Hop on! Bus Tours and Corporate Access

Daniel Bradley^a, Russell Jame^b, Jared Williams^c

^aKate Tiedemann School of Business and Finance, University of South Florida, Tampa, FL 33620, <u>danbradley@usf.edu</u>

^bDepartment of Finance, University of Kentucky, Lexington, KY, 40506 <u>Russell.jame@uky.edu</u>

^cKate Tiedemann School of Business and Finance, University of South Florida, Tampa, FL 33620, <u>jwilliams25@usf.edu</u>

November 2023

Abstract

We introduce bus tours, a corporate access event where investors and analysts visit company headquarters and/or production plants to tour operations and meet management and staff. Contrary to other private meetings, bus tours emphasize firms with more tangible assets, where the benefits of observing a firm's operations are likely larger. Trading volume and the frequency and accuracy of hosting analysts' earnings forecasts increase following the tour, particularly among asset-rich firms; and hosting analysts issue strategically biased forecasts preceding the tour. Our findings suggest that bus tours are a distinct disclosure medium that convey value-relevant information, but also induce significant analyst conflicts of interest.

Keywords: Field trips, bus tours, corporate access, analyst recommendations

JEL classifications: G20, G23

Hop on! Bus Tours and Corporate Access

1. Introduction

Bus tours, also referred to as field trips, plant visits, or reverse non-deal roadshows, are events organized by sell-side analysts whereby a host analyst schedules and coordinates firm site visits for their institutional clientele. These trips typically last several days, and they are typically industry-focused and geographically concentrated to maximize the number of firms that can be visited on a single tour. Like broker-hosted conferences and non-deal road shows, bus tours are an instrumental component of a brokerage house research department's corporate access program. For instance, William Blair's main corporate access page states: "Our non-deal roadshows, conferences, and investor field trips facilitate the exchange of ideas and build relationships between senior corporate management and key decision makers with leading institutional investors." Buy-side analysts also regularly emphasize the importance of bus-tours. For example, a recent *Institutional Investor* article cites a hedge fund manager: "But where the sell side is perceived to provide the most value to hedge funds is through corporate access – the meetings with corporate executives, field trips to see firm operations, and non-deal roadshows organized by sell-side firms on behalf of buy-side investors." Despite the importance of bus tours to both the sell-side and buy-side, to the best of our knowledge, they have not been examined in the academic literature. We attempt to fill this void.

¹ See: https://www.williamblair.com/Equities/Corporate-Access. Similarly, Oppenheimer states on their main corporate access page, "In addition to Oppenheimer's high-profile conferences, our Corporate Access Team facilitates more than 3,000 company-investor connections annually. This includes several hundred deal and non-deal roadshows, flagship conferences, field trips, bus tours, site visits, and other bespoke events throughout the United States, Canada, Europe, and Asia." See: https://www.oppenheimer.com/corporations-institutions/equities/corporate-access.aspx.

² Source: https://www.institutionalinvestor.com/article/2bsxrhr8ya274h2oullvk/research/hedge-funds-disdain-most-sell-side-analysts-heres-who-they-actually-like.

³ Several papers have studied site visits in China (e.g., Cheng, Du, Wang, and Wang, 2016; Cheng, Du, Wang, and Wang, 2019; and Han, Kong, and Liu, 2018). In addition to the substantial differences between the US and China markets, the site visits studied in China are very different from bus tours studied in the US. We discuss these differences in greater detail in Section 2.

We collect a novel sample of 733 bus tours spanning 4,457 firm-days over the 2013 to 2019 period from TheFlyOnTheWall.com(FLY). The average tour is 2.4 days, 6.1 firms are visited, and approximately 84% of the firms visited are covered by the hosting broker. We begin by examining the types of firms that are most likely to participate in bus tours, with a particular emphasis on contrasting bus tours with two other prominent corporate access events: broker-hosted conferences (Green et al. 2014b) and non-deal roadshows (Bradley, Jame, and Williams, 2022). In contrast to investor conferences and NDRs, bus tours take place at the firm's headquarters or important plant locations and typically include a guided tour of operational facilities. Accordingly, we hypothesize that investor demand for tours is greater for a firm when the benefits of observing operations are greater, such as firms with high levels of tangible assets and firms that derive a significant portion of their value from current assets rather than growth opportunities, i.e., value firms. We find strong support for both predictions. Specifically, relative to conferences and NDRs, bus tours are more common among firms with lower levels of intangible assets and lower market-to-book ratios. For example, a one standard deviation increase in intangibles is associated with a 20.5% decrease in bus tour participation, compared to a 13.3% and 6.5% increase for NDRs and conferences, respectively. This effect is mostly driven by within-industry rather than across-industry variation in tangible assets. These differences are consistent with bus tours being a distinct disclosure mechanism that allows investors and analysts to glean different types of information.

If bus tours are valuable and generate trade ideas, we should expect investors to trade based on the information they acquire during the bus tour. Consistent with this prediction, we find a surge in trading after tours: annualized turnover increases by 8 percent in the week following the bus tour compared to the weeks prior to the tour. The economic magnitude is comparable to the trading volume increase following investor conferences (6 percent), and somewhat larger than the volume

⁴ Bus tour activity declined significantly in 2020 due to the global pandemic.

increases following NDRs (3 percent). Consistent with bus tours being particularly valuable for firms with high tangible assets, the one-week volume increase is strongest among firms in the bottom 30% of intangible assets (18.5 percent) or bottom 30% of market-to-book ratios (21.5 percent). In contrast, the increase in trading volume following investor conferences tends to be larger for firms with more intangible assets and higher market-to-book ratios.

Having established that bus tours are important information events for institutional investors, we next examine whether and how they affect analyst research. If analysts acquire value-relevant information during these visits, they may be more likely to revise their forecasts to reflect this knowledge and their forecasts may be more accurate compared to other analysts. We find evidence of both. Specifically, we find that hosting analysts are about 50% more likely to issue a forecast revision in the two weeks immediately after the bus tour. Furthermore, hosting analysts' forecasts are significantly more accurate in the two quarters after the event. In contrast, we find no improvement in accuracy following NDRs, and statistically significant, but economically more modest, improvements following investor conferences. Consistent with the trading volume results, we find that the host analysts' improvement in forecast accuracy following bus tours is concentrated in firms with lower levels of intangibles assets and lower market-to-book ratios. The collective evidence suggests that bus tours are a particularly useful information acquisition activity for sell-side analysts.

In our final series of tests, we examine whether bus tours impair analysts' objectivity. Host tour analyst research may be compromised because they fear upsetting management prior to the event they are organizing. Consistent with this notion, Bradley, Jame and Williams (2022) show that analysts who host NDRs issue biased research just before the NDR. We find very similar patterns for bus tour analysts. Specifically, we find that host analysts issue more optimistic recommendations coupled with

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⁵ The magnitude of the accuracy advantage of the hosting analysts is larger over shorter horizons (e.g., two-weeks), but due to the relatively small number of observations, the estimates over horizons shorter than one-quarter are generally not statistically significant.

more pessimistic earnings estimates. These results are consistent with sell-side analysts issuing strategically-biased forecasts that cater to managers' preference for optimistic investment recommendations coupled with "beatable" short-term earnings forecasts (Malmendier and Shantikumar, 2014).

Our findings contribute to the literature on the determinants and consequences of corporate access events. Prior work has studied different sets of corporate events including investor conferences (Bushee, Jung, and Miller, 2011, Green et al., 2014a, Green et al 2014b), analyst/investor days (Kirk and Markov, 2016) and non-deal roadshows (Bradley, Jame, and Williams, 2022). We extend this literature by offering the first systematic analysis of bus tours, which are frequently acknowledged in surveys as one of the most important management access events that the sell-side organizes. Our analysis uncovers several important differences between bus tours and NDRs and investor conferences in terms of their determinants and their impact on institutional trading volume and analyst equity research. These differences highlight bus tours as an important and unique disclosure medium for firms, institutional investors, and sell-side analysts, particularly among firms with higher levels of tangible assets.

Our paper also adds to the literature that explores the factors contributing to analysts' informational advantage. Most relatedly, a growing literature suggests that management access is associated with more informative research (see, e.g., Cohen, Frazzini, and Malloy, 2010, Green et al., 2014a, and Bradley, Gokkaya, and Liu, 2020), but this literature is largely silent on when management access is more informative. Our evidence of larger improvements in accuracy following bus tours relative to other corporate access events suggests that features unique to bus tours, such as plant tours

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⁶ In addition to the above studies, several studies rely on proprietary data to study a comprehensive set of investor relation activities for a single firm (e.g., Soltes, 2014, and Solomon and Soltes, 2015).

and discussions with a broader set of management including non-C-suite level employees, might be particularly valuable for sell-side analysts.

Finally, our paper adds to the literature on analyst bias. Prior research emphasizes conflicts of interests stemming from analysts issuing biased research to win investment banking business (e.g., Lin and McNichols, 1998; Michaely and Womack, 1999; and Bradley, Jordan, and Ritter, 2003). Regulatory changes such as the 2003 Global Research Settlement were mandated to mitigate these conflicts and there is some evidence that such regulations were effective. Financial institutions were forced to separate their banking and research departments from each other both physically and with Chinese walls. Coincidently, corporate access events, which are not restricted under current regulations, have become more important to research departments as a revenue source. Similar to Bradley, Jame, and Williams (2022), who find evidence of analyst bias for non-deal roadshows, we document significant bias for hosting analysts prior to bus tours. Our findings further suggest that private meetings are a pervasive source of conflicts of interest for sell-side analysts.

2. Institutional background, data sources, and determinants of bus tours

2.1 Institutional details of bus tours

Providing institutional investors with access to management is an important component of a sell-side analyst's job. Each year, *Institutional Investor* polls buy-side investors on what they find most valuable in sell-side analysts. Management access is consistently ranked one of the three most important qualities. In addition to organizing events such as broker-hosted conferences (Green et al., 2014b) and non-deal roadshows (Bradley, Jame, and Williams, 2022), bus tours are an important

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⁷ See https://www.sec.gov/litigation/litreleases/finaljudgadda.pdf for regulatory changes. Kadan et al. (2008) find that banks changed their rating systems from a 5-point scale to a 3-point scale and affiliated analysts no longer display overly optimistic ratings. Corwin, Larocque and Stegemoller (2017) find that the Global Settlement was effective in curbing analyst bias for the banks directly sanctioned but was largely ineffective for other banks.

⁸ https://www.sec.gov/news/press/2003-54.htm

service that sell-side analysts offer their institutional investor clients. A bus tour is an event where an analyst charters a bus (or several) for institutional investor clients and coordinates firm site visits. A typical bus tour has an industry theme largely based on the coverage portfolio of the analyst and the firms visited are geographically proximate. Our discussion with a buy-side manager suggests that an average bus tour will include 20 to 30 institutional investors. Despite their importance, very little is known about bus tours, presumably because unlike conferences, bus tours are private meetings that are generally not disclosed by firms.

There are at least three important institutional features of bus tours that make them distinct from broker-hosted conferences and non-deal road shows. First, bus tours almost always include a visit to a firm's plant and facilities. This differs considerably from non-deal road shows that occur in institutional investors' offices or broker-hosted conferences that are typically held in a major money center in a meeting space, often a hotel. Second, bus tours provide investors access to not only upper management, but also lower-level employees. These lower-level employees do not attend broker-hosted conferences or non-deal road shows. Third, the hosting analyst is intimately involved in the site visits. For example, the hosting analysts will attend the plant tours and often ask questions. This differs considerably from non-deal roadshows where in many cases the analyst does not attend the meetings between investors and managers.

