Rogue Analysts and the Persistence of Earnings Components[†]

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July 2024

We thank Linda Bamber, Erv Black, Dirk Black, Khrystyna Bochkay, Mark Bradshaw, Kimball Chapman, Asher Curtis (Harvard IMO discussant), Bill Mayew, Lorien Stice-Lawrence, Eric Weisbrod, Ben Whipple, and workshop participants at American University, Duke University, ESSEC Business School, Exeter University, King's College London, Tilburg University, the University of Georgia, the University of Miami, the University of Oklahoma, the University of Western Ontario, Utah State University, Vanderbilt University, and the 2018 Harvard Information, Markets, and Organizations Conference for helpful comments and suggestions. We also appreciate comments from Ph.D. students at the University of Utah. We express appreciation to Justin Chircop, Willie Goodman, Ben Jumper, Alex Shek, James Shinners, and Eric Swenson for their research assistance. We are grateful to Kurt Gee for sharing earnings announcement data and non-GAAP dictionary phrases.

[†]A previous related paper circulated under the title "The Role of Rogue Analysts in Determining Street Earnings."

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Abstract

We investigate the influence of "rogue analysts" (i.e., analysts that I/B/E/S excludes in calculating the consensus forecast) in the interpretation of street earnings. The presence of these analysts suggests disagreement about which components of GAAP earnings are important for valuing the firm. This disagreement has important implications for the persistence of items that the majority of analysts exclude in forecasting street earnings. Determinants tests suggest that rogue analyst coverage is associated with shifts away from GAAP and toward non-GAAP reporting by the firm or by consensus-group analysts. We find that after analysts first go rogue, bottom-line earnings become more persistent, suggesting that street earnings are less informative. We also find that capital markets appear to underreact to the information conveyed by rogue analysts. Returns are predictably more negative following the initiation of rogue analyst coverage, and the presence of rogue analysts is associated with returns drifting in the direction of earnings news about the items the consensus analysts exclude in forecasting street earnings. These results have important implications for researchers examining disagreement among analysts as well as for investors seeking to understand the components of earnings that matter for firm value.

Keywords: earnings persistence; non-GAAP performance measures; street earnings; conference calls; analyst disagreement

JEL codes: G14, M40, M41

1. Introduction

Earnings (both forecasted and realized) are often the focal point of studies in the accounting and finance literatures. Using earnings numbers in different settings and research designs, prior researchers have drawn inferences about many topics such as the informativeness of accounting numbers, market (in)efficiency, managers' incentives, earnings management, analysts' incentives, and analysts' expertise. Moreover, investors and the business press often fixate on earnings numbers. Given the prominence and widespread use of earnings metrics, investors and researchers benefit from a clear understanding of the processes through which these numbers are determined and forecasted. However, these processes are not always straightforward. For example, GAAP earnings are not the only performance metric used by market participants. In particular, managers and analysts often adjust standard GAAP earnings by excluding one or more earnings components, resulting in "non-GAAP" earnings, the calculation of which often differs across companies and even over time for the same firm (Black et al., 2020). These non-GAAP performance metrics have received widespread attention in recent years, and prior research suggests that investors find these non-GAAP numbers to be more informative than GAAP earnings (Bradshaw and Sloan, 2002; Bhattacharya et al., 2003). Since analysts play a vital informational role in capital markets as a source of earnings expectations, the non-GAAP earnings numbers they forecast, often referred to as "street earnings," are particularly important to investors (Bradshaw and Sloan, 2002; Bradshaw et al., 2018).

Analyst forecast tracking services (such as I/B/E/S) provide a realized street earnings figure at the end of each quarter, calculated on the same basis (i.e., including or excluding the same items) as analysts' ex ante earnings forecasts. This process involves three steps. First, analysts issue earnings forecasts prior to the end of the quarter. Second, firms announce realized earnings at the end of the quarter. Third, the forecast tracking service (i.e., I/B/E/S) provides a street earnings number by adjusting the firm's realized earnings number based on the earnings definition forecasted by the

majority of analysts (the consensus group) who issued forecasts during that quarter. We investigate an important yet underexplored factor associated with the three steps in the street earnings generation process: the presence of "rogue analysts" who forecast an earnings metric that differs from the consensus group's earnings definition.

