Internet Appendix for:

The Democratization of Investment Research and the Informativeness of Retail Investor Trading

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In this appendix, we tabulate and discuss results from select robustness and supplementary analyses referenced in the paper. The set of figures and tables are as follows:

- Figure IA1. Distribution of Intraday Seeking Alpha Reports
- Figure IA2. SA Research and the Informativeness of Retail Order Imbalances over Time
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IA.1 Characteristics of Stocks Covered by Seeking Alpha

Table IA1 provides summary statistics on the characteristics of stocks covered in Seeking Alpha reports. We consider the following attributes: market capitalization (*Size*), book-to-market (*BM*), daily return volatility (*Volatility*), daily share turnover *(Turnover)*, past one-year return ($Return_{m\text{-}12,m\text{-}1}$), past one-year profitability (*Profitability*), the number of sell-side analysts covering the firm in the prior year (*IBES Coverage*), the number of unique media articles mentioning the firm in the prior year (*Media Coverage*), the percentage of the firm's shares held by institutional investors in the prior year (*Inst Ownership*), and the number of common shareholders in the prior year (*Breadth of Ownership*). Appendix A of the paper provides more detailed definitions.

For each year (2006-2017), we compute the mean, median, standard deviation, and 25th and 75th percentiles of each firm attribute across all reports. Table IA1 reports the time-series average of each statistic. As a benchmark, we also report the means of the firm attributes across all stocks in the CRSP-Compustat merged sample, where we either equally weight each firm (*EW Market*) or value-weight each firm by its market capitalization at the end of the prior year *(VW Market*). We find that the average size of a firm covered by an SA report is roughly $61.0 billion, which is smaller than the corresponding size of the value-weighted market average ($89.3 billion), but considerably larger than the equal-weighted market average ($4.6 billion). Relative to the *VW Market*, we also find that SA Coverage tilts towards more volatile firms, more liquid firms, firms with stronger past returns, and firms with lower institutional ownership. However, the *VW Market* attribute almost always falls within the interquartile range of the SA attribute, suggesting that SA coverage is not dramatically different from the market portfolio.

IA.2 Seeking Alpha Report Timing and the Timing of Major Information Events

An important identifying assumption is that other confounding events that influence retail trading are just as likely to occur during the pre-publication window as in the post-publication window. This assumption could in principle be violated if Seeking Alpha's editorial team systematically seeks to release reports immediately before or after the arrival of important information events. While this seems unlikely, we empirically address this possibility by examining the distribution of earnings announcements, analyst reports, and media articles in the pre- and post-publication windows. Finding that these events are equally likely to occur in the pre- and post-periods will help validate our assumption that differences in retail trading between the pre- and post- periods do not reflect differences in the arrival of other information.

We estimate the following linear probability model:

$$Event_{i,t} = \alpha + \beta_1 Post\_SA_{i,t} + Report_i + HalfHour_t \times Month + \varepsilon_{i,t}, \qquad \text{(IA.1)}$$

where $Event_{i,t}$ is equal to one if firm *i* event occurs in half-hour *t*, and zero otherwise. *Event* is either *Earnings Announcement*, *IBES Research*, or *Media Article* (defined in Appendix A). $Post\_SA_{i,t}$ equals one if *t* is in the interval [1, 5], and zero if *t* is in the interval [-5, -1]. $Report_i$ is a report fixed effect, which makes β_1 an estimate of the change in the probability of an information event occurring in the post-event window relative to the pre-event window. We include calendar half-hour fixed effects to control for intraday variation in the arrival of information, and we allow the loadings on these fixed effects to vary over the sample period (i.e., *Half Hour* × *Month* fixed effects). We cluster standard errors by date.

In Specifications (1)-(3) of Table IA2, we tabulate results when *Event* is *Earnings Announcement, IBES research*, or *Media Article*. In each specification, the coefficient on *Post_SA* is economically small and statistically insignificant, inconsistent with the idea that information disseminated by SA coincides with the dissemination of information from other sources. In the

remaining specifications, we seek to provide more granular evidence by replacing the single post-event indicator *Post_SA* with five post-event indicators: *SA*[1]…*SA*[5], four pre-event indicators: *SA*[-4]…*SA*[-1], and the event publication indicator *SA*[0]. The corresponding coefficients reflect changes in event probabilities relative to the first half hour in the event period [-5]. The coefficient estimates are insignificant and exhibit no systematic pattern. The absence of a relation in the timing of SA research reports relative to earnings announcements, sell-side research reports, and media articles, helps build confidence that any changes in retail trading immediately after SA research can, on average, be attributed to Seeking Alpha rather than the arrival of other information.

IA.3 The Distribution of SA Reports during the Trading Day

Figure IA1 examines the intraday distribution of SA reports published between 10:30 am and 3:30 pm for two samples: 1) all 61,282 reports and 2) 45,038 reports that have no earnings announcements, media articles, or sell-side research reports over the [-5, 5] event window ("No Event" reports). We observe that SA reports are uniformly distributed. For example, in the full sample, the median number of reports in a 30-minute window is 5,986, with a maximum of 7,016 (11:30-11:59) and a minimum of 5,451 (12:30-12:59).

IA.4 SA Research and the Intensity of Retail Investor Trading: Stale Reports

The results in Tables 3 and 4 suggest that SA research reports induce significant amounts of retail trading that is directionally consistent with the sentiment of the report. One potentially important attenuating factor is that some contributors may post their research reports on alternative websites, including their own personal sites, prior to posting on Seeking Alpha. Thus, attentive investors may be able to trade on some SA reports before the report is posted to Seeking Alpha, and our approach would underestimate the influence of SA research.

To explore the impact of "stale" reports on retail trading, we visit each contributor's author page to identify whether the author links a website to his author page. We find that roughly 41% of contributors provide a link to a website. For any author with both a website and at least ten reports, we visit the linked website and search for whether any SA research posts are available on the website.[IA1] In some cases, we find that the authors most recent SA reports are on their website while older reports are not. We classify an author as having a "matched blog" if we find any SA reports on their linked webpage, and we classify all reports authored by contributors with matched blogs as "stale". This classification is conservative in the sense that we are likely overestimating the fraction of stale reports. Even with this more conservative classification, we find that only 5.2% of reports are stale. Our investigation suggests that most authors write their research reports solely for Seeking Alpha, consistent with SA providing compensation only for reports that are exclusive to their website.[IA2]

Specifications (1) and (2) of Table IA3 of the Internet Appendix repeat Specification (2) of Table 3 for authors (with at least ten reports) with and without a matched blog. Similarly, Specifications (3) and (4) repeat Specification (3) of Table 4 for the same subsamples. We find the increase in *Retail* Volume is roughly 50% larger for authors for non-stale reports (6.54% versus 4.39%).[IA3] Similarly, retail order imbalances are roughly 11% more correlated with report sentiment for non-stale reports (0.96pp versus 0.86pp). Overall, the evidence is consistent with

[IA1] Authors with fewer than ten reports account for roughly 55% of the sample but just 15% of all reports. Thus, excluding contributors who issue fewer than ten reports great simplifies the data collection effort and is unlikely to meaningfully impact our estimates. We define matched blog as undefined for any author with fewer than ten reports (including authors without websites) to ensure that our comparison of authors with and without matched blogs is not biased by differences in reporting frequency.

[IA2] For more details on exclusive articles see: https://seekingalpha.com/page/premium-partnership-faq

[IA3] The estimates for each subsample are smaller than our overall estimate in Table 3 (8.77%). This is because both samples exclude contributors who issue fewer than ten reports. The aggregate estimate for contributors who issue at least ten (less than ten) reports is 6.42% (17.83%).

stale SA reports inducing weaker retail trading responses.[IA4] However, because stale reports are so infrequent their inclusion does not meaningfully alter our main findings.

IA.5 Institutional Trading Intensity and Order Imbalances around SA Research

Section 4.1 shows that retail investor trading intensity increases sharply following SA research, and Section 4.2 shows that retail order imbalances become more strongly correlated with the sentiment of SA research report. In this section, we conduct analogous tests after replacing retail trading measures with institutional trading measures.

Table IA4 reports the institutional trading intensity results when we replace *Retail Vol* in Equation (2) with *Inst. Vol*, defined as log (1 + Total Volume – Retail Volume). We find institutional trading volume significantly increases following the release of SA reports. For example, Specification (1) of Table IA4 indicate that institutional volume increases by 4.40% ($e^{0.043}$ -1) in the [1, 5] post-event window relative to the [-5, -1] pre-event window. The point estimate is roughly 70% of the magnitude of the corresponding estimate for *Retail Vol* (6.03%).

We next replicate the order imbalance analysis after replacing *Retail_OIB* in Equation (3) with *Inst_OIB*. The results, tabulated in Table IA5, indicate that *Inst_OIB* is correlated with the sentiment of SA research reports. For example, *Inst_OIB* significantly increases for reports where the contributor discloses a long position and significantly declines for reports with more negative tone. Specification (2) shows that a one unit increase in *Composite Sentiment* is associated with a 0.23 percentage point increase in *Inst_OIB*. The estimate, while statistically significant, is only about 30% of the magnitude of the corresponding *Retail_OIB* estimate (0.79pp) reported in Table 4. Overall, the evidence suggests that institutional investors respond to SA research, but not as

[IA4] The estimates of the effects of stale reports are relatively imprecise, however. We cannot reject the null that they differ from those of non-stale reports or from zero.

strongly as the reaction from retail investors. This is consistent with the evidence in Table 2 that SA research caters to retail investors, who have access to fewer alternative information sources.

IA.6 SA Research and the Informativeness of Retail Investor Trading - Sensitivity Tests

Table IA6 presents robustness checks for the informativeness evidence in Table 5. All specifications are based on Specification (2) of Table 5, and for brevity we focus on the coefficients on *Retail_OIB* × *Post_SA.* Specification (1) of Table IA6 presents the baseline result from Table 5 (0.256). In Specification (2), we explore the impact of stale reports. Specifically, we repeat the analysis after excluding reports authored by contributors with an identified matched blog (as defined in Section IA.4), and we find that the estimate on Post_SA × Retail_OIB increases slightly to 0.259pp.[IA5]

Our analysis in Table 5 includes specifications which exclude confounding events over the [-5,5] half-hour window. However, it does not address reports that are issued the day after earnings announcements. While reported earnings are generally available to all investors in the day after earnings releases, it is possible that the initial set of information increases (e.g., through earnings conference calls), which suggests that retail trading during the post-event window might be more informed even in the absence of SA reports. We address this concern by excluding reports issued one day after earnings announcements, which comprise 2.2% of all observations. In Specification (3) of Table IA6, we observe that the coefficient on *Post_SA* × *Retail_OIB* remains virtually unchanged (0.265pp). We also consider the impact of reports issued one day prior to earnings announcements (representing 6.0% of the sample), which could potentially break firm news. Excluding these reports results in a slightly reduction on the coefficient on Post_SA × Retail_OIB,

[IA5] We also separately examine contributors with an identified matched blog. The estimate for this subgroup is -0.0491% (*t*=-0.17). Thus, SA reports that were previously disseminated do not enhance retail trade informativeness.

but the estimates remains economically large (0.235pp) and highly significant in Specification (4).[IA6]

In our main tests, we limit the sample to reports issued between 10:30 am and 3:30 pm. While this filter is useful is minimizing the impact of confounding events (see Section 3), it does considerably reduce the sample size. We therefore repeat the analysis using two expanded samples. The first sample adds in reports issued between 10:00 am and 10:30 am and treats the 9:30-10:00 window as the pre-period. The second sample repeats the analysis using all Seeking Alpha reports. For all reports issued after hours, the pre-period is the five half-hour periods at the end of the previous trading day (i.e., from 1:30 to 4:00 pm) and the post-period is the five-half hour at the beginning of the next trading day (i.e., from 9:30 am to 12:00 pm). As in all the previous tests, we continue to impose the filter that there is no confounding information event over the [-5,5] window. The results of this analysis are reported in Specifications (5) and (6) and remain similar to our baseline estimates.