The bus tours in our sample are also very different from site visits that have been explored in the Chinese market (e.g., Cheng, Du, Wang, and Wang, 2016; Cheng, Du, Wang, and Wang, 2018; Han, Kong, and Liu, 2018, and Yang, Lu, and Xiang, 2020). Since 2009, firms listed on the Shenzhen Stock Exchange (SZSE) in China required disclosure of site visits, providing unique data for researchers to examine the consequences of information flow resulting from such visits. In the US,

⁹ In July 2012, these disclosure requirements were bolstered to require disclosure within two trading days of the visit. Prior to this, disclosure was mandated in firms' annual reports. See Yang, Lu, and Xiang (2020) for more detailed information.

no such regulatory disclosure requirements exist. Second, Cheng et al. (2015) report that top executives only participate in 15.2% of site visits in China. Our contact suggested that top management participate in virtually all bus tours. Third, bus tours include multiple firm visits and always include institutional investors. In China, Cheng et al. (2016) report that more than a third of site visits are solely by analysts.¹⁰

We had several conversations with a portfolio manager who views bus tours as at least as valuable as non-deal road shows and more valuable than broker-hosted conferences. He indicated that the information he obtains on bus tours is different from other events. He noted that being able to physically see operations and compare similar firms' production processes is insightful. Moreover, bus tours provide access to non-C suite employees who are not available otherwise. This view parallels a report by the National Investor's Relations Institute, which cites an Investor Relation (IR) consulting firm suggesting that firms should use bus tours to "to display their company's tangible assets and the way their company is set apart from peers." The IR consulting firm continues: "Many investors only hear the financial orientation and never quite understand the fundamentals of the company... A [bus tour] lets the investor actually understand what the company does from a practical point of view, as opposed to the balance sheet and credit ratings... Show your investors what they are investing in... A real product gives a better picture than just telling investors about your assets or asking them to read the annual report."

The view of bus tours as a valuable information event is also supported by survey evidence and case studies. For example, Brown et al. (2015) survey a large sample of US analysts about the usefulness of different types of management interactions for earnings forecasts and stock

¹⁰ The latter result is extrapolated from summary statistics in Cheng et al. (2016) Table 1. Their sample selection process begins with the total number of site visits (18,259 visits for 1,298 firms). In the next step, they combine adjacent site visits into one event reducing the sample to 16,913 visits for 1,269 firms implying that the typical site visit occurs for one firm. ¹¹ See page 14 of:

https://www.niri.org/NIRI/media/NIRI/IRUpdates/2015%20IR%20Update/1015_NIRI_IRU_FullBook_LRes.pdf

recommendations. Of the 8 types of activities (e.g., roadshows, conference calls, conferences, etc.), plant visits rank very high. In fact, for stock recommendations, US analysts rate plant visits as the second most important activity behind private phone calls with management. Similarly, using detailed data on broker votes for a mid-sized investment bank, Maber, Groysberg, Healey (2014) find that across all concierge services (i.e., bus-tours, NDRs, investor conferences), bus tours are most strongly related to brokerage votes.

2.2 Data sources and descriptive statistics

We collect data on bus tours from *Theflyonthewall.com* (FLY), which is the same data source used by Bradley, Jame, and Williams (2022) for their sample of non-deal roadshows.¹² The sample runs from 2013 through 2019. As Bradley, Jame, and Williams (2022) describe, FLY's propriety data come from several sources including points of contact within buy-side and sell-side firms.

Table 1

We match the bus tour data to I/B/E/S. We then identify the bus tour broker sponsor and the within-broker analyst covering the bus tour firms. Table 1 provides descriptive statistics on the sample. The sample is limited to common stocks (share codes 10 and 11) that are contained in the intersection of the CRSP monthly returns file and the Compustat fundamental annual file. We also require that the hosting broker in FLY reports to the IBES brokerage dataset. Panel A shows the number of bus tour events in our sample and corresponding statistics for other corporate access events. Our sample of 733 bus tours spans 4,457 firm-days with visits to 1,395 firms. The average field trip visits just over 6 firms, and 59 unique IBES brokerage firm organize at least one bus tour. We find that 84% of the companies on the field trip are covered by the hosting brokerage firm. As a comparison, there are far more NDRs and broker-hosted conferences. For instance, over the same

¹² A concern with FLY's reporting is that it does not contain the universe of bus tour coverage, which brings up sample selection issues. Bradley, Jame, and Williams (2022)

period, there are 28,013 NDRs and 2,675 broker conferences. NDRs only involve a single firm whereas the average number of firms participating at a broker-hosted conference is just over 20.

In Panel B, we examine the most common event locations. The majority of NDRs and broker conferences occur in the Northeast. For instance, 24% of NDRs and 40% of broker conferences are hosted in New York, New Jersey, or Connecticut. In contrast, only 6% of bus tours occur in the Northeast. This contrast is not surprising. Many institutional investors are headquartered in the Northeast. Thus, when firms travel (either for conferences or NDRs), they frequently visit locations that are convenient for institutional investors. On the other hand, bus tours involve firm site visits, which can only occur where firms have a presence. California is by far the most likely destination for a bus tour, which coincides with the state that has the largest economic impact from a production and market value standpoint.

2.3 Determinants of Bus-Tours

Private meetings with management should be particularly valuable for firms with high levels of intangible assets and greater growth opportunities because these assets are generally unrecognized in financial statements and are typically more difficult to value. Consistent with this view, Green et al. (2014b) and Bradley, Jame, and Williams (2022) find that firms with more intangible assets and higher market-to-book ratios (which likely captures both intangible assets and growth opportunities) are more likely to attend investor conferences and non-deal roadshows, respectively. In contrast, we expect bus tours to be particularly prevalent for firms with more tangible assets and fewer growth opportunities, where the benefits of observing operations in real time are likely to be larger. For example, investors on a bus tour might observe assembly lines, the morale of workers on the floor, etc. At the same time, bus tours might still be useful for firms with high levels of intangible assets. Consider the biotech industry. Although plant tours may not be particularly informative for such companies that possess considerable intellectual property (IP) through trade secrets, bus tours might

still add value by allowing analysts and investors to talk to the scientists or engineers who are responsible for the IP generation, particularly since these types of employees are generally not present at other investor-relation activities.

Asset tangibility and market-to-book ratios vary considerably across industries. Accordingly, in Table 2, we examine the prevalence of bus tours, NDRs, and investor conferences at the industry level using the Fama-French 10 industry classification. In the first column, we report the number of firm-month observations for each industry. Across our 2013-2019 sample period, we have 294,049 firm-month observations and intangible assets represents 15.76% of total assets on average. In the second column, we report the average percentage of each industry's assets that are intangible. Telecom has the highest percentage of intangibles at 34.1% followed by nondurables and high-tech business equipment (24.2% and 21.2%, respectively). On the other end of the spectrum, utilities and energy have the lowest percentage of intangible assets at 6.2% and 3.5%, respectively.

Table 2

The third column reports the average market-to-book ratio across all firms in the industry. Not surprisingly, industries with high intangibles assets also tend to have higher market-to-book ratios. For example, energy and utilities also have lower market-to-book ratios. However, the two measures do not always align. For example, although telecom has the highest level of intangibles, its market-to-book ratio is ranked 5th out of the 10 industries.

The next column (*Bus dummy*) reports the percentage of firm-months in which the firm participated in a bus tour in the given month. The columns *NDR dummy* and *Conf dummy* are defined analogously. Finally, the last column reports the average *Bus Ratio* defined as *Bus Dummy* (*Bus Dummy* + *NDR Dummy* + *Conf Dummy*). We compute the correlation between the percentage of intangible assets or the market-to-book ratios and the propensity to participate in the various types of private events. Here, we see that bus tour participation is negatively correlated with intangible assets (-0.37)

while NDRs and broker conferences are positively correlated (0.54 and 0.27, respectively). However, the relation between intangibles and bus tour participation is far from monotonic across industries. For example, in the case of bus tours, the energy industry is consistent with a negative correlation between intangibles and bus tours, as it has the lowest level of intangibles (3.5%) and the highest percentage of participating bus tour firms (3.0%). However, bus tours are also relatively common in the Hi-Tech industry despite the high levels of intangible assets. This finding is consistent with the view that client demand for bus tours, while positively related to tangible assets, is driven by many factors.

We find an economically insignificant correlation between bus tours and market-to-book ratios. This is in sharp contrast to the very strong positive correlation between market-to-book ratios and non-deal roadshows and investor conferences. Thus, like intangible assets, bus tours are relatively less common for firms with high market-to-book ratios.

We next examine the determinants of bus tours at the firm level. We borrow from the literature to form our model. Specifically, we conjecture that the propensity to engage in private events is generally similar across the three types of events (bus tours, NDRs, and broker-hosted conferences). That is, firms with greater incentives to reduce information asymmetry coupled with stronger investor demand should be more likely to participate in bus tours and the other types of private events.

Green et al. (2014b) and Bradley, Jame, and Williams (2022) show that the demand for private events increases with information asymmetry. Specifically, they find that participation in NDRs is positively related to higher levels of recognized intangibles, growth opportunities, R&D expenses, and idiosyncratic volatility. However, as we showed in Table 2, bus tours are more valuable in industries with higher degrees of tangible assets and are relatively more valuable for industries with lower growth opportunities, and we expect to observe similar differences at the firm level.

We include the percentage of institutional investors that own the stock because we expect there to be more demand for management access when there is a larger institutional ownership base. We also consider the number of analysts covering the firm for two reasons. First, on the supply side, when there are more analysts covering a firm, there are more analysts who will likely choose to organize a bus tour. On the demand side, analysts typically cover firms that institutions want to know more about; such firms are likely an attractive destination for institutions to visit. In examining the determinants of non-deal roadshows, Bradley, Jame, and Williams (2022) also include firm age, market capitalization, recent stock market performance, share turnover and future investment banking business. We include these as well. All continuous variables are normalized to have zero mean and unit variance. Detailed variable definitions can be found in the appendix.

We estimate a linear probability model at the firm-month level. The dependent variable, *Bus Dummy*, equals one if the firm participated in a bus tour in the given month and zero otherwise. We also estimate a similar model for non-deal roadshows, *NDR Dummy*, and investor conferences, *Conf Dummy*. We include month fixed effects and cluster the standard errors by firm and month.

Table 3

Specification 1 of Table 3 provides the results for bus tours. We find that bus tours are more common for firms with lower levels of intangible assets. The coefficient of -0.30% is highly statistically significant (*t*-stat =-5.25) and economically large, indicating that a one standard deviation increase in intangibles reduces the likelihood of engaging in a bus tour by 20.5% of its mean (=-0.30%/1.46%). This finding is consistent with Cheng et al. (2016), who document that site visits in China are also more common for firms with higher levels of asset tangibility. We note, however, that many of the other determinants are different. For example, we document that bus tours are strongly increasing in firm size and decreasing in firm age. In contrast, Cheng et al. (2016) document that site visits are unrelated to firm size and strongly increasing in firm age. These findings suggest that the

factors driving participation in bus tours in the United States versus site visits in China are very different.

In Specifications 2 and 3, we provide the same estimation but replace the dependent variable with NDR Dummy and Conf Dummy. In stark contrast to bus tours, the coefficient on Intangibles is positive and highly statistically and economically significant in both specifications. For example, in column 2 we see that a one standard deviation increase in intangibles increases the likelihood the firm will engage in an NDR in a given month by 1.07 percentage points, which reflects a 13.3% increase relative to its mean value (=1.07%/8.06%), and the corresponding increase for investor conferences is 6.5% (1.12%/17.19%). Likewise, market-to-book is an important determinant of NDR and conference participation but is unrelated to participation in bus tours. These findings are consistent with bus tours being a distinct disclosure medium that attracts different types of firms.

While the results in the first three specifications provide evidence that participation in these events is related to asset tangibility, it is not clear if this result is driven primarily by across-industry variation in asset tangibility or within-industry variation. To explore this further, Specifications 4 through 6 add fixed effects for the 10 Fama-French industries. The coefficient on *Intangibles* for bus tours is virtually unchanged after controlling for industry, suggesting that bus tours tend to seek out firms with relatively high levels of tangible assets within a given industry. There is some evidence that across-industry variation is relatively more important for NDRs and conferences. For example, a comparison of Specifications 3 and 6 suggests that across-industry variation accounts for roughly 30% of the tilt towards firms with more intangible assets (0.80/1.12). This is perhaps not surprising since investor conferences tend to be much larger and presumably more representative of the entire industry.