While street earnings numbers convey how *most* analysts evaluate firm performance, some analysts disagree with their peers about how firm performance should be defined. These analysts forecast earnings measures that differ from the majority or "consensus" earnings definition (i.e., they include or exclude different items than the consensus group of analysts). Because they forecast different earnings metrics, I/B/E/S excludes them from the consensus group. We refer to these disagreeing analysts as "rogue analysts." Prior research generally ignores rogue analysts. However, it is important to consider them because their presence indicates differing opinions about which items should be excluded in calculating street earnings, suggesting that analysts ultimately disagree about the degree to which certain components of earnings matter for firm value.[1] As a result, the presence of rogue analysts has important implications for stakeholders seeking to forecast or interpret (components of) firms' earnings.

We begin our analyses by exploring factors associated with a firm being covered by rogue analysts. To identify rogue analysts, we leverage the I/B/E/S excluded analysts file, which contains the forecasts of individual analysts that are not included in the calculation of the analyst consensus forecast.[2] We find that current rogue analyst coverage is associated with (1) prior non-GAAP reporting by consensus-group analysts, (2) prior shifts in the definition street earnings in I/B/E/S, and

[1] Importantly, we are referring to disagreement among analysts about how a firm's fundamental performance *should be defined* (as opposed to disagreement about the point estimate of forecasted earnings, often measured as the standard deviation of analysts' forecasts).

[2] While we use the I/B/E/S excluded analysts file, other forecast data providers also consider similar issues. For example, FactSet has a concept of a "Standout Estimate," which is a "broker-level estimate that significantly deviates from its peers," and it also uses "restrictions" at times when there is "a change in methodology by a particular broker" (see FactSet Online Assistant pages 17362 and 16084).

(3) prior non-GAAP reporting by managers. We also find that there is a significant drop in the frequency of a firm's street earnings equaling its GAAP earnings in the few quarters immediately before one of its analysts "goes rogue" for the first time. This evidence is consistent with rogue analysts disagreeing with the use of non-GAAP earnings for certain firms; these results also suggest that analysts go rogue (i.e., chose to depart from the consensus) in response to more non-GAAP reporting by either analysts or managers.

As a result, the presence of rogue analysts may convey important information about the persistence of earnings. For example, while the consensus group may exclude a certain expense in preparing their non-GAAP earnings forecasts (implying that it is less persistent and less important for firm value), rogue analysts may consider the same expense to be more persistent and important for assessing future cash flows, opting to include the expense in their street earnings forecasts. If rogue analysts disagree with the consensus and believe that excluded items are more persistent, particularly if consensus analysts focus on non-GAAP earnings, then we would expect bottom-line earnings to be more persistent for firms covered by rogue analysts. Consistent with this prediction, we find that current GAAP earnings become more predictive of future GAAP earnings summed over the next one, two, and three years after one of a firm's analysts first goes rogue. We also examine the persistence of individual components of earnings that are likely to be excluded: depreciation and amortization, special items, and non-operating items. Our evidence of increased persistence is strongest for depreciation and amortization, followed by special items. We find directionally consistent but statistically insignificant results for increased persistence of non-operating items.

Next, we turn to more direct evidence that rogue analysts may be focusing on and disagreeing about how to treat particular components of earnings by examining the discussion of non-GAAP topics in the Q&A portion of firms' earnings conference calls. We provide an example of this kind of discussion in Appendix C, where an analyst asks management about an excluded item that is

"increasingly looking like a recurring item." Consistent with the view that rogue analysts have different views about earnings components, we find that rogue analyst coverage is associated with more analyst-driven discussion of non-GAAP earnings topics during conference calls. This result suggests that rogue analysts are focused on understanding the components of earnings, consistent with the view that the presence of rogues conveys important information about firm fundamentals.

Since rogue analysts are by definition excluded from the consensus group whose forecasts receive most of the attention in the business press, we expect that capital markets may react slowly to the information conveyed by the presence of rogue analysts. To investigate this possibility, we examine the association between the presence of rogue analysts and stock returns over various windows. First, we find that rogue analyst coverage is associated with negative returns throughout the next quarter; we also find some evidence of this negative drift continuing for up to two years. These results are consistent with rogue analysts conveying important information about the implications of certain earnings components for firm value (particularly expenses that the consensus group excludes in forecasting street earnings) and with capital markets not fully incorporating this information immediately.

