences. Panel A of Table 2 presents initiations preceded by type A and B conferences, and Panel B presents initiations preceded by only type B conferences. Our primary interest is the frequency of Buy initiations preceded by conferences in the tipping period [-20,-1]. If few initiations are preceded by conferences, then conferences are likely to play a minor role in providing select investors with information and our tests would have low power due to minimal variation in the conditioning variable. Since a company may present at several analyst-hosted conferences prior to the initiation of coverage, we also report the number of conference presentations.

Out of 39,555 initiations in Panel A, 8,140 initiations (4,480 of which are Strong Buy or Buy recommendations) are preceded by type A or B conference presentations in the window [-20,-1]. This corresponds to 21% of all initiations in our sample, suggesting that company and analyst interactions with select investors prior to initiations are common. Expanding the pre-initiation window to 100 days increases the number of initiations preceded by company presentations to 19,261 (10,309 of which are Strong Buy or Buy recommendations). The number of company presentations at analyst-hosted conferences is higher at 26,455, suggesting that many companies attend more than one conference before initiations. Consistent with prior literature (Irvine 2003; Barber et al. 2006; Ertimur et al. 2010), initiating recommendations are optimistic: 25.7% *Strong Buy* and 28.4% *Buy*. These proportions do not vary based on the existence of prior conference activity.

Panel B shows that the incidence of initiations preceded by company presentations at type B conferences (i.e., conferences hosted by initiating analysts) is considerably lower. Only 310 of these initiations (182 of which are Strong Buy or Buy recommendations) are

preceded by conferences hosted by the initiating broker and attended by the initiated company. This corresponds to 1% of all initiations in the sample. The percentage drop from 21% to 1% is not surprising, however. In Panel A we allow that the initiated company presents at conferences hosted by any of the 87 brokers known to host conferences; in Panel B we consider conferences hosted by the initiating broker. The number of Buy initiations preceded by type B conferences is 182, meaning that our statistical tests may have low power. While certainly infrequent, these cases are interesting to study because this is when and where select investors are most likely to have obtained initiation-related information that others obtain later.

We next partition the sample of Buy initiations into three mutually exclusive subsamples based on whether the initiated company attends a conference hosted by the initiating analyst (Type A initiations, N=182); attends a conference hosted by a non-initiating analyst (Type B initiations, N=4,206), or does not attend any conferences (other initiations, N=16,301). Table 3 Panels A to C provide descriptive statistics on the subsamples of Buy initiations. Since a company may be initiated by more than one broker, the unit of analysis is company-year. The three subsamples include companies with similar characteristics in size, book-to-market ratio, ROA, beta, stock price volatility, age, and past returns. For example, the median market capitalization is \$782 million, \$1.185 billion and \$876 million; the median book-to-market ratio is 0.29, 0.30, and 0.41; and the median six-month CAR is 5.35%, 5.37%, and 3.24% in panels A, B, and C respectively. That the three subsamples include companies with similar characteristics (we cannot reject the null of equal location parameters for any characteristics) suggests—but does not guarantee—that differences in company characteristics will not confound our analyses of 20-day CARs.

IV. EMPIRICAL ANALYSES

We test the prediction of tipping using three distinct analyses. First, we explore the price run-up in a company stock prior to coverage initiation in relation to the company's participation in an analyst-hosted conference. Next, we test whether conference day abnormal returns are larger than non-conference day abnormal returns prior to initiations. Finally, we examine whether conference day returns relate with the level of recommendations issued when analysts initiate coverage.

Price Run-up

We calculate daily abnormal returns as the raw returns net of the value-weighted market returns in the period $[-20, +5]$, where *Day 0* is the day of initiation of coverage. For each day t we also compute cumulative abnormal returns, defined as the sum of daily abnormal returns from *Day -20* to *Day t*. We use Patell's (1976) z-test to assess whether daily and cumulative abnormal returns differ from zero. The calculation of the test statistic requires an estimate of the standard deviation of the distribution from which each daily abnormal return is drawn. We use abnormal returns from a post-initiation period $[+20, +60]$ in order to obtain this estimate.¹⁴

Table 4 reports average cumulative abnormal returns and a run-up index over the period $[-20, +5]$ for the three initiations subsamples presented in Table 3. The run-up index is defined as $\frac{CAR[-20,t] \times 100}{CAR[-20,+3]}$. The index reveals how much of the total information impounded in price as of *Day +3* is impounded in price as of *Day t*. The index runs through *Day +3* rather

¹⁴ Cross-sectional independence is a key assumption underlying the Patell's z-test. There is hardly any clustering of observations in either subsample to suggest that this assumption is violated. For example, there are 182 initiations preceded by conferences hosted by initiating analysts and they occur on 153 unique calendar days. Another key assumption is that initiations induce a shift in the mean but not the variance of daily abnormal returns. Since we observe increased return variability surrounding initiation days, for each event *Day -t* we also calculate a *t*-statistic based on the cross-sectional mean and standard deviation of *Day t* returns. Our empirical inferences do not change.

than *Day 0* or *Day +1* (Jarrell and Poulsen 1989) because the market reaction to analyst initiations appears significantly incomplete on *Day +1*.