3. Trading volume around bus tours

3.1 Changes in trading volume around bus turs

In this section, we examine trading volume around bus tours. Our empirical specifications examine whether there is an increase in trading in the week following the bus tour relative to the week prior to the bus tour. Intuitively, if institutional investors acquire valuable information during these events, then they should subsequently trade on this information. We also compare and contrast the volume effects across bus tours to those of NDRs and investor conferences. We conjecture that bus tours and conferences will likely generate a greater volume reaction than NDRs because more institutions are exposed to these events and therefore provide a higher likelihood of trading activity. We limit the sample to firm-days that are not within 5 trading days of an earnings announcement. We also require that there is only one type of investor-relations event during the event window.

We estimate the following panel regression:

$$Turn_{it} = \beta_1 Event_{it} + \beta_2 Event \times Post_{it} + Controls_{it} + Date_t + \varepsilon_{it}$$
 (1)

In all regressions, the dependent variable, *Turn*, is the annualized daily trading turnover, defined as daily trading volume divided by the number of shares outstanding, and multiplied by 250. We winsorize daily turnover at the 99th percentile. Event is in indicator equal to one if the trading day is within five trading days of the investor relation event (i.e., days – 5 through 5). *Event* × *Post* is an indicator that takes the value 1 if the day is the event day or 5 trading days after the event (i.e., days 0 through +5). *Controls* include *Lag turnover* (1y) and *Lag Turnover* (1q), defined as the firm's average annualized daily turnover in the previous year and previous quarter, respectively, and *Date* denote day fixed effects. Standard errors are clustered by firm and date.

¹³ Bradley, Jame, and Williams (2022) document that institutions residing in NDR locations increase their trading compared to institutions in non-NDR locations. Our setting is different in the sense that multiple institutions from various unknown locations participate. Accordingly, we focus on the ability of bus tours to generate increases in aggregate trading volume.

Insert Table 4

Table 4 reports the results. Column 1 reports the results for bus tours. The coefficient on Bus Event is statistically insignificant, indicating that trading volume is not significantly elevated in the week prior to the bus tour. The coefficient on Bus $Event \times Post$ is statistically significant at a 1% level. This indicates that there is an increase in trading volume on the day of the bus tour and the week following the bus tour, which is consistent with bus tours generating trading ideas for attending investors. The point estimate of 7.69% represents a roughly 3.7% increase in turnover relative to the mean of the dependent variable (2.09). This is an economically meaningful increase, particularly since only a relatively small fraction of investors (typically 20-30 institutions) attend the bus tour.

Columns 2 and 3 report analogous results for NDRs and conferences, respectively. We find significant increases in the post-event window for both NDRs and conferences. The point estimates for NDRs (3.02) and conferences (6.42) are slightly smaller than the increase for bus tours (7.69). These results are broadly consistent with our expectations. Fewer institutional investors participate in a typical NDR compared to other corporate access events. Thus, while trading volume may be elevated in the geographic region where the NDR occurs (Bradley, Jame, and Williams 2022), trading volume from these institutions is likely to be a small fraction of overall volume. On the other hand, conferences are attended by potentially thousands of institutional investor representatives, journalists, etc., resulting in a more pronounced impact on aggregate trading. Likewise, buy-side participation on a bus tour is significantly higher than a single NDR event, but smaller than conferences. Interestingly, despite less participation, bus tours generate at least as much trading as conferences, suggesting that the information acquired on a tour relative to a conference may be more valuable.

In Specification 4, we include all three events in the same regression, and we formally test whether the estimates on $Bus\ Event \times Post$ is significantly different from $NDR\ Event \times Post$ and $Conf\ Event \times Post$. We find that the difference in the volume increase in the post-event window for bus

tours relative to NDRs is marginally significant (p < 0.08). In contrast, the difference between Bus $Event \times Post$ and $Conf Event \times Post$ is statistically indistinguishable from zero.

To further explore the timing of the trading increases around events, we re-estimate Specification 4 of Table 4 after replacing $Event \times Post$ with separate event-time indicators ranging from event day -2 to event day +5. Thus, the estimates on each of the event-day indicators capture the change in volume relative to the baseline estimates from days [-5, -3]. Figure 1 reports the results. We generally find no significant increase in trading volume on days -2 or -1, which is inconsistent with increased trading in anticipation of the event. We observe an immediate increase in trading volume on the day of the event, although the estimate for bus tours is not reliably different from zero. We also observe that trading volume for all three events remains elevated until day 3.

Figure 1

3.2 Changes in trading volume around bus turs — cross-sectional patterns

The evidence from Table 3 suggests that bus tours tend to visit firms with high levels of tangibles assets, whereas NDRs and conferences favor firms with more intangible assets. If bus tours are particularly valuable for firms with more tangible assets, then the trading volume increases may be more pronounced for these types of firms. To explore this possibility, we divide all firms into three groups based on *Intangibles*. Specifically, we repeat Specification 4 of Table 4 for firms in the bottom 30% of intangibles, middle 40%, and top 30%.¹⁴

Table 5 reports the results for key estimates: *Post Bus*, *Post NDR*, *Post Conf*, and the difference between *Post Bus* and *Post NDR* (*Post Bus* – *Post NDR*) and *Post Bus* and *Post Conf* (*Post Bus* – *Post Conf*). For reference, Panel A reports the results for the full sample of firms (and is thus identical to Specification 4 of Table 4), and Panel B reports the results after sorting the sample based on

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¹⁴ If a firm is missing information on intangibles (or market-to-book ratio), we set the intangibles (market-to-book ratio) equal to the average intangibles (market-to-book ratio) for the firm's industry. Excluding these observations results in qualitatively similar results.

intangibles. For firms in the bottom 30% of intangibles, we find that trading volume increases by 16.07 in the week following the bus tours. The estimate is economically large and statistically significant. Further, the estimate is significantly larger than the estimate for NDRs (3.83). The difference is also considerably larger than the estimate for conferences (6.60), although the difference between the two estimates is only marginally significant (p < 0.08). The trading volume increases following bus tours for firms in the middle 40% or the top 30% of intangibles is considerably smaller (4.32 and 5.88, respectively). Further, for this subset of firms, there is no evidence that bus tours lead to more trading than either NDRs or investor conferences.

Table 5

In Panel C we conduct similar sorts after replacing *Intangibles* with *Market-to-Book*. We find trading volume increases by a highly significant 21.57% in the week following the bus tours for firms in the bottom 30% of *Market-to-Book*, whereas we observe no increase in trading following bus tours for firms in the top 30% of *Market-to-Book*. In contrast, the trading volume increase following investor conference tends to increase with *Market-to-Book*, which is consistent with investor conferences' emphasis on growth firms (see Table 3). These findings reinforce the evidence from the determinants analysis (Table 3) and further suggest that bus tours are a distinct corporate access event that is especially valuable for firms with higher levels of tangible assets and lower market-to-book ratios.

4. Bus tours and sell-side analyst research

The previous section shows that bus tours significantly increase trading volume, which is consistent with the view that these events generate trade ideas that are implemented by participating institutions. If analysts also acquire useful information during bus tours, they may update their forecasts soon after the event, and these updated forecasts might also be more accurate.

4.1. Bus Tours and forecast revision frequency

During bus tours, analysts can acquire information from seeing the facilities and production processes, talking to managers and lower-level employees, and having discussions with institutional investors. Given all this potential information, it seems likely that hosting analysts will be more likely to update their forecasts for the company's earnings in the period following the bus tour relative to others covering the same firm.

Many analysts covering a firm issue forecast revisions following major information events such as earnings announcements. To focus on more discretionary revisions that are likely driven by private information, we focus on annual earnings forecast revisions that do not coincide with other major information events. Specifically, following Loh and Stulz (2009) and Bradley et al. (2014), we eliminate forecast revisions that fall in the three-day window around quarterly earnings dates or earnings guidance, and we remove firm-days with multiple forecast revisions. Since analysts can acquire information that is value-relevant for both short-term and long-term profitability, we include all annual earnings forecasts for horizons ranging from one to three years.¹⁵

We aggregate observations to the analyst-firm-week level. The sample consists of all analyst-firm-weeks where the analyst covers the firm in the given week, where coverage is defined as the analyst having issued a forecast for the firm at some point during the previous 12 months. We then estimate the following linear probability model:

$$Revision_{jit} = \beta_1 Bus_{jit,t-1} + \beta_2 NDR_{jit,t-1} + \beta_3 Conf_{jit,t-1} + FE + \varepsilon_{it}$$
 (2)

The dependent variable, Revision, is an indicator equal to one if analyst j issues a revision for firm i in week t. Bus is an indicator equal to one if analyst j organizes a bus tour for firm i in either the current week or the previous week. NDR and Conf are defined analogously. FE denotes fixed effects. All specifications include firm \times week fixed effects. Thus, our identification strategy compares the

¹⁵ In unreported analysis, we find that the results are qualitatively similar across the three forecast horizons.

frequency of the hosting analyst's revision relative to other analysts covering the same firm at the same point in time. We also include analyst or analyst × firm fixed effects in some specifications.

Specification 1 of Table 6 reports the baseline results. We find that the probability the host analyst issues a revision increases by 1.33 percentage points immediately following bus tours. This represents a roughly 55% increase relative to the sample mean of (2.41%). We observe an even larger increase in revision frequency immediately following NDRs. ¹⁶ On the other hand, we find little evidence that the hosting analyst issues more forecast revisions after conferences. Specifications 2 and 3 replace *Revision*, with *Upgrade* or *Downgrade*, which are indicators equal to one if the analysts issues an upward or downward forecast revision, respectively. We find qualitatively similar results for both upgrades and downgrades, suggesting that analysts can acquire both positive and negative information during site visits. Specifications 4 and 5 augment Specification 1 by including either analyst or analyst × firm fixed effects. We continue to find very similar estimates, which alleviates the concern that analysts who host a firm on a bus tour are just generally more likely to issue forecast revisions for the firm.

Table 6

Finally, to better understand the dynamics around each investor relation event, we repeat Specification 1 after including indicators for the two weeks prior to the event [-2, -1], the event week and following week [0,1], the second and third week after the event [2,3], and the fourth and fifth week after the event [4, 5]. Figure 2 reports the results. We find some evidence of increased revisions in the two weeks prior to the NDR and conference. However, the economic magnitudes are small relative to the event-week estimates. For example, the increase in NDRs in the two weeks prior to the

¹⁶ This result is surprising because in many cases the analyst is not invited to participate in the meetings with management. In the next section, we show that revisions by the sponsoring analyst following an NDR are not more accurate, suggesting that the increase in forecast revisions is likely driven by factors unrelated to increased information acquisition.

event is roughly one-eighth of the event week increase (0.48 versus 3.35). We also do not see any significant increases for any of the three events over weeks [2, 3] or [4, 5].

4.2 Bus Tours and Analyst Accuracy

The previous section shows that host analysts are more likely to update their earnings forecasts following bus tours, presumably to reflect information gathered during the event. We next examine the quality of earnings forecasts as measured by forecast accuracy. We define the outcome variable as analyst forecast accuracy relative to all other analysts issuing forecasts for the firm in the same month as follows:

$$Rel\ Accuracy_{jith} = \frac{(AbsFE_{jith} - \overline{AbsFE}_{ith})}{MaxAbsFE_{ith} - MinAbsFE_{ith}} \times -1. \tag{3}$$

AbsFE_{ijt} is the absolute value of the forecast error (i.e., forecasted earnings minus realized earnings) of analyst j for firm i in month t for forecast horizon b, and \overline{AbsFE}_{ith} , $MaxAbsFE_{ith}$, $MinAbsFE_{ith}$ are the firm-month-horizon mean, maximum, and minimum of AbsFE, respectively. We multiply by negative 1 so that higher values indicate greater accuracy. We include annual earnings forecasts for horizons of one through three years. By focusing on relative accuracy, we control for factors that explain variation in accuracy both across firms and within firms but across months (see Clement, 1999; Hong and Kubik, 2003; and Jame, Markov, and Wolfe, 2022 for a similar approach). We exclude firmmonths with only one analyst forecast to ensure that our measure is meaningful.