Finally, we examine the stability of our results over time. We begin by estimating Equation (4) monthly from January 2007 through December 2017. We plot the cumulative coefficient on $Post\_SA \times Retail\_OIB$ from Specifications (2) of Table 5 in Figure IA2. We observe a jump in the second half of 2008 consistent with SA research being particularly valuable during the financial crisis, and a stable positive drift over the remainder of the sample period. To confirm that our results are not driven by the financial crisis period, we re-estimate the model after excluding the second half of 2008 (Specification (7) of Table IA6), and continue to find that the coefficient on $Post\_SA \times Retail\_OIB$ is statistically significant. We also separately estimate the results for the first third (January 2007 – August 2010), middle third (September 2010-April 2014), and last third

[IA6] In the next section, we also separately examine trade informativeness for reports issued immediately prior to or following an earnings announcement and we consider longer pre- and post-earnings announcement windows.

(May 2014-December 2017) of the sample period. The estimates from all three periods, reported in Specifications (8)-(10), are at least marginally significant ($p < 0.10$), consistent with the results being relatively stable over time.

IA.7 SA Research and the Informativeness of Retail Investor Trading around Earnings Announcements

In this section, we examine whether post-earnings SA research reports are associated with significantly larger (or smaller) changes in retail trade informativeness. We define the post-earnings period as day +1 and for robustness as the window [1, 3]. We then augment Specification (2) of Table 5 to include an indicator for reports issued in the post-earnings period, *Earn Indicator*, and its interaction with *Retail OIB* × *Post SA.*

Panel A of Table IA7 reports the estimates on *Retail OIB* × *Post SA* and *Retail OIB* × *Post SA* × *Earn Indicator*, as well as the fraction of SA reports occurring during the post-earnings periods. We find that a relatively small fraction of SA reports are issued after earnings announcements (2.2% for day +1 and 9.1% for days [1,3]). For either definition of post-earnings SA reports, the coefficient on *Retail OIB* × *Post SA* × *Earn Indicator* is statistically insignificant, whereas the coefficient on *Retail OIB* × *Post SA*, which captures the informativeness of all other reports, is highly significant and qualitatively similar to our baseline estimate of 0.256 pp, reported in Specification 2 of Table 5. We conclude that SA reports after earnings announcements are a relatively small portion of the sample, with no distinct effect on retail trade informativeness.

Panel B of Table IA7 presents analogous results for SA reports issued prior to earnings announcements. We observe that SA reports are more common in the days prior to earnings announcements (e.g., 6.0% for day -1 vs 2.21% for day +1). Furthermore, these reports are associated with significantly greater increases in retail trade informativeness. For example, SA

reports published in the [-1,-3] window increase retail trade informativeness by an additional 0.822pp (t=2.21). We note that the coefficient on *Retail OIB* × *Post_SA* remains economically and statistically significant (0.182 pp, t=2.68), suggesting SA research published on other days still increases retail trade informativeness.

IA.8 SA Research, Retail Investor Trading, and Future Cash Flow News – Event Time

Figure IA3 repeats Specifications (2) and (5) of Table 8 after replacing *Retail_OIB* and *Post_SA* × $Retail\_OIB_{it}$ with *Retail_OIB* interacted with 11 separate measures of retail order imbalance for each half-hour period ranging from –5 to 5. Panel A reports the results for *Media Article Tone*. The figure shows that there is no obvious pre-trend in the period before publication. In addition, there is a noticeable and immediate spike upwards in the estimates during the post-event window. In particular, the estimates over the post-event window range from 1.29 to 2.70, each exceeding the pre-period mean of 0.93. Panel B of Figure IA3 reveals similar results for *Forecast Revisions*.

IA.9 SA Report Quality by Component

Table 10 of the paper shows that the increase in retail trading informativeness following SA research is greater among higher quality reports, where composite report quality is defined as the sum of four components. In Table IA8, we report the results separately for each measure of contributor skill. *Academic Quality* is an indicator equal to one if the contributor author's bio mentions that she has a PhD, an MBA, or graduated from a school in the top 50 of average SAT scores based on the 75th percentile, as reported in the 2015 vintage of stateuniversity.com. Our second measure our contributor skill is *Comments*, which is an indicator variable equal to one if the number of comments elicited by the report within 24 hours of the report release exceeds the yearly median.

We also consider two measures of skill based on past market reaction to reports. *Signed Returns* is an indicator variable that is equal to one if the average signed return to a contributor's last five (non-neutral) reports exceeds the yearly median. Signed returns are based on two-day market-adjusted reactions multiplied by the sign of the report, where sign is 1 (-1) for positive (negative) reports. Following Farrell, Jame, and Qiu (2020), reports are signed using a two-step procedure. First, reports with long (short) position disclosures are classified as positive (negative). For remaining reports, we compute the tone of the report as the percentage of negative words in the report (Loughran and McDonald, 2011), and we assign reports in the bottom (top) tercile of percent negative relative to the distribution of report tone on the previous day as positive (negative). Since signing reports is measured with error and excludes roughly 25% reports that are classified as neutral, we also consider *Unsigned Returns*, which equals one if the average absolute two-day market-adjusted reaction to a contributor's last five reports exceeds the yearly median and zero otherwise. We find the correlation between *Signed Returns* and *Unsigned Returns* is low (ρ =0.05), suggesting that both may contain independently useful information.

Panel A of Table IA8 reports the results when five-day ahead returns are the dependent variable. We find that the coefficients on *Post_SA* × *Retail_OIB* × *Quality* are positive and three of the four are statistically significant at a 5% level, and the remaining variable (*Comments*) is significant at a 10% level. The individual quality measures are less robust predictors of cash flow news. None of the four triple interaction terms are significant in isolation when *Media Tone* is the dependent variable in Panel B, and only two of the four predictors are significant at the 10% level (or better) for *Forecast Revisions* in Panel C.

IA.10 Daily Analysis of Seeking Alpha Research

In Section 5.6, we acknowledge that while our intraday analysis is well-suited for estimating the causal effects of SA research on retail trading, it has some limitations such as small sample size and poor ability to benchmark SA research publication events to other information events. In this section, we re-examine the effects of SA on retail trading intensity and retail order imbalances using a daily framework and we conduct additional robustness tests of the daily retail trade informativeness results reported in Table 11 of the paper.

IA.10.1 Daily Estimates of Retail Trading Intensity

We estimate the effects of Seeking Alpha research on retail investor trading using the following daily panel regression:

$$Retail\_Trd_{i,t} = \alpha + \beta_1 Event_{i,t} + \beta_2 Char_{i,t} + Day_t + Firm_i \times Year + \varepsilon_{i,t.} \quad \text{(IA.2)}$$

where *Retail_Trd* is *Retail Turnover* or *Percentage Retail Turnover*. $Event_{i,t}$ is a vector of event indicators: $SA_{i,t,}$ $IBES_{i,t,}$ $Media_{i,t}$, and $Earnings_{i,t}$. $SA_{i,t}$ is an indicator equal to one if there was at least one SA research report published between 1:30 pm on day *t*-1 and 4 pm on day *t*, and zero otherwise. We define all other events (i.e., *IBES, Media,* and *Earnings*) analogously.

We also control for time-series variation in aggregate retail trading activity with calendar day fixed effects, and firm-specific and time-varying retail trading intensity with *Firm* × *Year* fixed effects. The inclusion of *Firm* × *Year* fixed effects also controls for firm characteristics that are stable within a firm-year (e.g., *Size*, *Book-to-Market*, *Institutional Ownership*, *Volatility*, *Turnover*, *Return*, *Profitability*, *IBES Coverage*, and *Media Coverage).* Char is a vector of time-varying firm characteristics, including returns estimated over the prior week ($Ret_{i,w-1}$), prior month ($Ret_{i,m-1}$) and prior two to seven months ($Ret_{i,[m-7,-m-2]}$), absolute returns estimated over the same intervals ($AbsRet_{i,w-1,}$ $AbsRet_{i,m-1,}$ and $AbsRet_{i,[m-7,-m-2]}$), indicators for whether trading volume in the stock was in the top or bottom 10% relative to the stock's trading volume in the previous fifty

trading days (*High Volume* and *Low Volume*), and retail trading over the prior week (*RetailTurnover*$_{i,w\text{-}1}$ *or Percent Retail*$_{i,w\text{-}1}$). All continuous independent variables are standardized to have mean zero and unit variance, and standard errors are clustered by firm.

Specifications (1) and (2) of Table IA9 report the results for *Retail Turnover* and *Percent Retail*, respectively. We find that the estimate for *Retail Turnover* is a highly significant 5.60% on days with SA research. This effect is larger than the estimated effect for *Media* (3.50%) and similar to the effect for IBES research (5.60%). We also find that retail trading increases by more than institutional trading. Specifically, *Percent Retail* increased by 0.29 percentage points. This effect is substantially larger than the estimated effects for Media coverage (0.04pp) or IBES research (0.01pp), further corroborating the importance of SA as a source of investment analysis for retail investors.

IA.10.2 Daily Estimates of Retail Order Imbalances

We estimate the effects of Seeking Alpha research sentiment on retail investor order imbalances using the following daily panel regression:

$$Retail\_OIB_{i,t} = \alpha + \beta_1 Event_{i,t} + \beta_2 Event\_Sentiment_{i,t} + \beta_3 Char_{i,t} + Day_t + Firm_i \times Year + \varepsilon_{i,t}. \quad \text{(IA.3)}$$

Retail_OIB$_{i,t}$ is the retail order imbalance for firm *i* on day *t*, defined as the difference between daily retail buy volume and retail sell volume, scaled by total daily retail trading volume (BJZZ). *Event*$_{i,t}$ is a vector of event indicators: *SA*$_{i,t}$, *IBES*$_{i,t}$, *Media*$_{i,t}$, and *Earnings*$_{i,t}$. *SA*$_{i,t}$ is as defined in Equation IA.2. *Event_Sentiment*$_{i,t}$ is the sentiment score associated with the *Event*. We classify SA research as having positive (negative) sentiment when the fraction of positive (negative) words in the SA report is above the sample median (using the word list in Loughran and McDonald's, 2011 as in Chen et al. 2014). We also measure sentiment using the SA contributor's investment position.