We document substantial run-up in subsamples with conference presentations. The average CAR[-20,-1] is largest at 2.41% for Type A initiations, followed by 0.91% for Type B initiations, and 0.54% for other initiations. The run-up index values rank similarly at 46%, 40%, and 25%, respectively. The ranking across subsamples is consistent with our hypothesis predicting that the largest flow of information to select investors takes place during conferences hosted by initiating analysts, followed by conferences hosted by non-initiating analysts. The differences in CARs are economically large and statistically significant, suggesting that hosting conferences is an important factor determining stock return patterns prior to analyst initiations. Further, the significant CAR in Type B initiations complements the traditional analyst tipping hypothesis asserting the pre-release of research only by the initiating analyst. It supports a more general version of this hypothesis that analyst-hosted conferences facilitate the flow of information (by the companies themselves) to select investors prior to its wide distribution in an initiation report.

We next extend the analysis conducted in Table 4 by controlling for company characteristics examined in Table 3, the level of the initiating recommendation, and industry indicators. In particular, we pool the three subsamples analyzed in Table 4 and estimate two OLS models. The first model regresses CAR[-20,-1] on *Conference* indicator that is equal to one if a conference takes place within 20 trading days and zero otherwise, control variables, and Fama-French industry indicators:¹⁵

$$CAR[-20, -1] = \alpha_0 + \alpha_1 Conference + \beta Controls + \delta Industry Indicators + \varepsilon \quad (1)$$

¹⁵ We lose 735 observations due to control variable data requirements.

In the second model, we replace *Conference* with two indicators, *Initiating Broker* and *Non-Initiating Broker* in order to separate conferences hosted by initiating analysts from conferences hosted by non-initiating analysts.

We use the following control variables. *Strong Buy* is an indicator variable equal to one if the initiation recommendation is a Strong Buy and zero otherwise. *Log (Size)* is a firm's market value of equity as of the end of the fiscal year prior to initiation. *Book-to-market* is the ratio of a firm's book value to market value of equity as of the end of the fiscal year prior to initiation. *Beta* is the slope coefficient in a regression of a firm's daily stock returns on CRSP value-weighted index returns for the year prior to initiation. *Past CAR* is cumulative abnormal return over a six-month period ending 20 trading days prior to initiation day. *Volatility* is the standard deviation of daily stock returns for the year prior to initiation. *Age* is the number of months between a firm's initial public offering date and initiation date. In assessing the significance of coefficient estimates we use standard errors clustered by initiation day, allowing for non-zero correlation in the error term for firms initiated on the same day.¹⁶

Panels A and B in Table 5 report coefficient estimates for Equation (1). Each column reports estimation results based on whether or not control variables and industry indicators are included. The occurrence of a conference in the 20-day interval prior to analyst initiations is associated with a larger price run-up of 0.60% (Panel A). This run-up differential is robust to including control variables and industry indicators; the coefficient on *Conference* in the full model remains essentially unchanged. The price run-up appears unrelated to the control variables with the exception of the negative coefficient on *Past CAR*, suggesting that short-term return reversal rather than momentum characterizes our sample of analyst initiations.

¹⁶ Clustering by month or using heteroscedasticity-robust standard errors does not change our inferences.

Panel B shows that the price run-up depends on whether conferences are hosted by initiating or non-initiating analysts. The coefficient on *Initiating Broker* is constant at 1.86, while the coefficient on *Non-Initiating Broker* varies between 0.55 and 0.57 across models. The differences in the above coefficient estimates are consistent with Table 4, economically large at 1.3% and statistically significant at 10% level. We conclude that the effect of analyst-hosted conferences on the price run-up is significant and robust after controlling for differences in company characteristics, the level of the recommendation, and industry dummies. The results are also similar if we include broker fixed effects in the model.

We interpret the relation between conferences and the price run-up in the 20-day period prior to initiation as evidence of tipping, but a more innocuous explanation is that the run-up in this period is due to companies making public disclosures or other analysts distributing their own research. In other words, the firm or other analysts publicly disseminate information, which leads to a price run-up and an initiation report. This is a reasonable explanation—many studies report that individual analyst recommendations are correlated (Welch 2000) and follow management forecasts (Altinkilic and Hansen 2009). To preclude this explanation, we include variables indicating the occurrence of any management forecasts by the to-be-initiated firm or any recommendations on the to-be-initiated firm by non-initiating analysts in the tipping period. We find that while management forecasts and recommendations by other analysts indeed play a role in explaining the price run-up, the economic and statistical significance of the conference variables are unaffected.

Conference Day Returns

If select investors obtain more information on conference days than on non-conference days, we should observe greater abnormal returns on conference days than on non-conference days. We test this prediction using Type A and B initiations. We report

average and median market-adjusted returns on conference days [C], three days surrounding conferences [C-1, C+1], initiation days [0], and non-conference days [NC] in Panel A of Table 6.