We next estimate the following panel regression:

$$RelAccuracy_{jith} = \beta_1 RelBusHost_{jit} + \beta_2 RelBusHostPost_{jit} + \beta_3 RelBusHostPre_{jit} + \\ \beta_4 RelNDRHost_{jit} + \beta_5 RelNDRHostPost_{jit} + \beta_6 RelNDRHostPre_{jit} + \beta_7 RelConfHost_{jit} + \\ \beta_8 RelConfHostPost_{jit} + \beta_9 RelConfHostPre_{jit} + RelControls_{jit} + \varepsilon_{jith}. \tag{4}$$

Bus Host is an indicator equal to one if the forecast was issued by a brokerage firm that has ever hosted the firm on a bus tour, Bus Host Post is an indicator equal to one if the forecast was issued within x days following the broker attending a bus tour for the firm, and Bus Host Pre is an indicator equal to one if the forecast was issued in the x days prior to the host attending the bus tour. We consider three different horizons for x: 10 days, 90 days, and 180 days. The advantage of the short (i.e., 10 day) horizon is that forecasts made very shortly following the event are most likely to capture information directly acquired at the event. On the other hand, information acquired during events may provide valuable context that allows analysts to better interpret subsequent news releases over longer horizons. Further expanding the window over longer horizons results in a much larger sample of forecasts.

We benchmark bus tours with NDRs (NDRhost) and broker-hosted conferences (Confhost), and we include analogous pre- and post-measures for both NDRs and conferences. Finally, the set of controls are taken from Clement (1999) and include the following variables: the number of years the analyst has covered the firm (Firm Experience), the number of years the analyst has covered any firm (General Experience), the total number of firms and industries covered by the analyst (Firms Followed and Industries Followed), the total number of employees working for the brokerage firm (Broker Size), and the difference in days between the date of the forecast and the date of the earnings announcement (Forecast Age). We convert all independent variables to relative measures by subtracting the firmmonth-horizon mean, and for continuous variables, scaling by the difference between the firmquarter-horizon maximum and minimum. Standard errors are clustered by firm and month.

Insert Table 7

Specifications 1 through 3 of Table 7 present the results where the pre- and post-event windows are set to 10 days, 90 days, and 180 days around the event. We find that the coefficients on *RelBusHost* is positive and significant. More interestingly, the coefficient on *RelBusHostPost* is positive

in all three specifications ranging from 2.18% for the 10-day horizon to 0.90% for the 180-day horizon, with the latter estimate being reliably different from zero. In specifications 4, 5, and 6, we augment model 3 by including brokerage house fixed effects, analyst fixed effects, and analyst \times firm fixed effects, respectively. The point estimates on *RelBusHostPost* remain similar and the estimates are always reliably different from zero at a 10% significance level. In contrast, across all six specifications the estimates on *RelBusHostPre* are always statistically insignificant and economically small with estimates ranging from (-0.35% to -0.31%). The sharp contrast between pre-event and post-event informativeness is consistent with analysts acquiring valuable information during the bus tours that allow them to subsequently issue more accurate research.

Our interview with a senior buy-side analyst revealed that sell-side analysts generally do not attend the private meetings between the buy-side and firm management during NDRs. Thus, we expect that sell-side analysts' ability to acquire value-relevant information during NDRs should be relatively limited. Consistent with this view, across all six specifications, we find that the coefficient on *RelNDRHostPost* is never significantly different from zero. Below the regression estimates, we also formally test whether the coefficient on *RelBusHostPost* and *RelNDRHostPost* are different from each other. We find that the estimate on *RelBusHostPost* is significantly greater than the estimate on *RelNDRHostPost* at a 5% level in three of the six specifications and is significantly greater at a 10% level in all six specifications.

Consistent with Green et al. (2014a), we find that conference hosts tend to issue more accurate research following the conference. The point estimates on *RelConfHostPost* are, however, consistently smaller than the estimates on *RelBusHostPost*. On average, the point estimates suggest that the improvements in accuracy following bus tours are roughly three times as large as the improvements following conferences, although the difference in the coefficients is only reliably different from zero at a 10% significance level in two of the six specifications. Nevertheless, the differences in the

magnitude of the estimates point to the possibility that bus tours are a particularly valuable source of information acquisition for the hosting analyst.

4.3 Bus Tours and Analyst Accuracy - Cross Sectional Patterns

The findings from Table 5 suggest that investors glean more information from firms with more tangible assets and lower market-to-book ratios. In this section, we explore whether these patterns extend to the hosting analyst accuracy advantage. Like Table 5, we sort all firms into three groups based on *Intragibles* or market-to-book ratios. We then repeat Specification 6 of Table 7 for firms in the bottom 30%, middle 40%, and top 30% of intangibles or market-to-book ratios.

Table 8, structured identically to Table 5, reports the results for key estimates. Panel B of Table 8 suggests that the information advantage of hosting analysts following bus tours is concentrated in firms with more tangible assets. For example, the point estimate on *Bus Host Post* for firms in the bottom 30% of intangibles is statistically significant at 1.30%. In contrast, the estimate for firms in the top 30% of intangibles is statistically insignificant at -0.16%. The market-to-book sorts, reported in Panel C, offer somewhat stronger evidence. Specifically, the point estimate on *Bus Host Post* for firms in the bottom 30% of market-to-book is 1.95%. The estimate is statistically significant, and it is also significantly greater than the corresponding estimate for *NDR Host Post* and *Conference Host Post*. In contrast, *Bus Host Post* is economically small and statistically insignificant among firms in the middle 40% of top 30% of market-to-book ratios. Overall, these findings are consistent with the trading volume results reported in Table 5, and further suggest that bus tours are particularly informative for firms with greater tangibles assets and lower market-to-book ratios.

Insert Table 8

4.4 Bus Tours and Analyst Bias

A large literature documents that sell-side analysts issue biased research due to various conflicts of interest (see Mehran and Stulz [2007] for a review). For example, prior work finds that analysts

issue overly optimistic in the hopes of winning investment banking business (Michael and Womack, 1999). In response to this conflict, regulators issued the Global Settlement which, among other things, prohibited analyst compensation from being explicitly tied to investment banking business.

Post-settlement, research departments placed more emphasis on concierge services that their clients find valuable. These corporate access events create a very similar source of conflicts of interest, but they are not regulated under the Global Settlement or other regulations. ¹⁷ In particular, organizing corporate access events are a strong driver of broker votes, which are a critical determinants of brokerage commissions and ultimately sell-side analyst compensation (Maber, Groysberg, and Healy 2014). Thus, the possibility of participating in corporate access events creates a strong incentive for analysts to issue overly optimistic research to curry favor with management.

Consistent with these incentives, Bradley, Jame, and Williams (2022) find that NDR host analysts' recommendations display bias. We examine if this bias is also pervasive for analysts who host bus tours. Note that unlike NDRs that focus on a single firm, bus tours are more like conferences in that many firms are visited on a tour. Recall from Table 1, about 6 firms on average are visited, and the host analyst covers roughly 75% of the firms. If bias is detected, it is likely to be a smaller magnitude relative to NDRs because a typical tour would represent a significant proportion of an analysts' coverage universe. In other words, while it is relatively easy for an analyst to issue a "Strong Buy" for one NDR firm, it is much more difficult to issue a "Strong Buy" for six firms that the broker will visit on a bus tour without losing credibility.

To test these predictions, we follow Bradley, Jame and Williams (2022) and estimate the following panel regression:

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¹⁷ Effective October 2000, Regulation Fair Disclosure (Reg FD) prohibits material information from being shared with select investors or analysts without simultaneous public disclosure. Private meetings between management and investors are permissible as long as no private material information is disclosed. For evidence on Reg FD, see Gintschel and Markov (2004), Heflin, Subramanyam, and Zhang (2003), and Kross and Suk (2012).

Optimis $m_{jit} = \beta_1 Bus \beta_{jit} + \beta_2 NDR \beta_{jit} + \beta_3 Conf \beta_{jit} + \beta_4 Affiliated \beta_{jit} + \beta_5 Controls + FE + \epsilon_{jit}$. (5) In Specification 1, Optimis m_{jit} is the Rev Level, i.e., the analyst's current recommendation converted to a numeric value using the following scale: 1=strong buy, 2=buy, 3=hold, 4=sell/underperform, and 5=strong sell. In Specification 2, Optimis m_{jit} is the Target Return, i.e., the 12-month expected return (excluding dividends) implied from broker j's most recent 12-month price forecast of firm i as of month t, computed as (Forecast Price_{jit}/Price_{jit})-1. The main variable of interest is $Bus \beta_s$, an indicator equal to one if the brokerage firm will visit the firm on a bus tour in the subsequent 3 months. We include $NDR \beta_s$ and $Conf \beta_s$, defined analogously, and $Affiliated \beta_s$ is an indicator variable equal to one if the firm will become an investment banking client of the firm in the next three months. The set of controls, also taken from Bradley, Jame, and Williams (2022), include Firm Experience, General Experience, Broker Size, Firms Followed, and All Star, all defined in the appendix. All specifications include firm-month fixed effects, and standard errors are clustered by firm and month. All continuous

Table 9 reports the results. Consistent with Bradley, Jame and Williams (2022) we find that NDRs are associated with significantly more optimistic research. The coefficients in Specification 1 implies that NDRs are associated with a 0.29 decline in the recommendation level (where lower values reflect more optimistic recommendation). The coefficients on *Conf* and *Bus* are both negative and statistically significant. However, the magnitude of the bias is smaller which is consistent with our conjecture that the number of firms attending the concierge event will attenuate the average bias for a given firm. In particular, the coefficient on *Bus* is roughly half of that on NDR (-0.13) and the coefficient on *Conf* is roughly one-fourth (-0.06). We generally observe qualitatively similar patterns using target returns, although the magnitude of optimism preceding bus tours is more modest.

variables are standardized to have mean zero and unit variance.

Insert Table 9

Although we document that host analysts issue significantly more optimistic recommendations, this does not necessarily imply that their research is intentionally biased. They may choose to include firms in corporate access events that they genuinely believe have the most favorable future prospects. Malmendier and Shanthikumar (2014) offer a potential solution to this self-selection problem. They argue that if analysts are genuine in their optimism, this optimism should also be present in their earnings forecasts. However, if they are strategically issuing biased research, they would be optimistic in their recommendations, but *pessimistic* in the short-term earnings forecasts. This strategy caters to management because pessimistic forecasts allow management a better opportunity to meet or beat EPS consensus benchmarks.

In Specifications 3 and 4, we examine the pessimism of analysts' earnings forecasts. In Specification 3 the dependent variable is *MBE*, an indicator for whether the firm beats the analyst's most recent quarterly earnings forecast, and in Specification 4 the dependent variable is *Relative Earnings Pessimism*, defined as [(Rank -1) / (Number of analysts – 1)], where Rank is a descending rank of each analysts' quarterly earnings forecast, which is scaled by the number of analysts issuing forecasts. Thus, higher values of both measures imply greater pessimism. Consistent with Bradley, Jame, and Williams (2022), NDR host analysts, and to a lesser extent conference hosting analysts, issue more pessimistic quarterly earnings forecasts. Interestingly, bus tour forecasts are also more pessimistic, and the magnitudes are larger than the corresponding estimates for NDRs and conferences.

Collectively, the results from this section are consistent with the view that host analysts organizing NDRs and bus tour analysts issue overly optimistic recommendations and simultaneous pessimistic earnings forecasts. Note that while affiliated analysts display some weak evidence of optimistic recommendations, their earnings forecasts are not pessimistically biased. Thus, our evidence suggests that while the Global Settlement may have been effective in curbing investment banking

analyst bias, analysts simply substituted from banking bias to corporate access bias. That is, sell-side analysts still issue biased research to curry favor with management in hopes that this increases the likelihood that management will participate in one of their profitable concierge services.