Next, we consider the association between rogue analyst coverage and the market response to earnings news. If rogue analysts correctly believe that consensus-excluded items are important in determining firm value, then capital markets should react more to bottom-line GAAP earnings news and less to street earnings news after a firm first experiences an analyst going rogue. Our evidence suggests that investors tend to underreact to GAAP earnings news (i.e., including those items that the consensus group excludes in forecasting street earnings) after the initiation of rogue analyst coverage, followed by a drift over the next quarter. Interestingly, this drift is several times larger than the initial reaction to GAAP earnings news. We also find that markets tend to overreact to street earnings news, leading to a reversal over the next quarter.

Taken together, our results provide new insights about the information content of street earnings by exploring the influence of rogue analysts. Rogue analysts appear to have insights about the persistence of earnings components excluded from the consensus street earnings number, and the presence of rogue analysts has implications for investors' interpretation of earnings news. Our evidence advances the literature by shedding light on this underexplored—yet important—aspect of the street earnings process, suggesting that rogue analysts have implications for researchers and stakeholders seeking to understand firm performance. Most prior research has ignored forecasts deviating from the consensus forecast, with limited exceptions (e.g., Kaplan et al. 2021). Examining forecasts that deviate from the consensus earnings definition is likely to be informative because they reflect alternate views about how to measure firms' operating performance. Kaplan et al. (2021) examine the forecasts excluded from the consensus and find that I/B/E/S retains stale forecasts in the consensus. They also find that I/B/E/S removes optimistic forecasts more frequently than pessimistic forecasts, especially when these removals allow firms to meet or beat the consensus forecast. Our investigation of the presence of rogue analysts at the firm level sheds additional light on the information conveyed by these analysts and how market participants may benefit from paying attention to their forecasts rather than excluding or ignoring them.

Our results also suggest that rogue analyst coverage is a proxy for disagreement about the definition of earnings. This evidence could be useful for future researchers examining analyst and investor disagreement. Prior research generally only relies upon dispersion in analysts' forecasts as a proxy for disagreement. We leave this as a future avenue for researchers to examine how these two measures of disagreement are related with one another. Finally, our results are important for investors seeking information about upcoming earnings and valuing firms. Our results suggest that investors should pay more attention to rogue analysts since their presence appears to convey useful information.

2. Background and research questions

2.1. The street earnings process

Street earnings are calculated based on a method known as the "majority rule," which Thomson Reuters (TR) has described as follows:

> [The] goal is to present [street earnings] on an operating basis, whereby a corporation's reported earnings are adjusted to *reflect the basis that the majority of contributors [i.e., analysts] use to value the stock*. In many cases, the reported figure contains unusual or one-time items that the majority of analysts exclude from their actuals. The majority accounting basis is determined on a quarter-by-quarter basis … [I/B/E/S] examines each reported item, and includes or excludes the item from the [street earnings number] based on how the majority of contributing analysts treat the item for that period (Thomson Reuters, 2009, emphasis added).

The main events in the process for deriving street earnings each quarter begin with analysts forecasting firms' earnings. In doing so, they decide which items to include or exclude from their forecasts. After reviewing these forecasts, I/B/E/S determines which analysts will be included in the consensus group based on whether particular line items are included or excluded by the majority of analysts. Then, after a company announces realized earnings for the quarter, I/B/E/S determines the "actual" street earnings number by applying the majority-determined definition of earnings to the actual line items announced by the company.

2.2. Prior research on street earnings

Prior research concludes that investors rely more on street earnings than on other earnings metrics. Specifically, Bradshaw and Sloan (2002) find that the street earnings surprise is more highly associated with stock returns than the GAAP earnings surprise.[3] Similarly, Brown and Sivakumar (2003) find that investors use street earnings rather than Compustat's calculated core earnings measure for valuation. While Landsman et al. (2007) find that income-increasing street exclusions

[3] Despite subsequent claims that Bradshaw and Sloan's (2002) result is attributable to measurement error, Bradshaw et al. (2018) find that after correcting for misaligned forecasts, investors unconditionally prefer street earnings relative to GAAP earnings as a summary performance measure. However, they also find that disaggregated GAAP earnings provide incremental explanatory power relative to street earnings.

result in overpricing prior to SEC regulatory intervention, Kolev et al. (2008) examine the quality of street earnings exclusions following Regulation G and find that, in the post-regulation period, street exclusions are of higher quality.