When conferences are hosted by initiating analysts (Type A initiations), average return on conference days (non-conference days) is 0.58% (0.10%). Furthermore, returns on days adjacent to conference days are also large; the average three-day CAR surrounding a conference day is 1.08% or 45% of the 20-day CAR of 2.41% reported in Table 4.¹⁷ The average return on initiation days is 1.63%, larger than conference day returns, but this is unsurprising.¹⁸ Uncertainty concerning upcoming initiations is unlikely to be fully resolved at a conference, and for various reasons investors in attendance may decide not to trade to the point where their information is fully impounded in price. The wide distribution of an initiating recommendation would therefore affect stock price.

When conferences are hosted by non-initiating analysts (Type B initiations), average return on conference days (non-conference days) is 0.17% (0.03%). Furthermore, three-day conference CAR is 0.19% or 20% of the 20-day CAR of 0.91. While not as significant as Type A initiations, abnormal returns during the twenty days prior to Type B initiations also concentrate on conference days, consistent with the prediction that conferences are venues where select investors obtain information that others obtain at initiation day.

We next use information concerning the timing of a conference in order to assess when information begins leaking into price. Recall that in measuring the price run-up prior to analyst initiation we selected *Day -20* as the first day when information is leaked into prices, an approach consistent with prior literature but arbitrary. A superior approach to measuring the price run-up would take into account when information is likely to be initially leaked. We

¹⁷ When calculating three-day CARs, conference presentations on day -1 are dropped to eliminate the effect of initiation days on CARs.

¹⁸ Our evidence on initiation returns are comparable to that reported in Irvine (2003) and Ertimur et al. (2010).

propose that the occurrence of a conference indicates when information to select investors first flows, and therefore when the leakage of information into price begins. If $CAR[C,-1]$ is comparable to $CAR[-20,-1]$, then the leakage of information into prices begins at the conference day rather than on *Day -20*. If the ratio of $CAR[C,-1]$ to $CAR[-20,-1]$ is close to 55% (the average number of days between a conference and an initiation divided by 20), then leakage begins on *Day -20*.

We test this hypothesis on the two initiations samples in Panel B of Table 6. For Type A initiations, the average $CAR[C,-1]$ is 3.08% and larger than the average $CAR[-20,-1]$ of 2.41%. For Type B initiations, the average $CAR[C,-1]$ is 0.62%, representing 68% of the average $CAR[-20,-1]$ of 0.91%. We conclude that conferences initiate the flow of information to select investors, especially when they are hosted by initiating analysts.

We then contrast $CAR[-20,-1]$ in two subsamples: initiations preceded by conferences in the periods $[-20, -11]$ and $[-10, -1]$. If analyst-hosted conferences initiate the flow of information to select investors as we suggest, then the price run-up in the first subsample will begin earlier than the price run-up in the second subsample. The evidence in Figure 1 is consistent with this prediction. The price run-up in the first subsample begins on *Day -13*, while the price run-up in the second subsample begins on *Day -6*. Furthermore, the gap between the two graphs increases until *Day -7* to 2.2%, then closes to 1% by *Day -1*.

The Level of Initiating Recommendations

A prediction that extends the study's hypothesis regarding pre-release of information prior to Buy initiations is that the same practice takes place prior to Hold and Sell initiations. We test this prediction by expanding our sample to include Hold and Sell initiations, and regress conference-day abnormal returns and post-conference price run-up on indicators of

Buy, *Hold*, and *Sell* (Sell or Strong Sell in the five-tier rating system) recommendations separately for Type A and B initiations:

$$Ret = a_0 + a_1Buy + a_2Hold + a_3Sell + \varepsilon. \quad (2)$$

The dependent variable *Ret* is for one-day conference abnormal return, AR[C], three-day conference returns, CAR[C-1, C+1], and post-conference run-up measures, CAR[C,-1] and CAR[C,+3]. If investors receive initiation-related information, the coefficient estimates should load differently across the recommendation levels. That is, we predict a positive coefficient on *Buy* and a negative coefficient on *Sell*. We make no prediction regarding *Hold* because the value of a Hold recommendation as an investment signal is minimal (Francis and Soffer 1997; Irvine 2003).

Table 7 reports coefficient estimates for Equation (2). For type A initiations, we document positive and significant coefficient estimates for Buy when conference day returns and post-conference returns are dependent variable. The coefficient estimates for Hold are positive but insignificant. We also document negative coefficient estimates for Sell; the estimate is statistically significant when CAR[C-1, C+1] is the dependent variable. The difference between Buy and Sell coefficient estimates are positive for all dependent variables and statistically significant when CAR[C-1, C+1] is the dependent variable.¹⁹ We report similar results for post-conference run-up returns that include the initiation day, CAR[C, +3]. We draw two conclusions on the basis of this evidence: select investors obtain information that allows them to anticipate information distributed in a Buy or Sell initiation report, and pre-release such information allows them to separate companies with upcoming Buy initiations from companies with upcoming Sell initiations.