5. Conclusion

Bus tours are a vital corporate access event that analysts arrange for their institutional clients. Yet, despite their importance to both the sell-side and buy-side, they have received very little attention from financial and accounting researchers. To the best of our knowledge, we provide the first empirical examination of these events. In doing so, we compare and contrast them to the two other most important and frequent management access events organized by analysts – non-deal road shows (NDRs) and broker-hosted conferences.

Relative to NDRs and investor conferences, bus tours place much greater on firms with more tangible assets and lower market-to-book ratios. We also find that trading volume and both the frequency and accuracy of hosting analysts' earnings forecasts increase following the tour, and our results are consistently stronger among firms with more tangible assets and lower market-to-book ratios. Our findings suggest that bus tours are a distinct disclosure mechanism and serve as an important information acquisition activity for investors and sell-side analysts, particularly among firms where the benefits of observing a firm's operations are likely to be largest. However, we also find that bus tour analysts (like NDR analysts) issue significantly more optimistic investment recommendations coupled with more beatable earnings forecast, which is consistent with analysts issuing strategically biased forecasts with the hopes of gaining increased access to management.

Our paper highlights a new corporate access event that has important implications for capital markets and analyst research. From the brokers' perspective, as research continues to come under

intense pressure to sustain profitability, corporate access events have become an increasingly important part of an analysts' job function as institutions find them highly valuable and are willing to pay for them. From a regulatory perspective, while private meetings with management are allowed under current regulations (assuming non-material private information is not divulged), institutions significantly trade after these events suggesting that they find the information valuable – information the retail investors likely do not have access to. In addition, while existing regulations, such as the Globel Settlement, aim to minimize conflicts of interest stemming from investment banking relationships, these rules do not extend to corporate access events. Our evidence suggests that these events are a pervasive source of analyst bias, raising the important question of whether regulations aimed at minimizing analyst conflict of interest need to be extended to cover concierge services.

References

- Bradley, D., Clarke, J., Lee, S., & Ornthanalai, C., 2014. Are analysts' recommendations informative? Intraday evidence on the impact of time stamp delays. *The Journal of Finance* 69(2), 645-673.
- Bradley, D., Gokkaya, S., & Liu, X., 2020. Ties that bind: The value of professional connections to sell-side analysts. *Management Science* 66(9), 4118-4151.
- Bradley, D., Jame, R., & Williams, J., 2022. Non-Deal Roadshows, Informed Trading, and Analyst Conflicts of Interest. *The Journal of Finance* 77(1), 265-315.
- Bradley, D., Jordan, B., and Ritter, J., 2003. The quiet period goes out with a bang. *The Journal of Finance* 58(1), 1-36.
- Brown, L., Call, A., Clement, M. and Sharp, N., 2015. Inside the "black box" of sell-side financial analysts. *Journal of Accounting Research* 53(1), 1-47.
- Bushee, B.J., Jung, M.J. and Miller, G.S., 2011. Conference presentations and the disclosure milieu. *Journal of Accounting Research* 49(5), 1163-1192.
- Cheng, Q., Du, F., Wang, X., & Wang, Y., 2016. Seeing is believing: Analysts' corporate site visits. Review of Accounting Studies 21, 1245-1286.
- Cheng, Q., Du, F., Wang, B. Y., & Wang, X., 2019. Do corporate site visits impact stock prices? *Contemporary Accounting Research* 36(1), 359-388.
- Clement, M., 1999. Analyst forecast accuracy. Do ability, resources, and portfolio complexity matter? *Journal of Accounting and Economics* 27 (3), 285-303.
- Cohen, L., Frazzini, A., & Malloy, C., 2010. Sell-side school ties. The Journal of Finance 65(4), 1409-1437.
- Corwin, S. A., Larocque, S. A., & Stegemoller, M. A., 2017. Investment banking relationships and analyst affiliation bias: The impact of the global settlement on sanctioned and non-sanctioned banks. *Journal of Financial Economics* 124(3), 614-631.
- Gintschel, A., & Markov, S., 2004. The effectiveness of Regulation FD. *Journal of Accounting and Economics* 37(3), 293-314.
- Green, T. C., Jame, R., Markov, S., & Subasi, M., 2014a. Access to management and the informativeness of analyst research. *Journal of Financial Economics* 114(2), 239-255.
- Green, T. C., Jame, R., Markov, S., & Subasi, M. 2014b. Broker-hosted investor conferences. *Journal of Accounting and Economics* 58(1), 142-166.

- Groysberg, B., Healy, P. M., & Maber, D. A., 2011. What drives sell-side analyst compensation at high-status investment banks? *Journal of Accounting Research* 49(4), 969-1000.
- Han, B., Kong, D., & Liu, S., 2018. Do analysts gain an informational advantage by visiting listed companies? *Contemporary Accounting Research* 35(4), 1843-1867.
- Harford, J., Jiang, F., Wang, R., & Xie, F., 2019. Analyst career concerns, effort allocation, and firms' information environment. *The Review of Financial Studies* 32(6), 2179-2224.
- Heflin, F., Subramanyam, K. R., & Zhang, Y., 2003. Regulation FD and the financial information environment: Early evidence. *The Accounting Review* 78(1), 1-37.
- Hong, H., and Kubik, J., 2003. Analyzing the analysts: Career concerns and biased earnings forecasts. *Journal of Finance* 58 (1), 313-351.
- Jame R., Markov, S., and Wolfe, M., 2022. Can fintech competition improve sell-side research quality? *The Accounting Review* 97(4), 287-316.
- Kadan, O., Madureira, L., Wang, R., & Zach, T. (2008). Conflicts of interest and stock recommendations: The effects of the global settlement and related regulations. *The Review of Financial Studies* 22(10), 4189-4217.
- Kirk, M. and Markov, S., 2016. Come on over: Analyst/investor days as a disclosure medium. *The Accounting Review 91 (6)*, 1725-1750.
- Kross, W. J., & Suk, I, 2012. Does Regulation FD work? Evidence from analysts' reliance on public disclosure. *Journal of Accounting and Economics* 53(1-2), 225-248.
- Lin, H. and McNichols, M., 1998. Underwriting relationships, analysts' earnings forecasts and investment recommendations. *Journal of Accounting and Economics* 25(1), 101-127.
- Loh, R. K., & Mian, G. M., 2006. Do accurate earnings forecasts facilitate superior investment recommendations? *Journal of Financial Economics* 80(2), 455-483.
- Loh, R. K., & Stulz, R. M., 2011. When are analyst recommendation changes influential? *The Review of Financial Studies*, 24(2), 593-627.
- Maber, D. Groysberg, B., and Healy, M., 2014. The use of broker votes to reward brokerage firms' and their analysts' research activities. Working paper.
- Malmendier, U., & Shanthikumar, D., 2014. Do security analysts speak in two tongues? *The Review of Financial Studies* 27(5), 1287-1322.
- Mehran, H. and Stulz, R.M., 2007. The economics of conflicts of interest in financial institutions. *Journal of Financial Economics* 85(2), 267-296.
- Michaely, R., and Womack, K., 1999. Conflict of interest and the credibility of underwriter analyst recommendations. *Review of Financial Studies* 12(4), 653–686.

- Solomon, D., and Soltes, E., 2015. What are we meeting for? The consequences of private meetings with investors. *Journal of Law and Economics* 58(2), 325-355.
- Soltes, E. 2014. Private interaction between firm management and sell-side analysts. *Journal of Accounting Research* 52(1), 245-272.
- Yang, J., Lu, J., & Xiang, C. (2020). Do disclosures of selective access improve market information acquisition fairness? Evidence from company visits in China. *Journal of Corporate Finance*, 64, 101631.

Appendix A: Variable Definitions

A.1 Determinants and Firm Characteristics (Table 3)

- Bus Dummy: an indicator equal to one if any broker visited the firm on a bus tour during the month and zero otherwise. (Source: FLY.)
- NDR Dummy: an indicator equal to one if any broker organized a non-deal roadshow for the firm during the month and zero otherwise. (Source: FLY.)
- *Conf Dummy:* an indicator equal to one if the firm attended any broker-hosted conferences during the month, and zero otherwise. (Source: FLY.)
- *Intangibles*: recognized intangibles (33) divided by total assets (6) Winsorized at the 99th percentile. (Source: Compustat.)
- *Market-to-Book* (*MB*): the market-to-book ratio computed as the market capitalization at the end of the calendar year scaled by book value of equity during year *t-1*. Positive values are winsorized at the 99th percentile. Negative values are set equal to zero and we include a corresponding negative book value indicator (*Negative Book*, often untabulated). (Source: CRSP/Compustat.)
- (R&D + ADV)/OE: R&D expense (46) plus advertising expense (45) divided by total operating expenses. Missing values of R&D and advertisting are set equal to zero. Winsorized at the 99th percentile. (Source: Compustat.)
- *Idiosyncratic Risk:* the square root of the mean squared residual from an annual regression of a firm's daily returns on the market (value-weighted CRSP index) returns. (Source: CRSP.)
- Institutional Ownership: the percentage of the firm's shares held by institutions at year end. Winsorized at 100%. (Source: Thomson Reuters S34.)
- Firm Age: the number of years since the firm first appeared on CRSP. (Source: CRSP).
- *Net Shares*: the natural log of the ratio of the split-adjusted shares outstanding at the fiscal year end in *t-1* divided by the split-adjusted shares outstanding at the fiscal year end in *t-2*. (Source: Compustat.)
- *SEO*: a dummy variable equal to one if a firm will issue a seasoned equity offering in the next two years. (Source: SDC.)
- *M&A Acquirer*: a dummy variable equal to one if a firm announces the acquisition of another firm in the next two years (Source: SDC.)
- Coverage: the number of analysts issuing earnings forecasts for firm i during quarter t.
- # *Institutions*: the number of institutions holding firm shares at year end. (Source: Thomson Reuters S34.)
- *Firm Size*: the market capitalization computed as share price times total shares outstanding at the end of June (Source: CRSP.)
- *Turnover*: the average daily turnover (i.e., share volume scaled by shares outstanding) over all trading days in the year. Winsorized at 99th percentile. (Source: CRSP.)
- R-squared: the r-squared from an annual regression of a firm's daily returns on the market (value-weighted CRSP index) returns. Winsorized at the 99th percentile. (Source: CRSP.)
- *Ret (m-1):* the return in the prior month. (Source: CRSP.)

- Ret (m-12, m-2): the return in the prior two to twelve months. (Source: CRSP.)
- Ret (m-7, m-2): the return in the prior two to seven months. (Source: CRSP).
- *Ret (w-1):* the return in the prior week (Source: CRSP).
- Vol: the standard deviation of daily returns over the prior calendar year (Source: CRSP).
- *Book-to-Market (BM):* the book-to-market ratio computed as the book value of equity during year *t-1* scaled by the market capitalization at the end of the calendar year. Positive values are winsorized at the 99th percentile. Negative values are set equal to zero and we include a corresponding negative book value indicator (untabulated). (Source: CRSP/Compustat.)

A.2 Trading Volume (Tables 4 and 5 and Figure 1)

- *Turnover:* trading volume divided by the total number of shares outstanding and annualized by multiplying by 250. This measure is winsorized at the 99th percentile. (Source: CRSP.)
- Lag Turnover (1 yr): the average value of Turnover estimated over the prior calendar year. (Source: CRSP.)
- Lag Turnover (1 qtr): the average value of Turnover estimated over the prior calendar quarter. (Source: CRSP.)
- Bus Event: an indicator equal to one if the given day is within a five-day trading window around a bus tour [-5, +5]. (Source: FLY and Bloomberg Corporate Events Database.)
 - o NDR event and Conf event are defined analogously.
- Bus Event × Post: an indicator equal to one if the given day is within a five-day trading window following a bus tour [0, +5]. (Source: FLY and Bloomberg Corporate Events Database).
 - \circ NDR Event \times Post and Conf Event \times Post are defined analogously.