Interestingly, analysts' street exclusion decisions can be idiosyncratic because they have the discretion to decide which line items they will forecast (Doyle et al., 2003; Barth et al., 2012). Prior research indicates that analyst ability (Gu and Chen, 2004) and analyst incentives (Baik et al., 2009) partially explain analysts' exclusions from GAAP earnings used in calculating street earnings. Since forecast tracking services base their exclusion decisions on the items excluded by the majority of analysts, these studies suggest that analysts' expertise and incentives play a key role in the determination of street earnings. Christensen et al. (2011) explore managers' influence on the determination of street earnings through ex-ante earnings guidance. They find that managers are able to influence the eventual calculation of street earnings at the end of the year by issuing earnings guidance during the year. Their evidence indicates that managers' earnings guidance influences the dollar amount of items excluded in calculating street earnings.

In summary, prior research has found that street earnings are a significant source of information for market participants. Moreover, the process of defining street earnings can be fluid and depends on several factors stemming from the actions of analysts, managers, and I/B/E/S. However, we still do not fully understand the factors influencing the "black box" calculation of street earnings (Abarbanell and Lehavy, 2007). Our goal is to open the black box and shed additional light on the informativeness of street and GAAP earnings by investigating the implications of rogue analysts following a firm.

2.3. The role of rogue analysts in the street earnings process

As analysts make their earnings forecasts, I/B/E/S may explicitly remove some analysts from the consensus group if their forecasts do not conform to the majority definition of earnings. Thomson

Reuters (TR) states, "It is possible that [analyst] estimates are provided on a different accounting basis that differs from the basis of the majority of the [analyst] estimates. When this occurs, TR contacts the analyst for confirmation…of either the estimate itself or the methodology behind it. TR estimates are removed from the database if a satisfactory resolution to the discrepancy is not reached" (Thomson Reuters, 2013, p. 24). We refer to these individuals whose forecasts are excluded as "rogue analysts." Their presence is an important factor in the street earnings environment because it indicates disagreement among analysts about the *definition* of street earnings.

Many studies consider disagreement about the *point estimate* of forecasted earnings (commonly measured as the standard deviation of earnings forecasts—see Ramnath et al., 2008 for a review), but we focus on rogue analysts because they suggest that analysts disagree at the very fundamental level about which items should be included or excluded from those forecasts. This type of disagreement is more fundamental and relates to different opinions about what constitutes a firm's core operating earnings and which earnings components matter for firm value. In addition, we believe this disagreement is informative "because it is costly for an analyst to have his/her forecast omitted from the consensus" (Baik et al., 2009, p. 51; also see Kaplan et al., 2021).[4] To our knowledge, we are the first to use the presence of excluded (rogue) analysts as a proxy to investigate the implications of this type of fundamental disagreement.[5]

2.4. Research questions

Since prior research has not examined the implications of the type of disagreement indicated by the presence of rogue analysts, our first research question focuses on identifying the characteristics

[4] In a private conversation, a Thomson Reuters product specialist indicated that brokerages want their analysts' estimates to be used by market participants. This evidence is also consistent with the idea that analysts would prefer to have their forecasts included in the consensus.

[5] In a recent paper mentioned previously, Kaplan et al. (2021) conclude that optimistic forecasts are more likely to be excluded because managers exert influence on I/B/E/S to increase the likelihood of meeting or beating earnings targets. While we do not dispute that certain optimistic forecasts can be excluded for this reason, our view is that variation across firms and across time in the presence of excluded analysts is a useful proxy for disagreement about the definition of street earnings.

of firms and their information environments that are key determinants of rogue analyst coverage. We next turn to earnings persistence; many of the results and frameworks in the street earnings literature can be traced back to the idea that analysts choose to exclude certain items from street earnings forecasts when they view these items as less persistent (e.g., Doyle et al., 2003). The intuition is that due to their transitory nature, these items are not useful for forecasting future earnings and matter less for firm value. However, by definition, rogue analysts disagree with the majority of analysts about which items should be included in street earnings forecasts, which suggests that for certain firms, underlying disagreement exists among analysts about which items should be viewed as transitory and less important for firm value. Thus, our second research question concentrates on whether the presence of rogue analysts is associated with firms' earnings persistence.