¹⁹ Tests involving Sell coefficients have low power because there exist only ten Sell initiations in our sample. The relative lack of significance can also be attributed to the observation that investors may obtain information but choose not to act on it, perhaps because the cost of trading on negative information is higher than the cost of trading on positive information (D'Avolio 2002; Jones and Lamont 2002).

For Type B initiations, we document positive and significant coefficient estimates for Buy and Hold when conference day returns and post-conference returns are dependent variable, suggesting that investors view the two sets of companies the same way up to the initiation day. We also document *positive* and insignificant coefficient estimates for Sell. When initiations are announced, a Buy initiation's price run-up of 0.65% accelerates to 1.93% as of *Day +3*; a Hold's price run-up of 0.40% drops to -0.33%; and a Sell's price run-up of +0.58% drops sharply to -1.97%. In comparison to Type A initiations, the evidence for Type B initiations reveals that uncertainty regarding the timing and the level of initiation largely remains until the initiation day, though we see modest predictions about an upcoming Buy initiation.

To summarize, we find evidence that select investors obtain preferential initiation-related information (about the timing of initiation and level of recommendation) during conferences organized by initiating analysts. Investors are able to distinguish companies initiated with a Buy recommendation from companies initiated with less favorable recommendations. The same conclusion does not hold as strongly for conferences organized by non-initiating analysts.

V. CONCLUSION

The original tipping hypothesis proposed by Irvine et al. (2006) does not account for multi-party interactions among select investors, analysts, and companies. We identify analyst-hosted invitation-only investor conferences, which are held shortly prior to one fifth of all coverage initiations with favorable recommendations, as a particular institutional arrangement that governs the interactions among companies, analysts, and select investors. We explore whether and how this arrangement facilitates the flow of information to select investors. Specifically, we test whether the price run-up in a company stock prior to initiation

of coverage with a Buy recommendation is higher when the company presents at these conferences, and whether the run-up is concentrated on conference days.

We document an average cumulative abnormal return of 2.41% (0.91%) during the twenty days prior to initiations when conferences are hosted by initiating (non-initiating) analysts and only 0.54% in the absence of these conferences. The daily abnormal returns in this period are concentrated on conference days at 0.58% and 0.17% for conferences hosted by initiating and non-initiating analysts, respectively. We conclude that analyst-hosted conferences are a significant venue where select investors obtain information that others obtain on initiation days. In contrast, the timing and content of initiation remain less certain when conferences are hosted by non-initiating analysts, despite likely private communications from the company management about a potential initiation of coverage.

A contemporary study by Bushee et al. (2010) shows that investor conferences hosted by brokers and other entities are associated with price and volume reactions, and conclude that these conferences convey new information to investors. Our study complements their work. We focus specifically on analyst-hosted conferences, and show that analyst initiation-related information is disseminated to select clients at these events. We therefore make a key contribution to the understanding of analyst tipping, a phenomenon documented first by Irvine et al. (2006) and then questioned by Altinkilic and Hansen (2010).

Our study also contributes to a broader literature exploring the sources of institutional investors' informational advantage (Acharya and Johnson 2007; Massa and Rehman 2008; Jegadeesh and Tang 2010). In particular, our evidence suggests that special services provided by equity analysts to their best institutional clients are a source of informational advantage to institutional investors. These special services likely include analysts' tipping select investors about information other than the initiation decisions (such as continuing recommendations) using venues other than the conferences (such as private correspondence, webcasts, etc.)

We caution against making policy recommendations based on our evidence. First, both hosting conferences and attending conferences are costly activities, and market participants would not engage in them unless they expected to recover these costs (Grossman and Stiglitz 1980). Our evidence suggests that benefits do accrue for those in attendance, but whether or not these benefits are abnormal is a separate topic. Second, we heed Demsetz's (1969) call for making policy recommendations based only based on a comparative analysis of real alternative institutional arrangements, and how these arrangements solve real economic problems. Analyst-hosted invitation-only investor conferences are a novel institutional arrangement largely ignored by academic literature that governs how and when analysts, managers, and select investors exchange information. We leave it for future research to explore what real economic problems this arrangement solves.

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TABLE 1
Annual Research Activities of I/B/E/S Brokers

Panel A: Brokers Hosting Conferences ($n = 87$)

	Mean	Median	Standard Deviation	5 th Percentile	95 th Percentile
Conference Activities					
Number of conferences	6	3	8	1	25
Number of company presentations	139	70	169	2	540
Number of presenting companies	128	69	150	2	479
Research Activities					
Number of analysts employed	40	24	43	8	124
Number of company following	236	151	219	41	705
Number of recommendations	330	200	336	58	1,007

Panel B: Other Brokers ($n = 103$)

	Mean	Median	Standard Deviation	5 th Percentile	95 th Percentile
Research Activities					
Number of analysts employed	12	8	13	5	26
Number of company following	68	43	97	9	207
Number of recommendations	96	57	132	13	300

We use the Bloomberg Corporate Events Database to identify brokers hosting conferences over the period from 2004 to 2008. Brokers employing fewer than five analysts in a year, company presentations made within three days of earnings announcements, and companies with stock price less than \$1 on conference days are excluded from the sample.