Seeking Alpha requires investors to disclose their investment positions, and we construct a long (short) indicator variable that takes the value of one if the contributor discloses a long (short) position (Campbell, DeAngelis, and Moon, 2019). We consider each individual measure separately, as well as a measure of *Composite Sentiment*, defined as the sum of the four measures of SA Sentiment (i.e., *Long + Pos. Tone – Short – Neg. Tone*).[IA7] *Media Sentiment* equals one if the ESS (RavenPack sentiment score) for the article exceeds 50 (the ESS score assigned to neutral articles), *IBES sentiment* is an indicator equal to one if the IBES research report contained a recommendation upgrade or upward forecast revision, and *Earnings Sentiment* is an indicator equal to one if the earnings surprise is positive relative to the consensus forecast and zero otherwise. Char includes a vector of time-varying firm characteristics including returns estimates over the prior week ($Ret_{i,w-1}$), prior month ($Ret_{i,m-1}$) and prior two to seven month ($Ret_{i,[m-7,m-2]}$), absolute returns estimated over the same intervals ($AbsRet_{i,w-1,}$ $AbsRet_{i,m-1,}$ and $AbsRet_{i,[m-7,m-2]}$), indicators for whether trading volume in the stock was in the top or bottom 10% relative to the stock's trading volume in the previous fifty trading days (*High Volume* and *Low Volume*), and retail order imbalances over the prior week ($Retail\_OIB_{i,w-1}$). As in Equation (IA.2), the regressions also include *Day* and *Firm* × *Year* fixed effects.

The results are reported in Table IA10. We find robust evidence that Seeking Alpha research sentiment predicts retail order imbalances. For example, Specification (1) reports that retail order imbalance increases (decreases) by 1.10 percentage points (-2.25pp) when an SA contributor discloses a long (short) investment position and 0.30pp (-0.90pp) when the report's positive (negative) tone is above the median, and Specification (2) indicates that a one unit increase

[IA7] If multiple SA reports are released for the same firm *i* and day *t*, each sentiment measure (i.e., *Long*, *Short*, *Neg. Tone*, *Pos. Tone*, and *Composite* Sentiment) is computed as the average value of the sentiment measure across all reports.

in *Composite Sentiment* is associated with a 0.80pp increase in retail order imbalance. We also find that retail order imbalances are correlated with the sentiment of sell-side research and media articles, but the magnitudes are considerably smaller than for SA research reports.

IA.10.3 Retail Informativeness in the Days Around Seeking Alpha Research

For robustness, we examine the dynamics of retail trade informativeness around the release of the SA report. We modify Equation (6) by interacting $Retail\_OIB_{i,t}$ with dummy variables that indicate days -2, -1, +1, and +2 relative to SA publication day. In Table IA11, we find that the coefficients on these interactions terms are positive but statistically insignificant, which suggests that retail trading on these SA publication-adjacent days is at least as informed as retail trading on a typical day.

IA.10.4 Price Pressure, Liquidity Provision, and Informed Trading Decomposition

In Section 5.3 of the paper, we decompose *intraday* order imbalances into three components: *OIB Persistence* (a proxy for price pressure), *OIB Contrarian* (a proxy for liquidity provision), and *OIB Other* (a proxy for informed trading). This section reports the results of an analogous decomposition applied to daily data. Specifically, the three components are estimated as the fitted value from the following panel regression: $Retail\_OIB_{i,t} = \alpha + \beta_1 Retail\_OIB_{i,w-1} + \beta_2 Ret_{i,w-1} + \varepsilon_{i,t}$, where *OIB Persistence* $= \hat{\beta}_1 Retail\ OIB_{i,w-1}$; *OIB Contrarian* $= \hat{\beta}_2 Ret_{i,w-1}$; and *OIB Other* $= \hat{\varepsilon}_{i,t}$. We then estimate Equation (6) in the text after replacing *Retail_OIB* (total retail order imbalance) with *OIB Persistence, OIB Contrarian,* or *OIB Other (Informed).*

Specifications (1)-(3) of Table IA12 report the results. We find that the coefficient on *OIB Persistence* × *SA* and *OIB Contrarian* × *SA* are statistically insignificant and economically small.

In contrast, the coefficient on *OIB Other* × *SA* is highly significant and virtually identical to the estimate reported in Specification (1) of Table 11.

IA.11 Fake SA Reports

This section provides several additional analyses of the impact of fake SA research reports on retail investor trading.

IA.11.1 Fake SA Reports and Retail Trade Informativeness: Return Horizon Analysis

In Table 12 we find that retail order imbalances induced by fake SA reports predict one-week returns but not five-week returns, consistent with there being a return reversal. In this section, we further investigate the return reversal hypothesis by presenting evidence when future returns are measured over week 1, 2, 3, 4, and 5, and from weeks 2 through 5.

Panel A of Table IA13 reports results for anonymous reports. The estimates, while generally not statistically significant, display a systematic pattern. Retail order imbalances after anonymous reports predict lower returns at every horizon, consistent with a reversal, while retail trades after non-anonymous reports generally predict higher returns, consistent with a return continuation. We find statistically significant evidence that the relation between anonymous report-induced retail trades and future returns differs from the respective relation for non-anonymous reports in the case of Week 4 returns and Week 2-5 returns (*t*-stats of -2.21 and -2.34). A similar pattern emerges in Panel B, where we compare low authenticity reports to all other reports.

IA.11.2 Fake SA Reports and Retail Trading Volume

In this section, we further explore the evidence that low authenticity reports influence retail trading more than high authenticity reports (Panel B of Table 12).[8] We propose that fake research producers target firms where public information is scarce and retail investors are more easily influenced. Fake report contributors also likely use language specifically designed to influence investors.

We first examine whether the effect of fake reports is stronger for firms with more opaque information environment. We generalize specification 1 in Panel B of Table 12 by interacting *Post SA* with indicators of firm membership in the bottom and the middle three size quintiles, *Small* and *Medium*,[9] the natural log of 1 plus the number of brokerage firms issuing at least one earnings forecast for the firm in the prior calendar year (*IBES Coverage*), the percentage of the shares held by institutional investors in year *t*-1 (*Institutional Ownership*), and an indicator equal to one for firms that received no SA coverage in the previous three months (*No SA coverage*).

Specification 1 of Table IA14 re-tabulates the original findings for reader convenience. Specification 2 presents the results from the estimation of the extended model. As expected, retail trading response to SA research is stronger for firms with a poorer information environment. For example, the magnitude of the response is approximately 12.6% larger for firms in the bottom size quintile (*Small*) and nearly 16% larger for firms without SA reports in the prior three months. Importantly, controlling for firm characteristics attenuates the estimate on $Post\_SA \times LowAuthenticity$ by more than 30% (from 12.05% to 8.26%).

We use LIWC's measure of confidence or expertise in expression to capture a contributor's general use of authoritative language (*Clout*), the consistency between ownership disclosure and

[8] We note that our findings are consistent with Vosoughi, Roy, and Aral's (2018) findings that verified fake news published on Twitter "diffuses significantly farther, faster, deeper, and more broadly" than verified real news.
[9] We use two indicator variables rather than a continuous measure because we observe a non-linear relation between post-publication retail trading volume and firm size.

article tone to measure a contributor's conviction in her investment analysis (*Consistent Tone*), and the percentage of long words in the article to capture projected expertise or sophistication of analysis (*Sophistication*).[10] We also consider the four tone components that explain retail order imbalances in Table 4: *Long*, *Short*, *Positive Tone*, and *Negative Tone*. Specification 3 augments Specification 2 by interacting *Post SA* with *Clout*, *Conviction*, *Sophistication*, *Long*, *Short*, *Positive Tone*, and *Negative Tone*, separately. We find statistically significant evidence that retail trading is increasing in *Clout*, *Conviction*, and *Sophistication*, and, more importantly, that the incremental response to low authenticity reports is further reduced to 6.16%. The evidence that the incremental fake report volume effect falls in half using simple firm characteristics and rough linguistic measures supports the view that aspects of the report and target firm are driving the result.

A related question is why investors are fooled by fake news at all. Mitts (2020) emphasizes that first-time contributors will be perceived as non-liars in a Baysian framework, yet fake contributors will be discovered over time. To test the learning hypothesis, we investigate whether retail investors react more strongly to fake reports by contributors with shorter track records. In Specification (4), we interact *Post_SA* × *Low Authenticity* with a *Short Track* indicator, equal to one for the first five reports contributed by an author, and zero otherwise.[11] We find that coefficient on *Post_SA* × *Short Track* × *Low Authenticity* is positive and significant, consistent with models of investor learning, and the coefficient on *Post_SA* × *Low Authenticity* is reduced to 3.58% and no longer significant. We conclude that low authenticity reports induce greater retail trading because fake research producers target firms with more opaque information environments and use

[10] Social psychology research shows opaque or complex language is more effective when the purpose is to convey information and recipients expect the content to be difficult (e.g., Galak and Nelson, 2011; Stremersch, Verniers, and Verhoef, 2007). Intuitively, a good textbook on a difficult subject is expected to be difficult to read, which makes ease of reading an indicator of poor subject coverage. A good summer book, on the other hand, aims to entertain, and can do so only if it is easy to read.

[11] Setting the indicator variable to one for the first 10 reports yields qualitatively similar results.

language specifically designed to influence, and assessing article truthfulness in the absence of a contributor's track record is difficult.

Panel B of Table 12 also presents modest evidence that low authenticity reports incrementally affect the direction and the informativeness of retail trading (specifications 3 and 4). For completeness, in Table IA15, we replicate all of our tests from Panel B of Table 12 before and after we account for differences in firm attributes, article language, and length of contributor track record. Paralleling our retail volume and retail order imbalance analyses, in Specifications (6) and (7), we also examine whether low authenticity reports incrementally affect institutional trading volume and institutional order imbalance.

We find that the incremental effect of low authenticity reports on retail order imbalances and the informativeness of retail order imbalance for one-week returns is no longer significant when additional interaction terms are included. Specifically, the baseline estimates in specifications (3) and (4) decline from 0.78 and 0.232 (*t*-stats of 1.65 and 1.60) to 0.33 and 0.164 (*t*-stats of 0.70 and 0.95) when firm and report interaction terms are included. Similarly, low authenticity reports incrementally influence the intensity and the direction of institutional trading before but this is due largely to differences in firm attributes and article language.