Lastly, because earnings persistence is fundamentally related to the link between earnings and firm value, our third research question centers on the potential link between the presence of rogue analysts and stock returns over various windows. By definition, these analysts are excluded from the consensus, which means that their information may not be widely disseminated to the market. If investors are unaware of rogue analysts' differing opinions, or if investors experience higher processing costs when considering information conveyed by rogue analysts, market prices may be slow to incorporate any value-relevant information associated with rogue coverage. As a result, we investigate whether rogue analysts are associated with future stock returns and the market response to earnings surprises.

In addressing these three research questions, we take the view that the presence of rogue analysts conveys important information about firm fundamentals. However, it is important to note that there are also arguments against rogue analysts conveying important information about firms' information environments, their earnings persistence, and their stock returns. For example, rogue analysts may be excluded because they have been slow to follow the consensus group, rather than

because they fundamentally disagree about the relevance of particular earnings components. In other words, rogue analysts may be exerting less effort than their counterparts. If this is the case, then we would not expect the presence of rogue analysts to convey information about the persistence of earnings or stock returns.

3. Data and sample

3.1. Main variables of interest

We first explain how we define our main variables of interest. Our rogue analyst variables are based on the I/B/E/S earnings forecast detail data. For each firm-quarter *t*, we first retain all forecasts of quarter *t*'s earnings issued beginning on quarter *t-1*'s earnings announcement (EA) date through one day before quarter *t*'s EA date. Then, we retain each analyst's most recent forecast and classify each forecast as either a consensus or an excluded forecast based on whether each forecast appears in the I/B/E/S excluded estimates database. This process leaves one forecast per analyst-firm-quarter, and each analyst is classified as either a consensus or an excluded analyst for each firm-quarter.[6] Finally, for each excluded analyst, we require them to have a corresponding GAAP forecast which is not excluded from the consensus. These analysts excluded from GAAP consensus are likely excluded for reasons other than a disagreement over the definition of street earnings, such as for excessive optimism (Kaplan et al., 2021).

We then construct two main indicator variables for rogue analyst coverage. *ROGUE* is an indicator variable equal to one if the firm is followed by at least one rogue analyst in the quarter. We use this variable for tests where we expect an effect only during periods when rogue analysts are actively excluded, and not after they stop being excluded. The second main variable is

[6] One potential reason for an analyst's forecast to be excluded is that it is very stale. This issue should not be a concern because of the forecast windows we use.

ROGUE_START, which is an indicator variable equal to one for the first quarter a firm was covered by a rogue analyst and remains equal to one for each following quarter. We use this variable for tests where we expect an effect to persist even after a rogue analyst might no longer be excluded. As an example, consider a firm for which the consensus group analysts forecast non-GAAP earnings, but a rogue analyst believes the excluded items are persistent and matter for assessing future cash flows. If at some point in the future the consensus group revises its definition to include those items (i.e., begins forecasting GAAP earnings instead of non-GAAP earnings), we would still expect those items to exhibit greater persistence, even if the original rogue analyst is no longer excluded from the consensus group.

3.2. Shifts in the I/B/E/S definition of earnings

I/B/E/S typically processes a firm's earnings announcement by applying the consensus analyst definition of street earnings to the earnings line items announced by the firm. However, I/B/E/S may also examine specific income statement line items from firms' previous reporting periods. To maintain consistency, I/B/E/S may decide that the majority basis should be amended based on the prior treatment of a particular item, and may update the I/B/E/S actual street earnings value accordingly. Moreover, I/B/E/S may check whether managers report non-GAAP numbers in their earnings press releases. When the analysts' street earnings and manager non-GAAP earnings numbers differ, I/B/E/S may decide to endorse at least some of the additional exclusions made by managers (Christensen, 2007).[7] The final calculation of the actual I/B/E/S earnings number may also reflect analysts' ex-post consensus opinion, as reflected in analysts' ex-post research reports.