TABLE 2

Initiations of Coverage and Prior Company Presentations at Analyst-Hosted Conferences

Panel A: Initiations and Prior Conferences Hosted by Initiating or Non-Initiating Analysts

	Strong Buy	Buy	Hold	Sell	Strong Sell	Total
Initiations preceded by conference presentations in the period [-20,-1]	2,106	2,374	3,263	251	146	8,140
Presentations	[2,695]	[2,980]	[3,982]	[317]	[191]	[9,190]
Initiations preceded by conference presentations in the period [-100,-1]	4,945	5,363	7,950	648	355	19,261
Presentations	[9,874]	[10,848]	[14,162]	[1,492]	[848]	[26,455]
Other initiations	5,239	5,877	8,093	705	380	20,294
All initiations	10,184	11,240	16,043	1,353	735	39,555

Panel B: Initiations and Prior Conferences Hosted by Initiating Analysts

	Strong Buy	Buy	Hold	Sell	Strong Sell	Total
Initiations preceded by conference presentations in the period [-20,-1]	72	110	118	9	1	310
Presentations	[72]	[110]	[118]	[9]	[1]	[310]
Initiations preceded by conference presentations in the period [-100,-1]	323	461	590	42	19	1,435
Presentations	[329]	[474]	[597]	[43]	[20]	[1,463]
Other initiations	7,822	8,380	12,494	1,021	529	30,246
All Initiations	8,145	8,841	13,084	1,063	548	31,681

The table examines the incidence of company conference presentations prior to initiation of research coverage over the periods [-20, -1] and [-100, -1] with *Day 0* defined as the initiation day. Panel A uses all initiations from 190 brokers, irrespective of whether or not they hold conferences. Panel B only uses initiations from 87 brokers known to host conferences, and presentations at conferences hosted by the analyst initiating coverage of that company.

TABLE 3
Characteristics of Initiated Companies

Panel A: Companies Presenting at Conferences Hosted by Initiating Brokers (Type A)

	n	Mean	Median	Standard Deviation	5 th Percentile	95 th Percentile
Log (Size)	182	20.60	20.48	1.71	18.11	23.83
Book-to-Market	182	0.38	0.29	0.32	0.09	0.92
ROA	182	-4.23%	3.07%	23.62%	-57.88%	17.58%
Beta	182	1.17	1.18	1.51	0.12	2.43
Volatility	182	2.99%	2.77%	1.47%	1.22%	5.83%
Age	182	145	106	141	1	424
Past CAR	182	5.35%	2.48%	26.65%	-37.39%	48.25%

Panel B: Companies Presenting at Conferences Hosted by Non-Initiating Brokers (Type B)

	n	Mean	Median	Standard Deviation	5 th Percentile	95 th Percentile
Log (Size)	4,206	21.11	20.88	1.67	18.78	24.29
Book-to-Market	4,206	0.34	0.30	0.25	0.06	0.80
ROA	4,206	-1.77%	3.76%	22.59%	-44.09%	17.86%
Beta	4,206	1.22	1.17	0.62	0.38	2.27
Volatility	4,206	2.70%	2.52%	1.21%	1.19%	4.82%
Age	4,206	162	111	176	7	485
Past CAR	4,206	5.37%	3.97%	28.04%	-37.40%	53.26%

Panel C: Companies with No Conference Presentations Prior to Initiations

	n	Mean	Median	Standard Deviation	5 th Percentile	95 th Percentile
Log (Size)	16,301	20.81	20.59	1.69	18.41	23.91
Book-to-Market	16,301	0.41	0.35	0.38	0.07	0.92
ROA	16,301	0.91%	3.88%	28.84%	-36.38%	17.57%
Beta	16,301	1.07	1.08	1.36	0.00	2.24
Volatility	16,301	2.64%	2.39%	1.41%	1.08%	5.02%
Age	16,301	155	99	186	1	519
Past CAR	16,301	6.05%	3.24%	27.15%	-32.71%	53.24%

Variable Definitions (defined at the end of the fiscal year prior to initiation):

Log (Size) = Natural log of market value of equity;

Book-to-market = Book value of equity divided by market value of equity;

ROA = Return on assets defined as income before extraordinary items divided by total assets;

Beta = Slope coefficient of the regression of a firm's daily stock returns on CRSP value-weighted market returns;

Volatility = Standard deviation of daily stock returns;

Age = Number of months between initial public offering date and the initiation date; and

Past CAR = Cumulative abnormal return over a six-month period ending 21 trading days before initiation day, where abnormal returns are company stock returns less CRSP value-weighted market return.