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Figure IA1. Distribution of Intraday Seeking Alpha Reports.
This figure plots the distribution of report publication times for SA reports published between 10:30 am and 3:30 pm (*All Intraday*). *No Event Reports* denotes the subset of intraday reports that are not confounded by other media articles, IBES research, or earnings announcements during the ten half-hour intervals surrounding the SA report publication.

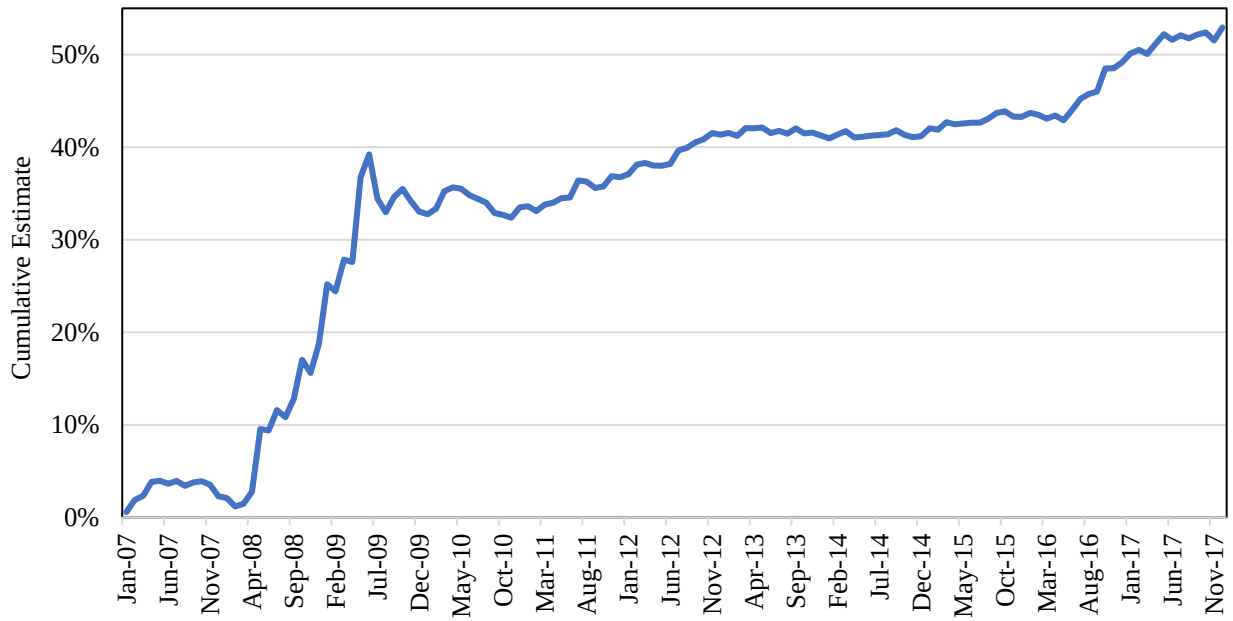
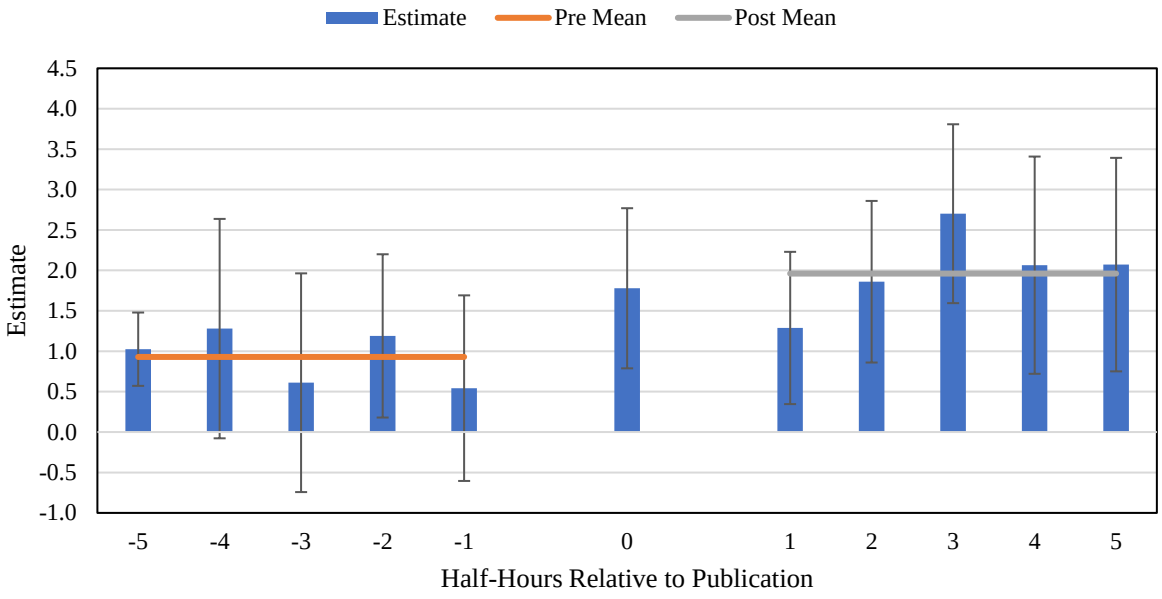


Figure IA2. SA Research and the Informativeness of Retail Order Imbalances over Time
We estimate Specification (2) of Table 5 for each month from January 2007 through December 2017. The blue line plots the *cumulative* coefficient on *Retail_OIB* × *Post_SA* for each month over the sample period.

Panel A: Media Articles



Panel B: Forecast Revisions

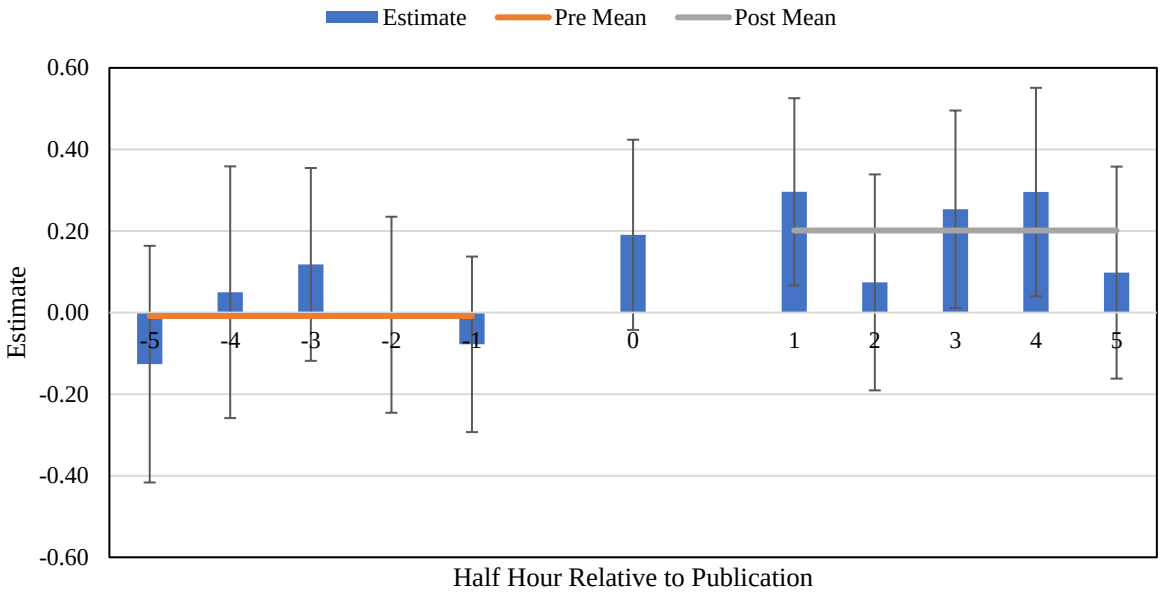


Figure IA3. SA Research and the Informativeness of Retail Trading: Predicting Future Cash Flow News – Event Time. The figures in Panel A and Panel B plot estimates from Specification (2) and (4) of Table 7 after replacing *Retail OIB* and *PostSA* × *Retail OIB*$_{it}$ with 11 separate retail order imbalance variables for each half-hour period ranging from [-5] to [5]. We report the coefficients on these variables as blue bars, and their 95% confidence intervals as error bars. The average of the pre-event and post-event coefficient estimates appear as orange and grey horizontal lines.

Table IA1. Characteristics of Stocks Covered by Seeking Alpha

The table reports the time-series average of annual cross-sectional summary statistics. The *Seeking Alpha Reports* sample includes all reports issued by Seeking Alpha over the 2006-2017 sample period. Across all SA reports in a year, we compute the mean, median, standard deviation, and the 25th and 75th percentiles of the following firm attributes: market capitalization (*Size*), book to market (*BM*), daily return volatility (*Volatility*), daily share turnover *(Turnover)*, past one-year return ($Return_{m\text{-}12,m\text{-}1}$), past one-year profitability (*Profitability*), the number of sell-side analysts covering the firm in the prior year (*IBES Coverage*), the number of unique media articles mentioning the firm in the prior year (*Media Coverage*), the percentage of the firm's shares held by institutional investors in the prior year (*Inst Ownership*), and the number of common shareholders in the prior year (*Breadth of Ownership*). We also report the means of the firm attributes across all stocks in the CRSP-Compustat merged sample, where we either equally weight each firm (*EW Market*) or value-weight each firm by its market capitalization at the end of the prior year *(VW Market)*.

	Seeking Alpha Reports					Market Portfolio	
	Mean	Median	Standard Deviation	25th	75th	VW Market Mean	EW Market Mean
Size ($Bil)	61.03	13.92	13.50	2.10	85.67	89.30	4.60
BM	0.55	0.33	0.12	0.18	0.63	0.46	0.82
Volatility	2.46%	2.15%	0.16%	1.62%	2.99%	1.79%	2.98%
Turnover	13.31%	9.48%	1.96%	5.70%	16.58%	8.00%	6.60%
$Return_{[m\text{-}12,\ m\text{-}1]}$	14.91%	8.39%	7.35%	-14.18%	33.44%	10.56%	11.81%
Profitability	13.58%	14.48%	2.43%	6.38%	23.69%	16.05%	6.37%
IBES Coverage	24.50	24.18	1.86	13.27	34.27	25.54	9.32
Media Coverage	250.19	206.32	24.08	101.91	352.64	272.66	84.20
Institutional Ownership	66.58%	68.71%	2.78%	57.48%	81.40%	68.92%	55.84%
Breadth of Ownership	103.25	9.28	70.36	1.14	57.83	176.39	21.35

Table IA2. The Relation Between Seeking Alpha Report Timing and the Timing of Major Information Events

Specifications (1)-(3) report the results from the estimation of Equation (IA.1):

$$Event_{i,t} = \alpha + \beta_1 Post\_SA_{i,t} + Report_i + HalfHour_t \times Month + \varepsilon_{it}.$$

$Event_{i,t}$ indicates the occurrence of an event (earnings announcement, IBES report, or media article) in a half-hour window *t* around the publication of an SA report *i*. *Post_SA*, is equal to one when *t* is in the interval [1, 5] and zero when it is the interval [-5, -1]. In Specifications (4)-(6), we include the half-hour publication window 0 and replace the *Post_SA* indicator with ten indicators representing individual event windows -4 through 5. *Report* denotes report fixed effects and *Half Hour* × *Month* denotes fixed effects for each half-hour of the trading interacted with month fixed effects. Standard errors are clustered by date, with *t*-statistics reported in parentheses.