A.3 Forecast Revision Frequency (Figure 2 and Table 6)

- Revision: an indicator equal to one if a given analyst issued earnings forecast revision for a firm during a calendar week. We include annual earnings forecast revisions for horizons of one to three years (i.e., FPI =1, FPI =2, or FPI =3).
 - O This measure excludes revisions that fall in the three-day window around quarterly earnings dates or earnings guidance, and revisions that are issued on the same day as another analyst's revision.
- Bus: an indicator equal to one if a given analysts organized a bus tour for a firm in either the current week or the previous week.
 - o Conf and NDR are defined analogously.

A.4 Forecast Accuracy (Tables 7 and 8)

* Below, we report the definition for the original variable (e.g., accuracy). All variables in this section are converted to relative measures (e.g., relative accuracy) by comparing the measure for a given analyst to the same measure for analysts issuing forecasts for the same firm (i), in the same month (t), for the same forecast horizon (h). All measured are converted to relative measures by subtracting the firm-quarter-horizon mean, and for continuous variables, scaling by the difference between the firm-month-horizon maximum and minimum.

- Accuracy: the absolute forecast error multiplied by negative one, where forecast error is computed as the difference between the forecasted earnings and the realized earnings. (Source: I/B/E/S.)
- Bus Host: an indicator equal to one if the forecast was issued by a brokerage firm that has ever visited the firm on a bus tour. (Source: I/B/E/S and FLY.)
 - o *Bus Host Post*: an indicator equal to one if the forecast was issued by a brokerage firm that has visited the firm on a bus tour in the past x days, where we set x equal to either 10 days, 90 days, or 180 days.
 - o *Bus Host Pre*: an indicator equal to one if the forecast was issued by a brokerage firm that will visit the firm on a bus tour in the next x days, where we set x equal to either 10 days, 90 days, or 180 days.
- NDR Host: an indicator equal to one if the forecast was issued by a brokerage firm that has ever organized an NDR for the firm. (Source: I/B/E/S and FLY.)
 - o NDR Host Post: an indicator equal to one if the forecast was issued by a brokerage firm that has organized an NDR for the firm in the past x days, where we set x equal to either 10 days, 90 days, or 180 days.
 - o NDR Host Pre: an indicator equal to one if the forecast was issued by a brokerage firm that will organize an NDR for the firm in the next x days, where we set x equal to either 10 days, 90 days, or 180 days.
- Conf Host: an indicator equal to one if the forecast was issued by a brokerage firm that has ever organized an NDR for the firm. (Source: I/B/E/S and Bloomberg Corporate Events Database.)
 - O Conf Host Post: an indicator equal to one if the forecast was issued by a brokerage firm that has hosted the firm at an investor conference in the past x days, where we set x equal to either 10 days, 90 days, or 180 days.
 - O Conf Host Pre: an indicator equal to one if the forecast was issued by a brokerage firm that will host the firm at an investor conference in the next x days, where we set x equal to either 10 days, 90 days, or 180 days.
- Forecast Age: the difference in calendar days between the issuance of the forecast and the earnings announcement date. (Source: I/B/E/S.)
- Firm Experience: the number of years since analyst j first issued earnings forecasts for firm i. (Source: I/B/E/S.)
- General Experience: the number of years since analyst j first issued earnings forecasts for any firm. (Source: I/B/E/S.)
- Firms Followed: the number of firms followed by analyst j in year t. (Source: I/B/E/S.)
- Industries Followed: the number of two-digit SICs followed by analyst j in year t (Source: I/B/E/S.)
- *Broker Size:* the total number of analysts issuing earnings forecasts for brokerage firm *j* during year *t.* (Source: I/B/E/S.)

A.5 Research Bias (Table 8)

• Rev Level: the most recent outstanding recommendation of broker j for firm i in month t. If the brokerage firm j has not issued a recommendation for firm i in the previous 24 months,

- we set the value to missing. Recommendations are converted to numeric values using the following scale: 1 for strong buy, 2 for buy, 3 for hold, 4 for sell/underperform, and 5 for strong sell. (Source: I/B/E/S.)
- Target Return: the 12-month expected return (excluding dividends) implied from broker j's most recent price forecast of firm i as of month t, computed as (Forecast Price_{jit}/Price_{it-1}) -1. The sample is limited to 12-month ahead forecasts. If the brokerage firm j has not issued a target price for firm i in the previous 24 months, we set the value to missing. We winsorize at the 1st and 99th percentile. (Source: I/B/E/S.)
- Meet or Beat Earnings (MBE): a dummy variable equal to one if firm i's realized quarterly earnings are greater than analyst j's most recent quarterly earnings forecast for firm i as of month t. (Source: I/B/E/S.)
- Relative Earnings Pessimism: [(Rank 1)/ (Number of Analysts -1)]. Rank is the rank of the analyst's forecasted earnings estimate, with the highest estimate value being given a ranking of 1, the second highest estimate is given a rank of 2, etc., and Number of Analysts is the number of analysts issuing a forecast for the firm-quarter. (Source: I/B/E/S.)
- Bus3: an indicator variable equal to one if broker j will visit firm i on a bus tour in the subsequent three months (i.e., t through t+2), and zero otherwise. (Source: FLY.)
- *NDR3*: an indicator variable equal to one if broker *j* will take firm *i* on an NDR in the subsequent three months (i.e., t through t+2), and zero otherwise. (Source: *FLY*.)
- *Conf3*: an indicator variable equal to one if broker *j* will host firm *i* at one of its investor conferences over the next three months (i.e., t through t+2), and zero otherwise. (Source: Bloomberg Corporate Events Database.)
- *Affiliated3:* a dummy variable equal to one if broker *j* will be a lead underwriter for firm *i* for an equity (i.e., SEO) offering or debt offering, or will be lead advisor on an M&A in the next three months, and zero otherwise. (Source: SDC.)
- *Broker Size:* the total number of analysts issuing earnings forecasts for brokerage firm *j* during year *t.* (Source: I/B/E/S.)
- Firm Experience: the number of years since analyst j first issued earnings forecasts for firm i. (Source: I/B/E/S.)
- General Experience: the number of years since analyst j first issued earnings forecasts for any firm. (Source: I/B/E/S.)
- Firms Followed: the number of firms followed by analyst j in year t. (Source: I/B/E/S.)
- *All-Star*: a dummy variable equal to one if analyst *j* is ranked as an All-American (first, second, third, or runner-up) in the annual polls. (Source: *Institutional Investor Magazine*.

Table 1: Descriptive Statistics

This table reports summary statistics for the sample of bus tours, non-deal roadshows (NDRs), and investor conferences from January 2013 to December 2019. Data on bus tours and non-deal roadshows is collected from TheFlyontheWall.com (FLY) and data on investor conferences is collected from Bloomberg. The sample is limited to common stocks and to events hosted by brokerage firms that report to the I/B/E/S database. In Panel A, *Broker-Firm-Days* reports the total number of unique broker-firm-date triples (i.e., JP Morgan, Apple, 1/3/2013). *Firms* report the unique number of firms and *Brokers* report the unique number of Brokers. *Unique Events* reports the number of distinct events (i.e., Credit Suisse's Bay Area Bus Tour). *Firms per Event* reports the average number of firms at each unique event, and % *Coverage by Broker* reports the percentage of firms at the event that are covered by the sponsoring brokerage firm. Panel B reports the frequency of *Broker-Firm-Days* by the location of the event.

Panel A: Summary Statics by Investor Relation Event						
	Bus Tours	NDRs	Investor Conferences			
Broker-Firm-Days	4,457	38,442	54,406			
Firms	1,395	3,514	4,067			
Brokers	59	83	93			
Unique Events	733	28,013	2,675			
Firms per Event	6.08	1.00	20.34			
% Covered by Broker	83.85%	90.91%	74.54%			

Panel B: Location Frequency by Investor Relation Event						
	Bus Tours	NDRs	Investor Conferences			
NY/NJ/CT	5.99%	23.67%	40.11%			
California	39.04%	15.41%	15.98%			
Texas/OK	16.66%	5.20%	1.78%			
Illinois	3.85%	7.38%	5.24%			
New England	5.01%	14.16%	9.62%			
Mid-Atlantic	3.74%	4.83%	3.14%			
Southeast	11.52%	1.75%	9.72%			
Midwest	7.03%	12.76%	0.73%			
Southwest	2.89%	0.31%	6.09%			
Northwest	2.51%	4.07%	1.47%			
International	1.76%	8.53%	5.89%			

Table 2: Industry-Level Intangibles and Investor Relations Activity

This table reports industry averages of several variables, where industries are defined using the Fama-French 10-industry classification. The unit of observation is a firm-month. *Intangibles* is defined as recognized intangibles including goodwill divided by operating assets. *Market-to-book ratio* is the market capitalization at the end of the calendar year scaled by book value of equity during year *t-1*. We winsorize *intangibles* and *market-to-book* at the 99th percentile, and we omit negative values of *market-to-book*. *Bus Dummy* is an indicator equal to one if any broker visited the firm on bus tour during the month and zero otherwise. *NDR Dummy* and *Conf Dummy* are defined analogously. *Bus Ratio* is computed as *Bus Dummy* / (*Bus Dummy* + *NDR Dummy* + *Conf Dummy*).

·	Obs.	Intangibles	Market-to-Book	Bus Dummy	NDR Dummy	Conf Dummy	Bus Ratio
Telecom	7,593	34.10%	2.96	0.87%	8.61%	23.35%	2.65%
Nondurables	12,573	24.22%	3.17	0.55%	6.92%	8.47%	3.44%
Hi-Tec	41,963	21.56%	3.54	2.22%	10.99%	22.74%	6.18%
Manufacturing	29,807	20.24%	2.96	0.97%	8.52%	15.89%	3.83%
Healthcare	26,690	17.90%	4.34	1.58%	8.73%	27.97%	4.12%
Durables	6,016	16.13%	2.81	0.86%	7.41%	15.41%	3.65%
Shops	24,753	15.82%	3.12	1.30%	9.16%	12.77%	5.62%
Other	126,315	11.98%	2.70	1.36%	7.05%	15.51%	5.69%
Utilities	6,765	6.17%	2.12	0.46%	5.74%	10.41%	2.76%
Energy	11,574	3.46%	2.04	2.97%	6.60%	19.29%	10.30%
All Industries	294,049	15.76%	2.97	1.45%	8.08%	17.41%	5.38%
Correlation with Intangibles				-36.83%	54.38%	27.30%	-55.49%
Correlation with Market-to-book				-0.77%	68.46%	54.70%	-46.79%

Table 3. Determinants of Corporate Access Events

This table reports estimates from linear probability models. The dependent variable is an indicator equal to one if a firm conducts a specific type of investor relation activity during the calendar month. For example, Bus Dummy, is an indicator equal to one if any broker visits the firm on a bus tour during the month and zero otherwise, and NDR Dummy and Conf Dummy are defined analogously. All independent variables are defined in Appendix A. All continuous variables are standardized to have mean zero and unit variance. Standard errors are double-clustered by firm and month, and t-statistics are reported in parentheses. The sample includes all common stocks with non-missing data for all of the independent variables (N = 275,440 firm-months).