TABLE 4
Price Run-up within 20 Trading Days Prior to Initiations

Day	Initiations Preceded by Conferences that are Hosted by Initiating Brokers (Type A) n = 182		Initiations Preceded by Conferences that are Hosted by Non-Initiating Brokers (Type B) n = 4,298		Initiations with No Conference Activity n = 16,944	
	CAR	Run-up Index	CAR	Run-up Index	CAR	Run-up Index
-20	-0.28%	-5.36%	0.05% ^{**}	2.21%	0.03%	1.38%
-19	0.05%	0.96%	0.18% ^{***}	7.96%	0.05% [*]	2.29%
-18	0.57%	10.92%	0.22% ^{***}	9.73%	0.05% [*]	2.29%
-17	0.14%	2.68%	0.25% ^{***}	11.06%	0.09% ^{**}	4.13%
-16	-0.09%	-1.72%	0.32% ^{***}	14.16%	0.12% ^{***}	5.50%
-15	-0.47%	-9.00%	0.25% ^{***}	11.06%	0.08% ^{**}	3.67%
-14	-0.44%	-8.43%	0.35% ^{***}	15.49%	0.08% ^{**}	3.67%
-13	-0.16%	-3.07%	0.36% ^{***}	15.93%	0.07% ^{**}	3.21%
-12	0.11%	2.11%	0.40% ^{***}	17.70%	0.06% ^{**}	2.75%
-11	0.31%	5.94%	0.44% ^{***}	19.47%	0.06% ^{**}	2.75%
-10	0.41%	7.85%	0.56% ^{***}	24.78%	0.10% ^{***}	4.59%
-9	0.50%	9.58%	0.60% ^{***}	26.55%	0.11% ^{***}	5.05%
-8	0.82% [*]	15.71%	0.70% ^{***}	30.97%	0.10% ^{**}	4.59%
-7	0.95% [*]	18.20%	0.74% ^{***}	32.74%	0.13% ^{***}	5.96%
-6	1.07% ^{**}	20.50%	0.76% ^{***}	33.63%	0.16% ^{***}	7.34%
-5	1.57% ^{**}	30.08%	0.75% ^{***}	33.19%	0.21% ^{***}	9.63%
-4	1.73% ^{**}	33.14%	0.74% ^{***}	32.74%	0.25% ^{***}	11.47%
-3	2.46% ^{***}	47.13%	0.77% ^{***}	34.07%	0.31% ^{***}	14.22%
-2	2.27% ^{***}	43.49%	0.86% ^{***}	38.05%	0.42% ^{***}	19.27%
-1	2.41% ^{***}	46.17%	0.91% ^{***}	40.27%	0.54% ^{***}	24.77%
0	4.04% ^{***}	77.39%	1.68% ^{***}	74.34%	1.54% ^{***}	70.64%
1	4.46% ^{***}	85.44%	2.15% ^{***}	95.13%	1.99% ^{***}	91.28%
2	4.95% ^{***}	94.83%	2.28% ^{***}	100.88%	2.13% ^{***}	97.71%
3	5.22% ^{***}	100.00%	2.26% ^{***}	100.00%	2.18% ^{***}	100.00%
4	5.27% ^{***}	100.96%	2.35% ^{***}	103.98%	2.26% ^{***}	103.67%
5	5.10% ^{***}	97.70%	2.41% ^{***}	106.64%	2.31% ^{***}	105.96%

***, **, and * reflect significance at the 1%, 5%, and 10% levels respectively.

The table reports average cumulative abnormal returns and a run-up index over the period [-20, +5] for the three initiations subsamples. *Day 0* is the day of analyst initiation. Run-up index is constructed as $\frac{CAR[-20,t] \times 100}{CAR[-20,+3]}$. We test whether or not the mean daily and cumulative abnormal returns differ from zero using Patell's (1976) z-test.

TABLE 5
Price Run-up Controlling for Recommendation and Firm Characteristics

Panel A: Pooling Conferences Hosted by Initiating and Non-Initiating Analysts

	Dependent variable: CAR[-20,-1]			
	I	II	III	IV
Intercept	0.41 ^{***} (3.35)	1.04 (1.51)	3.39 ^{**} (2.09)	4.43 ^{**} (2.51)
Conference	0.60 ^{***} (2.74)	0.61 ^{***} (2.73)	0.61 ^{***} (2.77)	0.62 ^{***} (2.77)
Strong Buy			-0.27 (-1.43)	-0.28 (-1.50)
Log (Size)			-0.11 (-1.60)	-0.12 [*] (-1.77)
Book-to-Market			-0.34 (-0.67)	-0.36 (-0.69)
Beta			0.01 (0.08)	-0.00 (-0.02)
Past CAR			-1.25 ^{***} (-2.77)	-1.36 ^{***} (-3.01)
Volatility			-16.04 (-1.54)	-20.71 [*] (-1.88)
Age			0.00 (0.04)	-0.00 (-0.31)
Industry Indicators	No	Yes	No	Yes
Adjusted R ²	0.0%	0.1%	0.2%	0.2%
N	20,689	20,689	20,689	20,689

Panel B: Distinguishing between Conferences Hosted by Initiating and Non-Initiating Analysts