	Earnings	IBES Research	Media Articles	Earnings	IBES Research	Media Articles
	(1)	(2)	(3)	(4)	(5)	(6)
Post_SA	0.00%	0.05%	-0.06%			
	(-0.21)	(0.84)	(-0.77)			
SA[-4]				0.00	0.06	-0.09
				(-0.68)	(0.69)	(-0.80)
SA[-3]				0.01	-0.05	-0.04
				(1.38)	(-0.58)	(-0.32)
SA[-2]				0.00	0.04	-0.10
				(-0.36)	(0.49)	(-0.93)
SA[-1]				0.00	0.07	-0.05
				(-0.11)	(0.85)	(-0.49)
SA[0]				-0.01	0.08	-0.07
				(-0.88)	(0.87)	(-0.60)
SA[1]				0.00	0.01	-0.13
				(0.43)	(0.11)	(-1.10)
SA[2]				0.00	0.16	-0.16
				(0.02)	(1.67)	(-1.30)
SA[3]				0.00	0.11	-0.10
				(0.04)	(1.15)	(-0.74)
SA[4]				-0.01	0.07	-0.11
				(-1.42)	(0.66)	(-0.79)
SA[5]				-0.01	0.06	-0.14
				(-0.99)	(0.57)	(-0.98)
Observations	485,710	485,710	485,710	546,992	546,992	546,992
Report and Half Hour × Month FE	Yes	Yes	Yes	Yes	Yes	Yes
Event Period	[-5,5]	[-5,5]	[-5,5]	[-5,5], Include 0	[-5,5], Include 0	[-5,5], Include 0
R-squared	12.5%	25.1%	14.8%	11.2%	24.1%	13.5%

Table IA3. SA Research and the Intensity of Retail Investor Trading: Stale Reports

Specifications 1 and 2 of this table reports the estimates from Specification 2 of Table 3 after partitioning the sample into reports authored by contributors with matched blogs (Specification 1) and reports authored by contributors without matched blogs (Specification 2). Specifications 3 and 4 reports the estimates from Specification 3 of Table 4 after conducting the same partition. The sample is limited to contributors who author at least 10 reports. We identify a contributor as having a matched blog if the contributor provides a link on her SA bio page to a personal webpage, and we find at least one of her SA reports on her personal webpage.

	Log (Retail Volume)		Retail OIB	
	Stale Reports	Not Stale Reports	Stale Reports	Not Stale Reports
	[1]	[2]	[3]	[4]
Post × SA Composite Sentiment			0.86%	0.96%
			(0.83)	(4.51)
Post_SA	4.39%	6.54%	-0.21%	0.24%
	(1.11)	(5.61)	(-0.19)	(1.07)
Abs Ret$_{i,t-1}$	8.36%	9.47%	-0.27%	0.26%
	(5.04)	(21.03)	(-0.51)	(2.46)
Abs Ret$_{i,[t-5,t-2]}$	4.11%	3.10%	1.20%	0.30%
	(2.27)	(6.57)	(2.06)	(2.53)
Ret$_{i,t-1}$	2.98%	1.13%	-1.12%	-1.61%
	(1.79)	(3.04)	(-2.38)	(-16.60)
Ret$_{i,[t-5,t-2]}$	4.85%	0.85%	-2.08%	-1.59%
	(2.46)	(1.75)	(-4.23)	(-13.42)
High Volume$_{i,t-1}$	14.05%	12.46%	0.00%	-0.16%
	(2.52)	(10.19)	(-0.00)	(-0.51)
High Volume$_{i,[t-5, t-2]}$	6.63%	-2.68%	-0.85%	0.85%
	(0.61)	(-1.07)	(-0.32)	(1.66)
Low Volume$_{i,t-1}$	-2.92%	-5.71%	-2.48%	-0.35%
	(-0.51)	(-3.52)	(-1.41)	(-1.04)
Low Volume$_{i,[t-5, t-2]}$	9.85%	11.59%	-0.08%	-0.22%
	(0.83)	(3.64)	(-0.02)	(-0.33)
Observations	14,528	267,697	14,528	267,697
SA Reports	No Events	No Events	No Events	No Events
Event Period	[-5,5]	[-5,5]	[-5,5]	[-5,5]
Report FE	Yes	Yes	Yes	Yes
Half Hour × Month FE	Yes	Yes	Yes	Yes
R-squared	81.97%	80.76%	20.03%	20.53%

Table IA4. Seeking Alpha Research Publication and Institutional Investor Trading

This table repeats the intraday panel regressions reported in Table 3 of the paper after replacing *Retail Volume* with *Institutional Volume* defined as log (1 + Total Trading Volume – Retail Volume).

	(1)	(2)	(3)
Post_SA	4.30%	6.64%	5.32%
	(4.30)	(5.82)	(6.48)
Abs Ret$_{i,[t-1]}$	6.71	6.80	5.06
	(21.10)	(18.29)	(8.55)
Abs Ret$_{i,[t-5,t-2]}$	1.76	1.65	-0.28
	(5.27)	(3.90)	(-0.45)
Ret$_{i,[t-1]}$	0.60	0.62	1.29
	(2.38)	(1.97)	(2.61)
Ret$_{i,[t-5,t-2]}$	0.28	0.90	0.45
	(0.78)	(2.10)	(0.76)
High Volume$_{i,t-1}$	11.84	11.34	6.64
	(14.59)	(10.92)	(4.06)
High Volume$_{i,[t-5, t-2]}$	-9.26	-11.26	-26.84
	(-5.27)	(-4.71)	(-9.63)
Low Volume$_{i,t-1}$	-6.48	-5.62	-0.90
	(-4.29)	(-3.72)	(-0.49)
Low Volume$_{i,[t-5, t-2]}$	13.20	15.26	30.07
	(4.81)	(5.23)	(8.04)
Observations	485,710	354,755	90,076
SA Reports	All Intraday	No Events	No Events
Event Period	[-5, 5]	[-5, 5]	[-1, 1]
Report FE	Yes	Yes	Yes
Half Hour × Month FE	Yes	Yes	Yes
R-squared	80.4%	81.1%	91.2%

Table IA5. Seeking Alpha Research Sentiment and Institutional Investor Order Imbalances
This table repeats the intraday panel regressions reported in Table 4 of the paper after replacing *Retail_OIB* with *Institutional_OIB*, defined as non-retail buy volume less non-retail sell volume scaled by non-retail trading volume, where non-retail buy (sell) volume is total buy (sell) volume less retail buy (sell) volume.

	(1)	(2)	(3)	(4)
Post × SA Long	0.34			
	(2.05)			
Post × SA Short	-0.01			
	(-0.03)			
Post × SA Negative Tone	-0.48			
	(-3.03)			
Post × SA Positive Tone	-0.01			
	(-0.04)			
Post × SA Composite Sentiment		0.23	0.36	0.57
		(2.69)	(3.41)	(3.48)
Post × SA	0.30	0.06	0.16	0.32
	(1.86)	(0.66)	(1.45)	(2.13)
Abs $Ret_{i,t-1}$	0.04	0.04	0.04	-0.10
	(0.82)	(0.86)	(0.72)	(-0.85)
Abs $Ret_{i,[t-5,t-2]}$	0.10	0.10	0.15	0.16
	(1.90)	(1.99)	(2.29)	(1.27)
$Ret_{i,t-1}$	-0.39	-0.39	-0.44	-0.93
	(-9.57)	(-10.03)	(-8.60)	(-9.23)
$Ret_{i,[t-5,t-2]}$	-0.93	-0.93	-1.08	-1.74
	(-18.52)	(-19.62)	(-17.22)	(-14.21)
High $Volume_{i,t-1}$	0.23	0.23	0.16	0.32
	(2.00)	(2.11)	(1.12)	(1.16)
High $Volume_{i,[t-5,\ t-2]}$	0.09	0.11	0.11	0.33
	(0.51)	(0.61)	(0.44)	(0.71)
Low $Volume_{i,t-1}$	-0.11	-0.11	-0.24	0.19
	(-0.77)	(-0.77)	(-1.40)	(0.59)
Low $Volume_{i,[t-5,\ t-2]}$	0.18	0.18	-0.06	-0.35
	(0.64)	(0.66)	(-0.19)	(-0.57)
Observations	485,710	485,710	354,755	90,076
SA Reports	All Intraday	All Intraday	No Events	No Events
Half-Hour Event Window	[-5, 5]	[-5, 5]	[-5, 5]	[-1, 1]
Report FE	Yes	Yes	Yes	Yes
Half Hour × Month FE	Yes	Yes	Yes	Yes
R-squared	22.6%	22.6%	22.4%	56.6%

Table IA6. SA Research and the Informativeness of Retail Investor Trading: Robustness

The table presents the results of variations of the retail trade informativeness results reported in Table 5. Row 1 reports the results from the baseline result from Specification 2 of Table 5. Row 2 excludes reports issued by contributors with matched blogs (as defined in Table IA.3). Rows 3 and 4 exclude reports that are issued the day after or the day before an earnings announcement. Row 5 repeats the analysis after including reports issued between 10:00-10:30 am, and Row 6 repeats the analysis after including reports during non-trading hours. Row 7 excludes reports issued during the financial crisis (July 2008-December 2008). Rows 8, 9, and 10 report the results for reports issued in the first third, middle third, and last third of our sample.

	Observations	Estimate	*t*-statistic
1. Baseline	353,557	0.256	(3.51)
2. Exclude Stale Reports	268,689	0.259	(3.64)
3. Exclude Post-Earnings Reports	345,711	0.265	(3.58)
4. Exclude Pre-Earnings Reports	334,401	0.235	(3.46)
5. Include Reports issued between 10:00 and 10:30	379.072	0.248	(3.50)
6. Include Overnight Reports	593,470	0.175	(2.71)
7. Exclude Financial Crisis (July - Dec 2008)	347,601	0.230	(3.25)
8. First third of sample (Jan 2007 - Aug 2010)	36,176	0.721	(1.83)
9. Middle third of sample (Sep 2010- April 2014)	124,764	0.168	(1.91)
10. Last third of sample (May 2014 - Dec 2017)	192,617	0.217	(2.42)

Table IA7. SA Research and the Informativeness of Retail Trading around Earnings Announcements

This table repeats Specification (2) of Table 5 after including an indicator for reports issued near an announcement and interacting this indicator with *Retail OIB* × *Post_SA*. Panel A reports the results when the earning indicator is defined as either the day after earnings [1], or one to three days after earnings [+1, +3]. Panel B reports analogous results for reports issued prior to earnings announcements. In the interest of brevity, we only report the estimates on *Retail OIB* × *Post SA* and *Retail OIB* × *Post SA* × *Earn Indicator*. We also report the fraction of total SA reports that occur over each earnings event window.