	Bus Dummy	NDR Dummy	Conf Dummy	Bus Dummy	NDR Dummy	Conf Dummy
	[1]	[2]	[3]	[4]	[5]	[6]
Intangibles	-0.30%	1.07%	1.12%	-0.32%	0.90%	0.80%
	(-5.25)	(7.47)	(4.10)	(-5.44)	(6.46)	(3.19)
Log (MB)	0.04%	1.55%	1.71%	0.03%	1.43%	1.56%
	(0.35)	(6.80)	(3.53)	(0.28)	(6.37)	(3.36)
Negative Book	-0.42%	4.45%	5.83%	-0.43%	4.03%	5.17%
	(-0.92)	(4.65)	(2.76)	(-0.98)	(4.26)	(2.54)
$(R \mathcal{O}D + ADV)/OE$	0.12%	0.82%	5.09%	-0.01%	0.53%	4.05%
	(1.54)	(6.11)	(12.09)	(-0.12)	(3.48)	(10.62)
Idiosyncratic Risk	0.18%	-0.04%	1.45%	0.14%	0.03%	1.20%
	(2.34)	(-0.23)	(4.09)	(2.00)	(0.17)	(3.55)
Institutional Ownership	-0.06%	1.61%	2.99%	-0.08%	1.56%	2.96%
•	(-0.66)	(6.94)	(7.16)	(-0.88)	(6.71)	(7.40)
Log (Firm Age)	-0.19%	-0.06%	-0.84%	-0.18%	-0.16%	-0.98%
	(-3.18)	(-0.47)	(-3.67)	(-2.81)	(-1.12)	(-4.06)
Net Shares	0.20%	0.10%	0.64%	0.26%	0.34%	0.54%
	(1.58)	(0.34)	(1.17)	(2.16)	(1.16)	(1.00)
Log (Analyst Coverage)	1.11%	2.05%	5.45%	1.02%	2.03%	5.22%
	(10.34)	(10.03)	(10.35)	(9.82)	(9.74)	(10.51)
Log (# of Institutions)	0.03%	-0.72%	-1.10%	0.05%	-0.71%	-0.85%
	(0.35)	(-3.01)	(-2.31)	(0.59)	(-2.94)	(-1.82)
Log (Firm Size)	0.55%	1.18%	2.35%	0.64%	1.38%	2.54%
	(5.26)	(4.66)	(4.13)	(5.80)	(5.40)	(4.40)
Log (Turnover)	-0.12%	0.20%	-0.35%	-0.09%	0.20%	-0.29%
,	(-2.15)	(1.50)	(-1.24)	(-1.67)	(1.46)	(-1.07)
R-squared	0.07%	0.00%	0.17%	0.11%	0.12%	0.31%
•	(1.59)	(0.02)	(0.78)	(2.58)	(1.22)	(1.43)
Mom1	0.06%	0.40%	0.31%	0.07%	0.39%	0.31%
	(2.15)	(7.49)	(2.38)	(2.30)	(7.45)	(2.40)
Mom12	0.13%	1.01%	1.09%	0.13%	0.98%	1.05%
	(4.50)	(10.73)	(6.92)	(4.45)	(10.64)	(6.77)
SEO	0.14%	0.86%	0.78%	0.17%	1.00%	0.45%
	(1.21)	(3.05)	(1.58)	(1.42)	(3.64)	(0.95)
M&A - Acquirer	0.17%	0.52%	1.95%	0.14%	0.42%	1.86%
	(1.62)	(2.19)	(4.44)	(1.37)	(1.82)	(4.38)
Month Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	No	No	No	Yes	Yes	Yes
R-squared	2.02%	4.61%	15.40%	2.19%	4.72%	16.07%
Mean of Dep. Variable	1.46%	8.06%	17.19%	1.46%	8.08%	17.19%

Table 4: Trading Volume around Bus Tours and Other Events

This table reports estimates from the following regression:

 $Turn_{it} = \beta_1 Event_{it} + \beta_2 Event \times Post_{it} + Controls_{it} + Date_t + \varepsilon_{it}$.

Turn is the annualized daily trading turnover, defined as daily trading volume divided by the number of shares outstanding, and multiplied by 250. We winsorize daily turnover at the 99th percentile. Event is an indicator equal to one if the trading day is within five trading days of an investor relations event (i.e., days – 5 through 5), where the events include bus tours (Bus), non-deal roadshows (NDRs), and investor conferences (Conf). Event × Post is an indicator that takes the value one if the day is an event day or 5 trading days after an event (i.e., days 0 through +5). Controls include Lag turnover (1y) and Lag Turnover (1q), defined as the firm's average annualized daily turnover in the previous year and previous quarter, respectively, and Date denotes day fixed effects. The sample is restricted to firm-dates that are not within five days of an earnings announcement, and we require only one type of investor relations event during the event window. For example, when analyzing bus tours in Specification 1, we restrict the sample to dates that do not fall within the event window (5 trading days before or after) of an NDR or a conference. Below the regression estimates we also report whether the estimate on Bus Event × Post is significantly different from the estimate on NDR Event × Post and Conf Event × Post. Standard errors are clustered by firm and date, and t-statistics are reported in parentheses.

	[1]	[2]	[3]	[4]
Bus Event	1.99			2.34
	(0.79)			(0.94)
Bus Event \times Post	7.69			7.65
	(3.16)			(3.16)
NDR Event		5.71		5.74
		(5.10)		(5.12)
NDR $Event \times Post$		3.02		3.01
		(3.04)		(3.03)
Conf Event			5.75	5.83
			(6.76)	(6.84)
Conf Event \times Post			6.42	6.45
-			(8.53)	(8.59)
Lag Turnover (1 yr.)	12.99	12.78	13.08	13.00
	(18.47)	(18.64)	(18.84)	(19.04)
Lag Turnover (1 qtr.)	73.37	73.53	73.32	73.49
	(102.66)	(103.67)	(103.41)	(104.53)
Bus - NDR (Post)				4.64
				(1.78)
Bus - Conf (Post)				1.20
				(0.47)
Observations	4,160,824	4,332,900	4,588,657	4,818,394
Date FE	Yes	Yes	Yes	Yes
R-squared	44.79%	44.80%	43.37%	45.00%

Table 5: Trading Volume around Bus Tours and Other Events – Cross-Sectional Patterns

Panel B reports estimates from specification 4 of Table 4 after splitting firms into low intangibles (bottom 30%), average intangibles (middle 40%) or high intangibles (top 30%). Panel C reports analogous estimates after splitting the sample using market-to-book ratios (M/B). We report the estimates on Bus Event × Post (column 1, Post-Bus), NDR Event × Post (column 2, Post-NDR), Conf Event × Post (column 3, Post-Conf), the difference between Bus Event × Post and NDR Event × Post (column 4, Bus – NDR), and the difference between Bus Event × Post and Conf Event × Post (column 5, Bus – Conf). For reference, Panel A also reports the estimates for the full sample of firms (also reported in Specification 4 of Table 4). Standard errors are clustered by firm and date, and t-statistics are reported in parentheses.

	Post-Bus	Post NDR	Post Conf	Bus-NDR	Bus - Conf
	[1]	[2]	[3]	[4]	[5]
		Panel A: Full Sa	ample Results		
All Firms	7.65	3.01	6.45	4.64	1.20
	(3.16)	(3.03)	(8.59)	(1.78)	(0.47)
		Panel B: Sort o	n Intangibles		
Low Intangibles	16.07	3.83	6.30	12.24	9.77
	(3.14)	(1.53)	(3.49)	(2.10)	(1.78)
Average Intangibles	4.28	2.67	8.13	1.61	-3.85
	(1.28)	(1.75)	(7.19)	(0.45)	(-1.07)
High Intangibles	7.28	3.73	5.56	3.55	1.72
	(1.57)	(2.58)	(5.27)	(0.73)	(0.36)
		Panel C: Sort on	Market-to-Book		
Low M/B	21.46	3.15	2.62	18.31	18.84
	(4.05)	(1.36)	(1.53)	(3.09)	(3.36)
Average M/B	8.30	4.24	6.27	4.06	2.03
	(2.52)	(3.09)	(6.21)	(1.15)	(0.58)
High M/B	-1.85	1.78	8.45	-3.63	-10.30
	(-0.44)	(1.04)	(6.75)	(-0.80)	(-2.32)

Table 6: Forecast Revision Frequency around Bus Tours and Other Events

This table reports estimates from the following linear probability model:

 $Revision_{jit} = \beta_1 Bus_{jit,t-1} + \beta_2 NDR_{jit,t-1} + \beta_3 Conf_{jit,t-1} + FE + \varepsilon_{it}.$

Revision is an indicator equal to one if analyst j issued a revision for firm i in week t. Specifications 2 and 3 replace Revision with Upgrade and Downgrade, respectively, where Upgrade (Downgrade) is an indicator equal to one if the analysts issued an upward (downward) forecast revision, Bus is an indicator equal to one if analyst / organized a bus tour for firm i in either the current week or the previous week, and NDR and Conf are defined analogously. FE denotes firm × week fixed effects (all specifications), and analyst fixed effects (Specification 4) or analyst × firm fixed effects (Specification 5). Below the regression estimates we also report whether the estimate on Bus [0,1] is significantly different from the estimate on NDR / 0.17 (Bus – NDR), and whether the estimate on Bus / 0.17 is different from the estimate on Conf [0,1] (Bus - Conf). The sample consists of all analyst-firm-weeks where the analyst covers the firm in the given week, where coverage is defined as the analyst having issued a forecast for the firm at some point during the previous 12 months. Standard errors are clustered by firm and week, and t-statistics are reported in parentheses.

	Forecast	Upgrade	Downgrade	Forecast	Forecast
	[1]	[2]	[3]	[4]	[5]
Bus [0,1]	1.33	0.41	0.61	1.32	1.18
	(3.42)	(1.97)	(2.86)	(3.43)	(3.07)
NDR [0,1]	3.57	1.74	1.33	3.58	3.31
	(29.83)	(19.47)	(17.56)	(29.81)	(27.72)
Conf [0,1]	-0.08	0.01	-0.06	-0.06	-0.03
	(-0.91)	(0.15)	(-1.22)	(-0.78)	(-0.43)
Bus - NDR	-2.24	-1.33	-0.72	-2.26	-2.13
	(5.49)	(5.94)	(3.18)	(5.57)	(5.31)
Bus - Conf	1.41	0.40	0.67	1.38	1.21
	(3.50)	(1.97)	(3.00)	(3.47)	(3.05)
Observations	3,769,653	3,769,653	3,769,653	3,769,653	3,769,653
Firm * Week FE	Yes	Yes	Yes	Yes	Yes
Analyst FE	No	No	No	Yes	No
Analys * Firm FE	No	No	No	No	Yes
Mean Dep Variable	2.41%	1.01%	1.04%	2.41%	2.41%

Table 7: Forecast Accuracy around Bus Tours and Other Events

This table reports estimates from the following panel regression:

 $RelAccuracy_{jith} = \beta_1 RelBusHost_{jit} + \beta_2 RelBusHostPost_{jit} + \beta_3 RelBusHostPre_{jit} + \beta_4 RelNDRHost_{jit} + \beta_5 RelNDRHostPost_{jit} + \beta_6 RelNDRHostPre_{jit} + \beta_7 RelConfHost_{jit} + \beta_8 RelConfHostPost_{jit} + \beta_9 RelConfHostPre_{jit} + RelControls_{jit} + \varepsilon_{jith}.$

The sample consists of all annual forecasts for horizons of one, two, or three years (i.e., FPI = 1, FPI = 2, or FPI = 3) issued between 2013 and 2019. RelAccuracy jith is computed as the absolute forecast error of analyst j for firm i for an annual earnings forecast issued in month t for forecast horizon h less the average absolute forecast error across all analysts issuing earnings forecast for firm i in month t for horizon h, scaled by the difference between the maximum and minimum absolute forecast error across all forecasts for firm i in month t and horizon h. We multiple Rel Accuracy by negative one so that larger values correspond to more accurate forecasts. Bus Host is an indicator equal to one if the forecast revision was issued by a brokerage firm that has ever hosted the firm on a bus tour, Bus Host Post is an indicator equal to one if the forecast was issued within x days following the broker attending a bus tour, and Bus Host Pre is an indicator equal to one if the forecast was issued in the x days prior to the host attending the bus tour. We set x equal to 10 days in Specification 1, 90 days in Specification 2, and 180 days in Specifications 3 -6. NDR Host and Conf Host variables are defined analogously, and detailed variable definitions for all control variables are in Appendix A. All independent variables are relative measures computed by subtracting the firm-month-horizon mean and scaling by the firm-month-horizon range. Below the regression estimates we also report p-value testing whether the estimate Rel Bus Host Post is significantly different from the estimate on Rel NDR Host or Rel Conf Host Post. Standard errors are clustered by firm and month, and t-statistics are reported in parentheses below the corresponding coefficient estimate.