	Dependent Variable: CAR[-20,-1]			
	I	II	III	IV
Intercept	0.41 ^{***} (3.35)	1.05 (1.52)	3.35 ^{**} (2.07)	4.40 ^{**} (2.50)
Initiating Broker	1.86 ^{**} (1.96)	1.86 ^{**} (1.96)	1.86 [*] (1.95)	1.86 [*] (1.96)
Non-Initiating Broker	0.55 ^{**} (2.48)	0.56 ^{**} (2.48)	0.56 ^{**} (2.51)	0.57 ^{**} (2.52)
Strong Buy			-0.27 (-1.41)	-0.28 (-1.48)
Log (Size)			-0.10 (-1.57)	-0.12 [*] (-1.75)
Book-to-Market			-0.34 (-0.67)	-0.37 (-0.69)
Beta			0.01 (0.08)	-0.00 (-0.02)
Past CAR			-1.25 ^{***} (-2.76)	-1.36 ^{***} (-3.01)
Volatility			-16.14 (-1.55)	-20.84 [*] (-1.89)
Age			0.00 (0.03)	-0.00 (-0.32)
Industry indicators	No	Yes	No	Yes
Adjusted R ²	0.0%	0.1%	0.2%	0.2%
N	20,689	20,689	20,689	20,689

TABLE 5 (continued)

*, **, and *** indicate significance at the 10%, 5%, and 1% levels respectively.

Table presents results from the regressions of cumulative abnormal returns during the twenty days prior to coverage initiations on conference activity and control variables. The *t*-statistics (in parentheses) are calculated using standard errors clustered by initiation day.

Variable Definitions (defined at the end of the fiscal year prior to initiation):

CAR[-20, -1]	= Cumulative abnormal returns between <i>Day -20</i> and <i>Day -1</i> (where <i>Day 0</i> is the initiation day);
Initiating Broker	= An indicator equal to one if an initiation is preceded by a conference presentation at an initiating analyst-hosted conference, and zero otherwise.
Non-Initiating Broker	= An indicator equal to one if an initiation is preceded by a conference presentation at a non-initiating analyst-hosted conference, and zero otherwise.
Strong Buy	= An indicator equal to one if an initiation is a strong buy recommendation, and zero if it is a buy recommendation.
Log (Size)	= Natural log of market value of equity;
Book-to-market	= Book value of equity divided by market value of equity;
Beta	= Slope coefficient of the regression of a firm's daily stock returns on CRSP value-weighted market returns;
Volatility	= Standard deviation of daily stock returns; and
Age	= Number of months between initial public offering date and the initiation date.

TABLE 6
Conference Day Returns

Panel A: Conference Day vs. Non-Conference Day Returns

Conference Host		AR[C]	CAR[C-1, C+1]	AR[0]	AR[NC]	AR[C] vs. AR[NC]
Initiating Broker (Type A)	Mean	0.58% ^{***}	1.08% ^{***}	1.63% ^{***}	0.10% [*]	0.49% ^{**}
	Median	0.24% ^{**}	0.23% ^{**}	1.13% ^{***}	-0.06%	0.30% ^{**}
Non-Initiating Broker (Type B)	Mean	0.17% ^{***}	0.19% ^{***}	0.76% ^{***}	0.03% ^{***}	0.14% ^{***}
	Median	0.08% ^{***}	0.07% ^{***}	0.47% ^{***}	-0.06% ^{***}	0.15% ^{***}

Panel B: Tipping Period and Post-Conference Run-up

Conference Host		CAR[C, -1]	CAR[-20, -1]	CAR[C, +3]	CAR[-20, +3]
Initiating Broker (Type A)	Mean	3.08% ^{***}	2.41% ^{***}	5.89% ^{***}	5.22% ^{***}
	Median	1.77% ^{**}	1.19% ^{**}	3.52% ^{***}	3.01% ^{***}
Non-Initiating Broker (Type B)	Mean	0.62% ^{***}	0.91% ^{***}	1.90% ^{***}	2.24% ^{***}
	Median	0.32% ^{***}	0.76% ^{***}	1.28% ^{***}	1.68% ^{***}

***, **, and * denote significance at the 1%, 5%, and 10% levels respectively.

Variable Definitions:

Initiating Broker = An indicator equal to one if an initiation is preceded by a conference presentation at an initiating analyst-hosted conference, and zero otherwise.

Non-Initiating Broker = An indicator equal to one if an initiation is preceded by a conference presentation at a non-initiating analyst-hosted conference, and zero otherwise.

AR[C] = Abnormal returns (the stock return net of the CRSP value-weighted market return) on conference days;

CAR[C-1, C+1] = Cumulative abnormal returns between one day before the conference and one day after the conference;

AR[0] = Abnormal returns on initiation days;

AR[NC] = Abnormal returns on non-conference days; and

CAR[-20, -1] = Cumulative abnormal returns between Day -20 and Day -1 (where Day 0 is the initiation day).