Panel A: Post Earnings SA Reports

		Retail OIB × Post SA		*Retail OIB × Post SA × Earn Indicator*	
Earnings Day	*Fraction of Repots*	*Estimate*	*t-stat*	*Estimate*	*t-stat*
+1	2.21%	0.263	(3.56)	-0.400	(-1.07)
[+1, +3]	9.11%	0.228	(3.15)	0.350	(1.27)

Panel B: Pre-Earnings SA Reports

		Retail OIB × Post SA		*Retail OIB × Post SA × Earn Indicator*	
Earnings Day	*Fraction of Repots*	*Estimate*	*t-stat*	*Estimate.*	*t-stat*
-1	6.02%	0.233	(3.42)	0.436	(0.83)
[-1, -3]	10.18%	0.182	(2.68)	0.822	(2.21)

Table IA8. SA Research and Retail Order Informativeness: Components of Report Quality

This table repeats the intraday panel regressions from Table 10 of the paper after replacing *Report Quality* with either *Academic Quality*, *Unsigned Return*, *Signed Return*, or *Comments*. Half Hour × Month fixed effects are included. Detail variable definitions are in Appendix A.

Panel A: Stock Returns

	Academic Quality	*Unsigned Return*	*Signed Return*	*Comments*
Retail_OIB	-0.054%	-0.048%	-0.069%	-0.096%
	(-1.05)	(-0.78)	(-0.95)	(-1.88)
Retail_OIB × Quality	-0.389%	-0.106%	-0.073%	-0.027%
	(-2.04)	(-1.00)	(-0.70)	(-0.20)
Retail_OIB × Post_SA	0.181%	0.083%	0.056%	0.167%
	(2.53)	(0.96)	(0.60)	(2.22)
Retail_OIB × Post_SA × Quality	0.569%	0.327%	0.395%	0.285%
	(2.14)	(2.29)	(2.80)	(1.72)
Report Quality	0.112%	-0.158%	0.122%	-0.077%
	(1.02)	(-2.08)	(1.43)	(-0.74)
Institutional_OIB	0.179%	0.183%	0.181%	0.180%
	(1.71)	(1.75)	(1.74)	(1.72)
Institutional_OIB × Post	0.237%	0.227%	0.233%	0.225%
	(1.69)	(1.64)	(1.67)	(1.62)
Abs $Ret_{i,[t-1]}$	-0.023%	-0.017%	-0.024%	-0.023%
	(-0.47)	(-0.35)	(-0.49)	(-0.46)
Abs $Ret_{i,[t-5,t-2]}$	-0.067%	-0.060%	-0.068%	-0.066%
	(-1.00)	(-0.90)	(-1.01)	(-0.99)
$Ret_{i,[t-1]}$	0.028%	0.028%	0.029%	0.028%
	(1.06)	(1.05)	(1.07)	(1.06)
$Ret_{i,[t-5,t-2]}$	0.046%	0.046%	0.046%	0.046%
	(1.00)	(0.99)	(1.00)	(1.00)
High $Volume_{i,t-1}$	0.025%	0.025%	0.025%	0.025%
	(0.36)	(0.37)	(0.36)	(0.37)
High $Volume_{i,[t-5,\ t-2]}$	-0.288%	-0.282%	-0.289%	-0.290%
	(-2.24)	(-2.20)	(-2.25)	(-2.26)
Low $Volume_{i,t-1}$	0.012%	0.011%	0.011%	0.012%
	(0.28)	(0.24)	(0.25)	(0.28)
Low $Volume_{i,[t-5,\ t-2]}$	-0.124%	-0.131%	-0.123%	-0.124%
	(-1.05)	(-1.12)	(-1.05)	(-1.06)
Observations	353,557	353,557	353,557	353,557
SA Sample	No Event	No Event	No Event	No Event
Event Period	[-5,5]	[-5,5]	[-5,5]	[-5,5]
Half Hour × Month FE	Yes	Yes	Yes	Yes
R-squared	1.16%	1.17%	1.16%	1.16%

Table IA8. SA Research and Retail Order Informativeness: Components of Report Quality (continued)

Panel B: Media Tone

	Academic Quality	*Unsigned Return*	*Signed Return*	*Comments*
Retail_OIB	1.07	0.75	0.72	1.10
	(3.14)	(1.73)	(1.34)	(2.38)
Retail_OIB × *Quality*	-1.32	0.27	0.38	-0.61
	(-0.96)	(0.41)	(0.51)	(-0.82)
Retail_OIB × *Post_SA*	0.71	0.55	1.06	0.61
	(1.71)	(1.11)	(1.65)	(1.20)
Retail_OIB × *Post_SA* × *Quality*	2.17	0.87	-0.09	1.32
	(1.31)	(1.11)	(-0.10)	(1.36)
Report Quality	6.07	2.95	0.39	0.20
	(5.44)	(4.81)	(0.68)	(0.27)
Institutional_OIB	0.63	0.55	0.60	0.62
	(1.00)	(0.87)	(0.96)	(1.00)
Institutional_OIB × *Post*	0.26	0.28	0.27	0.22
	(0.32)	(0.35)	(0.33)	(0.28)
Abs $Ret_{i,[t-1]}$	-1.94	-2.07	-1.95	-1.95
	(-8.90)	(-9.27)	(-8.98)	(-9.10)
Abs $Ret_{i,[t-5,t-2]}$	-2.70	-2.87	-2.73	-2.74
	(-10.48)	(-10.85)	(-10.54)	(-10.75)
$Ret_{i,[t-1]}$	0.12	0.14	0.13	0.13
	(1.12)	(1.30)	(1.23)	(1.23)
$Ret_{i,[t-5,t-2]}$	-0.06	-0.05	-0.06	-0.06
	(-0.32)	(-0.26)	(-0.31)	(-0.30)
High $Volume_{i,t-1}$	3.42	3.45	3.46	3.46
	(6.00)	(6.05)	(6.04)	(6.07)
High $Volume_{i,[t-5,\ t-2]}$	1.15	1.08	1.19	1.20
	(1.06)	(0.98)	(1.09)	(1.10)
Low $Volume_{i,t-1}$	-2.54	-2.58	-2.59	-2.60
	(-6.82)	(-6.87)	(-6.88)	(-6.92)
Low $Volume_{i,[t-5,\ t-2]}$	-4.79	-4.72	-4.85	-4.85
	(-5.31)	(-5.18)	(-5.30)	(-5.29)
Media $Tone_{[0]}$	0.07	0.07	2.00	0.07
	(3.65)	(3.48)	(3.49)	(3.50)
Media $Tone_{[-5,-1]}$	0.03	0.03	1.41	0.03
	(3.89)	(3.85)	(3.79)	(3.79)
Media $Tone_{[-26,\ -6]}$	0.07	0.07	7.28	0.07
	(12.46)	(12.61)	(12.42)	(12.41)
Observations	276,097	276,097	276,097	276,097
SA Sample	No Event	No Event	No Event	No Event
Event Period	[-5,5]	[-5,5]	[-5,5]	[-5,5]
Half Hour × Month FE	Yes	Yes	Yes	Yes
R-squared	7.58%	7.49%	7.40%	7.40%

Table IA8. SA Research and Retail Order Informativeness: Components of Report Quality (continued)

Panel C: Forecast Revisions

	Academic Quality	*Unsigned Return*	*Signed Return*	*Comments*
Retail_OIB	0.02	0.03	0.08	0.00
	(0.22)	(0.31)	(0.65)	(-0.01)
Retail_OIB × *Quality*	-0.09	-0.05	-0.14	0.05
	(-0.37)	(-0.35)	(-0.85)	(0.30)
Retail_OIB × *Post_SA*	0.14	0.00	-0.10	0.12
	(1.41)	(0.03)	(-0.67)	(0.94)
Retail_OIB × *Post_SA* × *Quality*	0.35	0.37	0.61	0.21
	(1.07)	(1.77)	(2.69)	(1.06)
Report Quality	0.72	0.20	0.06	-0.34
	(3.98)	(1.94)	(0.47)	(-3.01)
Institutional_OIB	0.30	0.30	0.30	0.29
	(1.64)	(1.63)	(1.64)	(1.60)
Institutional_OIB × *Post*	0.17	0.17	0.17	0.16
	(0.89)	(0.86)	(0.88)	(0.83)
Abs $Ret_{i,[t-1]}$	-0.12	-0.13	-0.13	-0.12
	(-3.99)	(-4.19)	(-4.01)	(-3.98)
Abs $Ret_{i,[t-5,t-2]}$	-0.24	-0.25	-0.24	-0.23
	(-6.04)	(-6.33)	(-6.15)	(-6.06)
$Ret_{i,[t-1]}$	0.06	0.06	0.06	0.06
	(3.40)	(3.48)	(3.45)	(3.44)
$Ret_{i,[t-5,t-2]}$	0.09	0.09	0.09	0.09
	(2.29)	(2.33)	(2.32)	(2.28)
High $Volume_{i,t-1}$	0.26	0.26	0.26	0.26
	(2.67)	(2.73)	(2.74)	(2.69)
High $Volume_{i,[t-5, t-2]}$	0.08	0.08	0.08	0.06
	(0.42)	(0.41)	(0.44)	(0.33)
Low $Volume_{i,t-1}$	-0.20	-0.20	-0.20	-0.20
	(-3.08)	(-3.11)	(-3.12)	(-3.08)
Low $Volume_{i,[t-5, t-2]}$	-0.31	-0.31	-0.31	-0.31
	(-1.49)	(-1.48)	(-1.52)	(-1.51)
$Revisions_{[0]}$	0.60	0.59	1.81	0.60
	(10.22)	(10.20)	(10.21)	(10.21)
$Revisions_{[-5,-1]}$	0.10	0.10	0.57	0.10
	(11.06)	(10.95)	(10.95)	(10.97)
$Revisions_{[-26,-6]}$	0.08	0.08	0.82	0.08
	(8.59)	(8.54)	(8.56)	(8.57)
Observations	157,680	157,680	157,680	157,680
SA Sample	No Event	No Event	No Event	No Event
Event Period	[-5,5]	[-5,5]	[-5,5]	[-5,5]
Half Hour × Month FE	Yes	Yes	Yes	Yes
R-squared	13.51%	13.42%	13.40%	13.45%