	[1]	[2]	[3]	[4]	[5]	[6]
Rel Bus Host	0.57%	0.48%	0.44%	0.06%	0.32%	0.73%
	(2.67)	(2.21)	(1.90)	(0.24)	(1.38)	(2.55)
Rel Bus Host Post	2.18%	1.06%	0.90%	1.00%	0.77%	0.84%
	(1.18)	(2.15)	(2.19)	(2.41)	(1.82)	(1.89)
Rel Bus Host Pre	-0.35%	0.31%	0.13%	0.21%	0.10%	0.30%
	(-0.28)	(0.61)	(0.27)	(0.45)	(0.21)	(0.68)
Rel NDR Host	0.29%	0.29%	0.34%	-0.02%	-0.14%	0.15%
	(2.14)	(1.98)	(2.27)	(-0.10)	(-0.86)	(0.91)
Rel NDR Host Post	-1.26%	0.19%	-0.01%	0.04%	0.03%	-0.12%
	(-1.52)	(0.89)	(-0.08)	(0.22)	(0.18)	(-0.71)
Rel NDR Host Pre	0.08%	-0.18%	-0.30%	-0.26%	-0.22%	-0.36%
	(0.15)	(-0.76)	(-1.68)	(-1.45)	(-1.24)	(-2.03)
Rel Conf Host	0.75%	0.71%	0.68%	0.41%	0.39%	0.77%
J	(5.69)	(5.33)	(4.81)	(2.83)	(2.71)	(4.60)
Rel Conf Host Post	-0.70%	0.38%	0.32%	0.30%	0.33%	0.02%
J	(-0.97)	(2.03)	(1.72)	(1.63)	(1.83)	(0.10)
Rel Conf Host Pre	0.68%	0.07%	0.07%	0.05%	0.10%	-0.21%
J	(1.83)	(0.38)	(0.40)	(0.31)	(0.60)	(-1.19)
Rel Firm Experience	0.57%	0.57%	0.57%	0.36%	0.29%	0.36%
1	(3.60)	(3.58)	(3.58)	(2.32)	(1.88)	(1.74)
Rel Gen. Experience	0.26%	0.26%	0.26%	-0.12%	0.32%	-0.08%

	(1.63)	(1.62)	(1.62)	(-0.74)	(1.42)	(-0.34)
Rel Firms Followed	0.39%	0.39%	0.39%	-0.01%	0.32%	0.03%
	(2.08)	(2.07)	(2.05)	(-0.04)	(1.53)	(0.15)
Rel Ind. Followed	-0.30%	-0.30%	-0.30%	-0.10%	0.02%	0.08%
	(-1.73)	(-1.72)	(-1.72)	(-0.58)	(0.08)	(0.38)
Relative Broker Size	0.11%	0.11%	0.11%	0.30%	0.18%	0.09%
,	(1.01)	(1.02)	(1.01)	(1.84)	(1.50)	(0.76)
Relative Forecast Age	-8.25%	-8.25%	-8.25%	-8.36%	-8.53%	-8.88%
	(-14.44)	(-14.43)	(-14.44)	(-14.71)	(-15.10)	(-15.81)
Bus Post – NDR Post	3.44%	0.87%	0.91%	0.96%	0.74%	0.96%
	(1.84)	(1.63)	(2.11)	(2.21)	(1.71)	(2.19)
Bus Post – Conf Post	2.88%	0.68%	0.58%	0.70%	0.44%	0.82%
	(1.55)	(1.35)	(1.40)	(1.69)	(1.07)	(1.95)
Pre and Post Window	[-10,10]	[-90,90]	[-180,180]	[-180,180]	[-180,180]	[-180,180]
Other Fixed Effect	No	No	No	Broker	Analyst	Analyst \times Firm
Observations	3,390,585	3,390,585	3,390,585	3,390,585	3,390,585	3,390,585

Table 8: Forecast Accuracy around Bus Tours and Other Events - Cross-Sectional Patterns

Panel B reports estimates from specification 6 of Table 7 after splitting firms into low intangibles (bottom 30%), average intangibles (middle 40%) or high intangibles (top 30%). Panel C reports analogous estimates after splitting the sample using market-to-book ratios (M/B). We report the estimates on Rel Bus Host Post (column 1), Rel NDR Host Post (column 2), Rel Conf Host Post (column 3), the difference between Bus Host Post and NDR Host Post (column 4, Bus – NDR), and the difference between Bus Host Post and Conf Host Post (column 5, Bus – Conf). For reference, Panel A also reports the estimates for the full sample of firms (also reported in Specification 6 of Table 7). Standard errors are clustered by firm and month, and t-statistics are reported in parentheses.

and month, and t-statis	Bus Host Post	NDR Host Post	Conf Host Post	Bus-NDR	Bus - Conf
	[1]	[2]	[3]	[4]	[5]
]	Panel A: Full Sample	Results		
All Firms	0.84%	-0.12%	0.02%	0.96%	0.82%
	(1.89)	(-0.71)	(0.10)	(2.19)	(1.95)
		Panel B: Intangik	oles		
Low Intangibles	1.30%	-0.01%	0.42%	1.31%	0.88%
	(2.00)	(-0.02)	(1.38)	(1.72)	(1.23)
Average Intangibles	1.28%	-0.12%	0.15%	1.41%	1.13%
	(1.82)	(-0.36)	(0.48)	(1.81)	(1.48)
High Intangibles	-0.16%	-0.27%	-0.40%	0.11%	0.24%
	(-0.24)	(-0.93)	(-1.36)	(0.14)	(0.33)
	Pa	nel C: Sort on Marke	t-to-Book		
Low M/B	1.95%	-0.87%	0.28%	2.82%	1.67%
	(2.90)	(0.54)	(0.81)	(3.44)	(2.20)
Average M/B	-0.38%	0.66%	-0.03%	-1.04%	-0.35%
	(-0.46)	(1.91)	(-0.09)	(-1.16)	(-0.39)
High M/B	0.56%	-0.21%	-0.08%	0.77%	0.64%
-	(0.89)	(-0.79)	(-0.31)	(1.15)	(0.95)

Table 9: Research Bias around Bus Tours and Other Events

This table reports estimates from the following panel regression:

 $Optimism_{iit} = \beta_1 Bus \beta_{iit} + \beta_2 NDR \beta_{iit} + \beta_3 Conf \beta_{iit} + \beta_4 Affiliated \beta_{iit} + \beta_5 Controls + FE + \epsilon_{iit}$

The sample consists of all broker-firm-months from 2013 through 2019 where the broker issues at least one recommendation in the prior 24 months (column 1), one target price in the prior 24 months (column 2), or one quarterly earnings forecast over the prior three months (columns 3 and 4). The dependent variable is a measure of bias for analyst j for firm j in month t. In Specifications 1 the optimism measure is Rec Level, a rating from 1 to 5 using the following scale: 1=strong buy, 2=buy, 3=hold, 4=sell/underperform, and 5=strong sell (and thus a more negative recommendation level indicates greater optimism). In Specifications 2 the optimism measure is Target Return, the 12month expected return implied from the most recent 12-month price forecast of the firm, computed as (Forecast Price_{it}/Price_{it-1})-1. Specifications 3 and 4 examine two measures of quarterly pessimism: MBE, an indicator equal to 1 if firm's realized quarterly earnings are greater than analyst j's most recent quarterly earnings forecast for firm i, and Rel Qtr Pessimism, computed as $[(Rank-1)/(Number\ of\ Analysts-1)]$, where Rank is the rank of the analyst's forecasted quarterly earnings estimates, where the highest estimate is a given a rank of 1. Bus3 is an indicator variable equal to one if the broker will visit the firm on a bus tour over the subsequent three months. NDR3 is an indicator variable equal to one if the broker will take the firm on an NDR over the subsequent three months, and Conf3 and Affiliated3 are indicator variables equal to one if the broker will host the firm at a conference or will have an investment banking relation with the firm in the subsequent three months. Controls include the following broker/analyst related controls: Log (Broker Size), Log (Firm Experience), Log (Experience), Log (Firms Followed), and All-Star. Detailed variable definitions are provided in Appendix A. FE denotes firm-month fixed effects. All continuous independent variables are standardized to have mean zero and unit variance. Standard errors are double clustered by firm and month, and t-statistics are reported in

parentheses below the corresponding coefficient estimate.

	Rec Level	Target Return	MBE	Rel Qtr. Pessimism
	[1]	[2]	[3]	[4]
Bus3	-0.13	0.86%	1.98%	1.38
	(-5.68)	(2.46)	(2.80)	(2.26)
NDR3	-0.29	4.52%	1.37%	1.33
	(-30.99)	(23.32)	(5.80)	(5.68)
Conf3	-0.06	1.46%	0.43%	0.24
	(-6.09)	(9.35)	(2.24)	(1.42)
Affiliated3	-0.04	1.25%	-0.30%	-0.44
-	(-2.65)	(4.71)	(-0.79)	(-1.35)
Log (Broker Size)	0.05	-1.87%	0.22%	0.39
	(13.85)	(-19.63)	(3.22)	(5.34)
Log (Firms Followed)	0.00	0.41%	0.20%	0.50
,	(0.00)	(2.67)	(1.36)	(3.58)
Log (Experience)	-0.01	0.35%	0.31%	0.39
	(-3.43)	(4.10)	(3.97)	(5.34)
Log (Firm Experience)	0.01	0.44%	0.14%	-0.08
,	(1.44)	(4.86)	(1.79)	(-1.03)
All Star	0.09	-0.62%	0.26%	-0.33
	(8.30)	(-3.08)	(1.35)	(-1.56)
Fixed Effects	Firm-Month	Firm-Month	Firm-Month	Firm-Month
R-squared	1,572,302	1,958,038	1,436,655	1,436,655
Observations	29.88%	71.82%	60.14%	0.07%

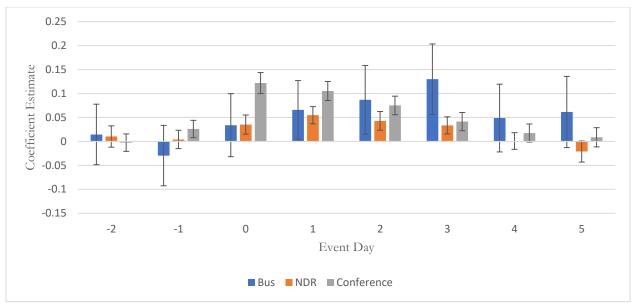


Figure 1: Trading Volume around Bus Tours and Other Events – Event Time

This figure reports estimates from Specification 4 of Table 4 after replacing *Event* × *Post* with separate event-time indicators ranging from event day -2 to event day +5. We report the coefficient estimates for each day for bus tours (blue bars), non-deal roadshows (orange bars), and broker-hosted conferences (gray bars). Standard errors are clustered by firm and date and the 95% confidence intervals are reported as error bars.

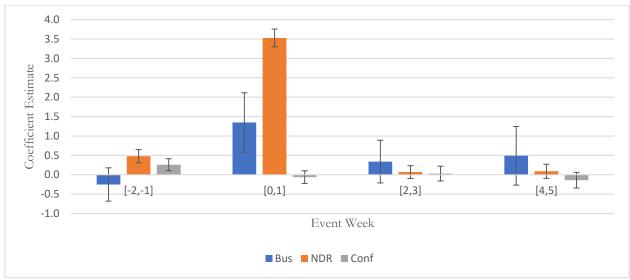


Figure 2: Forecast Revision Frequency around Bus Tours and Other Events - Event Time

This figure reports estimates from Specification 1 of Table 6 after augmenting the model to include three additional event-time indicators: an indicator for the two weeks prior to the event [-2, -1], an indicator the second and third week after the event [2,3], and an indicator for the fourth and fifth week after the event [4, 5]. We report the coefficient estimates for each two-week period for bus tours (blue bars), non-deal roadshows (orange bars), and broker-hosted conferences (gray bars). Standard errors are clustered by firm and week and the 95% confidence intervals are reported as error bars.