TABLE 7
Conference Returns and the Level of the Initiating Recommendations

	Initiating Analyst-Hosted Conferences (Type A)				Non-Initiating Analyst-Hosted Conferences (Type B)			
	AR [C]	CAR [C-1, C+1]	CAR [C, -1]	CAR [C, +3]	AR [C]	CAR [C-1, C+1]	CAR [C, -1]	CAR [C, +3]
Buy	0.72 ^{***} (2.68)	1.12 ^{***} (2.76)	3.57 ^{***} (4.26)	5.99 ^{***} (6.25)	0.21 ^{***} (4.48)	0.21 ^{**} (2.54)	0.65 ^{***} (3.94)	1.93 ^{***} (10.42)
Hold	0.26 (0.94)	0.31 (0.60)	0.08 (0.08)	-2.53 [*] (-1.87)	0.15 ^{***} (2.65)	0.41 ^{***} (4.27)	0.40 ^{**} (2.44)	-0.33 (-1.60)
Sell	-0.50 (-0.48)	-2.09 [*] (-1.78)	-0.69 (-0.18)	-1.13 (-0.32)	0.04 (0.24)	0.22 (0.81)	0.58 (1.12)	-1.97 ^{***} (-2.70)
Adj. R ²	3.0%	3.0%	6.5%	12.7%	0.36%	0.41%	0.4%	2.1%
N	296	296	296	296	7,521	7,513	7,521	7,521
Buy-Sell	1.22 (1.14)	3.21 ^{***} (2.58)	4.26 (1.09)	7.12 ^{**} (1.96)	0.17 (1.07)	-0.01 (-0.05)	0.07 (0.14)	3.90 ^{***} (5.23)

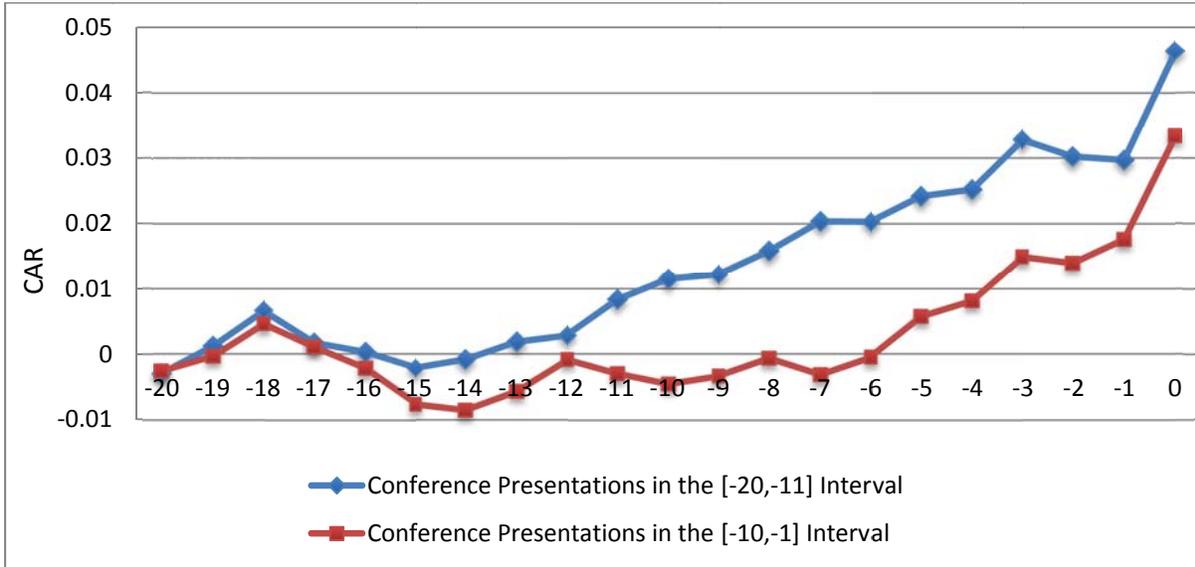
***, **, and * denote statistical significance at the 1%, 5%, and 10% levels respectively.

The table presents the results from the regressions of conference day abnormal returns and post-conference cumulative market adjusted returns on the levels of initiation recommendations that shortly follow the conferences. The t-statistics (in parentheses) are calculated using standard errors clustered by initiation day.

Variable Definitions:

- AR[C] = Abnormal returns on conference days;
- CAR[C-1,C+3] = Cumulative abnormal returns between one day before and one day after the conference;
- CAR[C,-1] = Cumulative abnormal returns between conference day and one day before the initiation;
- CAR[C, +3] = Cumulative abnormal returns between Day -20 and Day -1 (where Day 0 is the initiation day);
- Buy = An indicator equal to one equal to one if the recommendation of the coverage initiation is *Strong Buy* or *Buy* on a five-tier rating system;
- Hold = An indicator equal to one equal to one if the recommendation of the coverage initiation is *Hold* on a five-tier rating system; and
- Sell = An indicator equal to one equal to one if the recommendation of the coverage initiation is *Sell* or *Strong Sell* on a five-tier rating system.

FIGURE 1
Conference Timing and the Price Run-up



The figure presents cumulative market-adjusted returns for two subsamples of the initiations sample where conferences are hosted by initiating analysts. The first one includes observations where conferences take place in the interval [-20,-11], and the second includes observations where conferences take place in the interval [-10,-1]. *Day 0* is defined as the initiation day.