Table IA9. Seeking Alpha Research Coverage and the Intensity of Retail Investor Trading (Daily)
The table presents the results from the following daily panel regression:

$$Retail\ Trade_{i,t} = \beta_1 SA_{i,t-1} + \beta_2 Event_{i,t} + \beta_3 Char_{i,t} + Day_t + Firm_i \times Year_t + \varepsilon_{i,t.}$$

Retail Trade is either *Retail Vol* defined as log (1 + Retail Volume) for stock *i* on day *t* or *Percent Retail Trading* defined as total retail trading volume in stock *i* on day *t* scaled by total aggregate trading volume in stock *i* on day *t*. Trades are classified as retail using the approach of Boehmer et al. (2020). $SA_{i,t}$ is an indicator equal to one if at least one SA research report on stock *i* is published between 1:30 pm on day *t*-1 and 4 pm on day *t*. $Event_{i,t}$ is a vector of indicators for $Media_{i,t}$, $IBES_{i,t}$, and $Earnings_{i,t}$, defined analogously to $SA_{i,t}$. *Char* includes the return and the absolute return over the previous week ($Ret_{i,w-1}$, $AbsRet_{i,w-1}$), the previous month ($Ret_{i,m-1}$, $AbsRet_{i,m-1}$), the previous two to seven month ($Ret_{i,[m-7,m-2]}$, $AbsRet_{i,[m-7,m-2]}$), indicators for whether trading volume in the stock was in the top or bottom 10% relative to the stock's trading volume in the previous fifty days (*High Volume* and *Low Volume*), and the lag of the dependent variable measured over the previous five trading days ($Retail\ Turnover_{i,w-1}$ or $Percent\ Retail\ Trading_{i,w-1}$). All continuous independent variables are standardized to have mean zero and unit variance. Day_t denotes calendar day fixed effects and $Firm_i \times Year_t$ denotes fixed effects for each firm interacted with year fixed effects. Standard errors are clustered by date, and *t*-statistics are reported below each estimate.

	Log (Retail Turnover)	*Percent Retail Trading*
	(1)	(2)
SA	5.60%	0.29
	(55.33)	(27.30)
Media	3.50%	0.04
	(80.32)	(6.41)
IBES	5.60%	0.01
	(98.00)	(2.17)
Earnings	41.20%	0.63
	(119.45)	(25.83)
$Ret_{i,w-1}$	0.30%	-0.01
	(7.05)	(-1.23)
$Ret_{i,m-1}$	0.00%	-0.03
	(-0.62)	(-6.37)
$Ret_{i,[m-7,m-2]}$	-0.20%	-0.14
	(-5.28)	(-25.00)
Abs $Ret_{i,w-1}$	2.70%	0.21
	(52.88)	(40.13)
Abs $Ret_{i,m-1}$	0.90%	0.16
	(27.18)	(30.95)
Abs $Ret_{i,[m-7,m-2]}$	1.80%	0.23
	(41.05)	(32.82)
$High\ Volume_{i,d-1}$	9.00%	(0.10)
	(87.39)	(10.36)
$Low\ Volume_{i,d-1}$	-2.10%	(0.08)
	(-40.99)	(7.95)
$Log\ Retail\ Turnover_{i,w-1}$	64.40%	
	(316.01)	
$Percent\ Retail\ Trading_{i,w-1}$		0.38
		(131.46)
Day Fixed Effects	Yes	Yes
Firm × Year Fixed Effects	Yes	Yes
Observations	4,222,189	4,222,189
SA Sample	Full Sample	Full Sample
R-squared	73.08%	54.93%

Table IA10. Seeking Alpha Research Coverage and the Direction of Retail Investor Trading (Daily)
The table presents the results from the following daily panel regression:

$$\text{Retail\_OIB}_{i,t} = \alpha + \beta_1 \text{Event}_{i,t} + \beta_2 \text{Event\_Sentiment}_{i,t} + \beta_3 \text{Char}_{i,t} + \text{Day}_t + \text{Firm}_i \times \text{Year} + \varepsilon_{i,t}.$$

Retail_OIB_{it} is defined as retail buy volume less retail sell volume, scaled by total retail trading volume for firm i on day t. Retail buys and sells are classified as in Boehmer et al. (2020). SA×Sentiment is a vector of four variables: Long (Short), a dummy equal to one if the author discloses a long (short) position and Negative Tone (Positive Tone), a dummy equal to one if the fraction of negative (positive) words in the report exceeds the median. Positive Tone, a dummy equal to one if the fraction of positive words in the report exceeds the median. In Specification (2), Composite Sentiment is defined as: Long + Pos Tone – Short – Neg Tone. $SA_{i,t}$ is an indicator equal to one if at least one SA research report on stock i is published between 1:30 pm on day t-1 and 4 pm on day t. In cases where there are multiple SA reports for the same day, we take the average of SA × Sentiment across all reports. $Event_{i,t}$ is a vector of indicators for $Media_{i,t}$, $IBES_{i,t}$, and $Earnings_{i,t}$, defined analogously to $SA_{i,t}$. Event×Sentiment measures the sentiment of Media, IBES, and Earnings. Media × Sentiment equals one (negative one) if the ESS score for a media articles for firm i on day t is greater (less) than 50 (the score assigned to a neutral article) and equals 0 if the ESS score is 50. IBES × Sentiment equals one (negative one) if the IBES report includes a recommendation upgrade or upward forecast revision (downgrade or downward revision). Media × Sentiment (IBES × Sentiment) are averaged across all media articles (IBES reports) for the same firm day. Earnings Sentiment equals one (negative one) if the earnings surprise is positive (negative) relative to the consensus forecast. Char includes the return and the absolute return over the previous week ($Ret_{i,w-1}$, $AbsRet_{i,w-1}$), the previous month ($Ret_{i,m-1}$, $AbsRet_{i,m-1}$), the previous two to seven month ($Ret_{i,[m-7,m-2]}$, $AbsRet_{i,[m-7,m-2]}$), indicators for whether trading volume in the stock was in the top or bottom 10% relative to the stock's trading volume in the previous fifty days (High Volume and Low Volume), and the lag of the dependent variable measured over the previous five trading days ($Retail\_OIB_{i,w-1}$). All continuous independent variables are standardized to have mean zero and unit variance. Day_t denotes calendar day fixed effects and $Firm_i \times Year_t$ denotes fixed effects for each firm interacted with year fixed effects. Standard errors are clustered by date, and t-statistics are reported below each estimate.

	[1]	[2]
SA × Long	1.10%	
	(7.37)	
SA× Short	-2.25%	
	(-6.82)	
SA × Negative Tone	-0.90%	
	(-6.78)	
SA × Positive Tone	0.30%	
	(2.30)	
SA × Composite Sentiment		0.80%
		(10.30)
SA	1.26%	1.01%
	(10.24)	(12.58)
Media × Sentiment	0.39%	0.39%
	(11.13)	(11.13)
Media	0.23%	0.23%
	(5.17)	(5.17)
IBES × Sentiment	0.32%	0.32%
	(3.74)	(3.74)
IBES	0.27%	0.27%
	(5.23)	(5.21)
Earnings × Sentiment	0.07%	0.07%
	(0.63)	(0.63)
Earnings	-1.25%	-1.25%
	(-9.31)	(-9.37)
$Ret_{i,w-1}$	-0.81%	-0.81%
	(-36.76)	(-36.76)

$Ret_{i,m-1}$	-0.69%	-0.69%
	(-29.97)	(-29.98)
$Ret_{i,[m-7,m-2]}$	-0.43%	-0.43%
	(-13.64)	(-13.66)
Abs $Ret_{i,w-1}$	0.36%	0.36%
	(17.59)	(17.58)
Abs $Ret_{i,m-1}$	0.29%	0.29%
	(13.05)	(13.05)
Abs $Ret_{i,[m-7,m-2]}$	0.27%	0.27%
	(9.16)	(9.17)
High $Volume_{i,d-1}$	0.82%	(0.01)
	(12.78)	(12.76)
Low $Volume_{i,d-1}$	-1.01%	(-0.01)
	(-14.07)	(-14.07)
Retail OIB_{w-1}	2.28%	2.28%
	(65.80)	(65.80)
Time Fixed Effects	Yes	Yes
Firm * Year Fixed Effects	Yes	Yes
Observations	4,174,881	4,174,881
R-squared	2.16%	2.16%

Table IA11. Retail Investor Trading Informativeness: Daily Analysis (Before and After Report Publication)
This table repeats Table 11 after replacing the single *Retail_OIB* × *SA* interaction term with *Retail OIB* interacted with five separate indicators denoting separate trading days around the publication of the SA report. For example, day -2 (day +2) indicates that trade occurred two trading days prior to (after) the release of the SA report. All controls are included but omitted for brevity.

	Coefficient	*t-stat*
Retail_OIB	0.04	7.18
Retail_OIB × SA_{-2}	0.02	0.68
Retail_OIB × SA_{-1}	0.03	1.03
Retail_OIB × SA_{-0}	0.07	2.48
Retail_OIB × SA_{+1}	0.05	1.63
Retail_OIB × SA_{+2}	-0.02	-0.64

Table IA12. SA Research and the Informativeness of Retail Order Imbalances: Decomposition Analysis

The table presents coefficients from the estimation of Specification (1) of Table 11 when retail trading is replaced with one of its three components: *Persistence* (a proxy for price pressure), *Contrarian* (a proxy for liquidity provision), or *Other* (a proxy for informed trading). These components are estimated as the fitted values from the panel regression:

$$Retail\_OIB_{i,t} = \alpha + \beta_1 Retail\_OIB_{i,w-1} + \beta_2 Ret_{i,w-1} + \varepsilon_{i,t},$$

where $\widehat{OIB}_{i,t}^{Persistence} = \hat{\beta}_1 OIB_{i,w-1}$; $\widehat{OIB}_{i,t}^{Contrarian} = \hat{\beta}_2 Ret_{i,w-1}$; and $\widehat{OIB}_{i,t}^{Other} = \hat{\varepsilon}_{i,t}$, respectively. All continuous variables are standardized. Standard errors are clustered by month, and *t*-statistics are reported in parentheses.