This discussion illustrates that the definition of street earnings is not always static from quarter to quarter. While we cannot observe the components of the consensus street earnings definition in a

[7] These actions by I/B/E/S may be related to the phenomenon reported by Brown and Larocque (2013) where the I/B/E/S actual does not correspond to certain analysts' individual actual earnings number.

particular firm-quarter, we can observe firm-quarters for which I/B/E/S issues a "go-forward actual" street earnings number. Thomson Reuters explains that these go-forward actuals capture scenarios when the majority of analysts change their view of firm performance either for a particular period or on a "go-forward" basis (Thomson Reuters, 2017).[8] Because street earnings are specifically used to better capture earnings on an "operating basis" (Thomson Reuters, 2009), the issuance of a go-forward actual proxies for a shift in the way the majority of analysts view firm operating performance.[9] While I/B/E/S does not provide detail on which line items are being excluded or included differently, the presence of a go-forward actual is a useful indicator of a shift in analysts' opinion about the definition of street earnings. We define *SHIFT* as an indicator equal to one for firm-quarters with an I/B/E/S go-forward actual number.

3.3. Data and sample selection

Our sample period covers firm-quarters with fiscal periods ending between the years 2009 and 2020. We begin in 2009 because this is when GAAP forecasts started being published by the vast majority of analysts (Bradshaw et al., 2018). We end in 2020 to allow for several years of data for outcome variables after the sample period. We retain firm-quarters during the sample period for which we have I/B/E/S analysts' forecasts and street earnings data and all other data needed to carry out the empirical analyses. We construct our control variables using data from various databases as defined in Appendix A. After imposing these data requirements, the sample includes 113,298 firm-quarter observations. The number of observations drops somewhat for outcome variables that extend two or three years after a focal firm-quarter. Table 1 provides descriptive statistics for our main variables of interest as well as the other variables used throughout our empirical analyses.

[8] We thank Eric Weisbrod for bringing go-forward actuals to our attention for our analyses.
[9] Moreover, the high degree of overlap between managers' and analysts' views about street earnings (Bentley et al., 2018) suggests that these shifts in the definition of street earnings are potentially informative about managers' shifting views about firm performance.

4. Empirical results

4.1. Determinants of rogue analyst coverage

To address our first research question, we begin by examining the factors associated with rogue analyst coverage. We estimate the following model:

$$\begin{aligned} ROGUE_{i,t} = {} & \beta_0 + \beta_1 ROGUE_{i,t-1} + \beta_2 STREETGAAP_{i,t-1} + \beta_3 SHIFTT_{i,t-1} + \beta_4 MGRGAAP_{i,t-1} \\ & + \beta_5 MGRGAAP\_MISSING_{i,t-1} + \beta_6 ANALYSTS_{i,t} + \beta_7 DISPERSION_{i,t} \\ & + \beta_8 TURNOVER_{i,t} + \beta_9 SIZE_{i,t} + \beta_{10} MOMENTUM_{i,t} + \beta_{11} BTM_{i,t} \\ & + \beta_{12} LOG\_PRC_{i,t} + \beta_{13} Q4_{i,t} + \beta_{14} EARNVOL_{i,t} + \gamma_i + \tau_t + \varepsilon_{i,t} \end{aligned} \quad (1)$$

ROGUE is an indicator for whether the firm was covered by a rogue analyst during the quarter. $ROGUE_{t-1}$ is the same measure but corresponding to the prior firm-quarter. $STREETGAAP_{t-1}$ is an indicator for whether street earnings were equal to GAAP earnings in the prior quarter. $SHIFT_{t-1}$ is an indicator for whether there was a shift in the I/B/E/S definition of earnings in the prior quarter, as identified using the I/B/E/S go-forward actuals file. $MGRGAAP_{t-1}$ is an indicator for whether the main earnings figure disclosed by management is equal to GAAP (as opposed to managers disclosing a non-GAAP number), as examined by Bentley et al. (2018). Since this variable is not available for many of the observations in our sample (about 23%), we include $MGRGAAP\_MISSING_{t-1}$ as an indicator for when it is missing. *ANALYSTS* is the number of analysts in the consensus group following the firm. *DISPERSION* is the standard deviation of forecasts for the consensus group. *TURNOVER* is the average monthly stock turnover for the firm in the prior three months. *SIZE* is the log market capitalization of the firm. *MOMENTUM* is the trailing abnormal returns of the company over the prior three months. *BTM* is the book-to-market ratio of the firm. *LOG_PRC* is the log of the company's stock price at the end of the fiscal quarter. *Q4* is an indicator for the fourth fiscal quarter. *EARNVOL* is earnings volatility, defined as the standard deviation of return on assets for the prior eight quarters. We also include firm and year-quarter fixed effects and cluster standard errors by firm and year-quarter.