	Persistence	**Contrarian**	**Other (Informed)**
	(1)	(2)	(3)
Retail_OIB	0.057	0.030	0.030
	(7.05)	(1.25)	(7.25)
Retail_OIB × *SA*	0.002	-0.031	0.092
	(0.06)	(-1.04)	(3.49)
Retail_OIB × *Media*	-0.001	0.025	0.019
	(-0.12)	(1.27)	(2.32)
Retail_OIB × *IBES*	0.004	-0.046	0.024
	(0.29)	(-2.10)	(1.89)
Retail_OIB × *Earnings*	0.001	-0.054	0.066
	(0.03)	(-0.71)	(1.51)
Retail_OIB × *Size*	-0.037	-0.002	-0.024
	(-4.58)	(-0.17)	(-5.12)
Institutional_OIB	-0.053	-0.053	-0.051
	(-7.65)	(-7.57)	(-7.39)
Institutional_OIB × *SA*	0.032	0.033	0.035
	(1.14)	(1.17)	(1.24)
Institutional_OIB × *Media*	0.019	0.019	0.019
	(1.73)	(1.74)	(1.74)
Institutional_OIB × *IBES*	0.007	0.006	0.009
	(0.48)	(0.38)	(0.60)
Inst_OIB × *Earnings*	0.020	0.018	0.021
	(0.47)	(0.44)	(0.51)
Institutional_OIB × *Size*	0.005	0.004	0.006
	(0.88)	(0.73)	(0.99)
$Ret_{i,w-1}$	-0.093	-0.079	-0.090
	(-3.84)	(-3.29)	(-3.72)
$Ret_{i,m-1}$	-0.037	-0.041	-0.039
	(-1.16)	(-1.28)	(-1.23)
$Ret_{i,[m-7,\ m-2]}$	-0.002	-0.003	-0.002
	(-0.06)	(-0.08)	(-0.06)
$Turnover_{i,m-1}$	-0.050	-0.047	-0.049
	(-2.01)	(-1.88)	(-1.95)
$Volatility_{i,m-1}$	0.060	0.062	0.061
	(1.49)	(1.52)	(1.50)
Log (Size)	-0.001	-0.002	0.000
	(-0.03)	(-0.06)	(0.01)
Log (BM)	0.017	0.016	0.016
	(0.62)	(0.57)	(0.60)
$High\ Volume_{i,d-1}$	0.197	0.203	0.198
	(6.76)	(7.02)	(6.80)
$Low\ Volume_{i,d-1}$	-0.127	-0.128	-0.129

	(-5.49)	(-5.44)	(-5.60)
SA	0.009	0.010	0.004
	(0.26)	(0.31)	(0.12)
Media	0.016	0.017	0.016
	(1.57)	(1.62)	(1.51)
IBES	-0.026	-0.024	-0.026
	(-0.96)	(-0.90)	(-0.95)
Earnings	-0.080	-0.079	-0.071
	(-1.45)	(-1.41)	(-1.29)
Day Fixed Effects	Yes	Yes	Yes
Observations	4,216,191	4,216,191	4,216,191
SA Sample	Full Sample	Full Sample	Full Sample
R-squared	15.71%	15.57%	15.70%

Table IA13. Fake SA Reports and Retail Trade Informativeness: Return Horizon Analysis

This table repeats the retail trade informativeness tests reported in Specification 4 of Table 12 after altering the period of which future returns are measured. Specification 1 measures future returns over week 1 and is thus identical to Specification 4 of Table 12. Specifications 2-5 report the results when future returns are measured over week 2, 3, 4, and 5, and from weeks 2 through 5. All other details are identical to Table 12.

Panel A: Anonymous Contributors

	Week Relative to Publication					
	1	2	3	4	5	[2,5]
Anonymous	0.378	-0.005	-0.189	-0.238	-0.065	-0.400
	(2.48)	(-0.03)	(-1.45)	(-1.45)	(-0.57)	(-1.54)
Non-Anonymous	0.229	-0.012	-0.040	0.068	0.131	0.191
	(2.69)	(-0.18)	(-0.82)	(0.92)	(2.00)	(1.59)
Anonymous Interaction	0.155	-0.015	-0.116	-0.381	-0.182	-0.615
	(0.86)	(-0.09)	(-0.82)	(-2.34)	(-1.19)	(-2.21)

Panel B: Authenticity Score

	Week Relative to Publication					
	1	2	3	4	5	[2,5]
Low Authenticity	0.405	-0.040	-0.117	-0.262	0.104	-0.274
	(2.91)	(-0.25)	(-1.14)	(-1.93)	(0.80)	(-1.01)
High Authenticity	0.200	-0.002	-0.045	0.077	0.092	0.180
	(2.60)	(-0.03)	(-0.92)	(0.90)	(1.44)	(1.36)
Low Authenticity Interaction	0.232	-0.044	-0.073	-0.331	0.010	-0.515
	(1.60)	(-0.28)	(-0.62)	(-2.08)	(0.08)	(-1.65)

Table IA14. Exploring the Differential Effect of Low Authenticity Reports on Retail Trading Volume

This table repeats Specification 1 of Table 12 (reported here as Specification 1) and interacts *Post_SA* with measures of for the firm's information environment (Specification 2), the language used in the report (Specification 3), and the length of the contributor's track record (Specification 4). Measures of the firm's information environment include indicators equal to one if the firm is in the bottom 20 of market capitalization based on NYSE size breakpoints (*Small Size)* or middle 60 of market capitalization (*Medium Size*), the natural log of 1 plus the number of brokerage firms issuing at least one earnings forecast for the firm in the prior calendar year (*IBES Coverage*), the percentage of the shares held by institutional investors in year *t*-1 (*Institutional Ownership*), and an indicator equal to one for firms that received no SA coverage in the previous three months (*No SA coverage*). Measures of the language used in the report include an LIWC outputted measure of confidence or expertise in expression (*Clout);* the fraction of words in the report that are more than six letters long (*Sophistication*), indicators for whether the author discloses a long position (*Long*) or short position (*Short*), indicators for whether the fraction of negative/positive words in the report exceeds the sample median (*Negative Tone/Positive Tone*), and an indicator equal to one if the composite sentiment, defined as *Long + Positive Tone – Short – Negative Tone*, is either clearly positive (i.e., composite sentiment =2) or clearly negative (i.e., composite sentiment = -2) (*Consistent Tone*). *Short Track* is an indicator equal to one for the first five reports of a contributor and zero otherwise. All other variables are defined as in Table 3. All continuous variables are standardized. Standard errors are clustered by date, and *t*-statistics are reported below each estimate.

	(1)	(2)	(3)	(4)
Post_SA	6.29	2.45	4.52	4.18
	(5.23)	(1.44)	(1.86)	(1.71)
Post SA × Low Authenticity	12.05	8.26	6.16	3.58
	(5.73)	(3.96)	(2.91)	(1.60)
Post SA × Small Size		12.60	12.12	11.81
		(4.17)	(3.97)	(3.86)
Post SA × Medium Size		-5.39	-5.61	-5.65
		(-2.91)	(-2.94)	(-2.96)
Post SA × Log (Coverage)		-12.60	-12.16	-11.94
		(-11.41)	(-10.84)	(-10.65)
Post SA × Log (Inst. Ownership)		-2.06	-2.33	-2.28
		(-2.21)	(-2.39)	(-2.34)
Post SA × No SA Coverage		15.89	15.33	15.35
		(7.02)	(6.71)	(6.72)
Post SA × Clout			2.19	2.23
			(2.57)	(2.63)
Post SA × Sophistication			2.74	2.67
			(3.04)	(2.96)
Post SA × Long			1.40	0.97
			(0.62)	(0.43)
Post SA × Short			1.12	0.69
			(0.26)	(0.16)
Post SA × Negative Tone			-2.07	-2.08
			(-1.07)	(-1.08)
Post SA × Positive Tone			-2.00	-1.85
			(-1.15)	(-1.07)
Post SA × Consistent Tone			8.81	8.70
			(2.19)	(2.16)
Post SA × Short Track				4.05
				(1.36)
Post SA × Short Track × Low Auth.				15.05
				(2.49)
Abs $Ret_{i,t-1}$	10.00	10.03	10.02	10.00
	(24.88)	(24.51)	(24.40)	(24.38)

Abs $Ret_{i,[t-5,t-2]}$	3.44	3.39	3.40	3.39
	(8.25)	(7.93)	(7.93)	(7.91)
$Ret_{i,t-1}$	1.00	0.95	1.00	0.99
	(2.90)	(2.70)	(2.83)	(2.81)
$Ret_{i,[t-5,t-2]}$	1.03	1.01	1.02	1.01
	(2.38)	(2.27)	(2.28)	(2.26)
High $Volume_{i,t-1}$	13.74	12.85	12.77	12.74
	(12.84)	(12.03)	(11.93)	(11.91)
High $Volume_{i,[t-5,\ t-2]}$	-2.36	-3.20	-3.40	-3.45
	(-1.03)	(-1.38)	(-1.46)	(-1.48)
Low $Volume_{i,t-1}$	-5.98	-5.81	-5.74	-5.74
	(-4.07)	(-3.95)	(-3.89)	(-3.89)
Low $Volume_{i,[t-5,\ t-2]}$	12.98	12.53	12.54	12.47
	(4.78)	(4.62)	(4.60)	(4.58)
Observations	354,755	347,597	345,286	345,286
R-squared	81.1	81.4	81.5	81.5
Report FE	Yes	Yes	Yes	Yes
Half Hour × Month FE	Yes	Yes	Yes	Yes

Table IA15. Exploring the Differential Effects of Low Authenticity Reports on Retail Trading, Retail Informativeness, and Institutional Trading
Specifications 1-6 report the coefficient on the *Low Authenticity Interaction* from Panel B of Table 12 before and after accounting for differences in firm attributes, article language, and length of contributor track record. For reference, Row 1 (*Baseline Model*) reports the results from Panel B of table 12. Rows 2 reports the estimate on the interaction term after adding the firm attributes that were included in Specification 2 of Table IA.14. Similarly, Rows 3 and 4 add language attributes and track record length and are identical to Specification 3 and 4 of Table IA.14, respectively. Rows 7 and 8 report analogous results after replacing Retail *Volume* and *Retail OIB*, with *Institutional Volume* and *Institutional Order Imbalance.* Standard errors are clustered by time and t-statistics are reported below each estimate.

	Retail Volume (1)	Percent Retail (2)	Retail OIB (3)	Return 1-week (4)	Return 5-weeks (5)	Return 12-weeks (6)	Institutional Volume (7)	Institutional OIB (8)
Baseline Model	12.05	0.04	0.78	0.232	-0.283	-1.059	10.75	0.50
	(5.73)	(0.46)	(1.65)	(1.60)	(-0.79)	(-1.91)	(4.88)	(1.77)
Include Firm Attributes	8.26	0.08	0.35	0.248	-0.157	-0.813	7.10	0.47
	(3.96)	(0.81)	(1.06)	(1.70)	(-0.46)	(-1.61)	(3.25)	(1.65)
And Language Attributes	6.16	0.04	0.33	0.164	-0.161	-0.724	5.45	0.33
	(2.91)	(0.42)	(0.70)	(1.09)	(-0.44)	(-1.37)	(2.45)	(1.13)
And Track Record Length	3.58	0.01	-0.08	0.163	-0.008	-0.815	3.84	0.29
	(1.60)	(0.12)	(-0.16)	(0.95)	(-0.02)	(-1.35)	(1.60)	(0.94)