Table 2 presents the results. Column 1 excludes fixed effects, while column 2 includes fixed effects. We find that current rogue coverage is strongly positively associated with past rogue

coverage, indicating some stickiness in rogue coverage and suggesting that *ROGUE* is unlikely to merely capture the presence of one-off disengaged analysts. We also find higher rogue coverage when past street earnings differed from GAAP, when there was a shift in the I/B/E/S definition of earnings in the prior period, or when managers disclosed non-GAAP earnings in the prior period. These results suggest that on average, rogue analysts are more likely to be excluded due to a disagreement about the use of non-GAAP earnings by management and consensus group analysts. Thus, these results are consistent with rogue analysts disagreeing about the persistence and value-relevance of certain items that management and/or analysts have excluded from their non-GAAP figures.

We also find that rogue coverage is associated with a larger consensus group in column 1 (without fixed effects), but a smaller consensus group when including fixed effects in column 2. This result is intuitive if rogue analysts are moving from the consensus group to the excluded group within a firm over time. Consistent with the presence of rogue analysts serving as an indicator for disagreement about earnings, we find that *ROGUE* is positively associated with dispersion in the consensus group's earnings forecasts. Overall, the results suggest that some analysts disagree with consensus group non-GAAP reporting and/or respond to changes over time in the definition of earnings. These analysts appear to respond by allowing their forecast to be excluded from the consensus group, thereby going rogue. This behavior is consistent with rogue analyst coverage having implications for the persistence of earnings and stock returns.

Figure 1 presents additional descriptive time trends with event-study plots around the first quarter in which a firm is covered by a rogue analyst in our data, showing trends from 12 quarters prior to 12 quarters after the initial quarter with rogue coverage. We also require that firms have at least three years of data at the beginning of the sample without rogue analyst coverage, to reduce the chance that the firm had rogue coverage prior to the sample start date. Panel A indicates the average number of rogue analysts following the firm. By definition, there is no coverage in the pre-period. After the initial spike in coverage, we see a rapid decline in coverage which then reaches a consistent nonzero level of coverage. Considered alongside the results in Table 2, this trend is consistent with the idea that rogue coverage may first occur when the consensus group shifts its definition of earnings

and that rogue coverage decreases as some align their forecasts with the consensus group. However, the fact that some rogue coverage persists is consistent with the notion that some analysts choose to remain rogue because of differing opinions about particular components of earnings.

Panel B presents the frequency of street earnings equaling GAAP earnings. There tends to be a slow but steady decline in street earnings equaling GAAP earnings, but there is a large drop in the frequency (i.e., an increase in the use of non-GAAP earnings) during the quarters immediately prior to rogue analyst coverage. This evidence is again consistent with the evidence in Table 2 which suggests that rogue analysts are more likely when firms rely on non-GAAP earnings. Panel C illustrates the frequency of shifts in the I/B/E/S definition of earnings. We find an increase in shifts prior to the start of rogue analyst coverage, especially in the quarters immediately prior to coverage. This result is also consistent with Table 2 and with Figure 1 Panel B, suggesting that these changes in the definition of earnings—likely away from bottom-line GAAP—may lead certain analysts to go rogue and become excluded from the consensus group. However, thus far we cannot disentangle whether this behavior is because of fundamental disagreement about the definition of earnings—and thus the persistence of the exclusions—or whether these analysts have simply failed to update their definition of earnings. In the next section, we examine whether rogue analyst coverage is associated with the persistence of earnings.

4.2. Earnings persistence

4.2.1. Bottom-line earnings. To examine our second research question focusing on the persistence of earnings, we take an approach similar to Doyle et al. (2003) and regress future earnings or earnings components on current earnings or earnings components. We begin with examining bottom-line GAAP earnings. If rogue analysts tend to disagree with the consensus group's reliance on non-GAAP earnings and are correct in their opinion that the consensus-excluded components of earnings are persistent enough to matter for firm value, then we would expect bottom-line earnings to be more persistent after rogue analyst coverage begins. We estimate the following model:

$$GAAP\_EPS_{i,t+k} = \beta_0 + \beta_1 GAAP\_EPS_{i,t} + \beta_2 GAAP\_EPS_{i,t} \times ROGUE\_START_{i,t} + \beta_3 ROGUE\_START_{i,t} + \delta CONTROLS_{i,t} + \gamma_i + \tau_t + \varepsilon_{i,t} + \quad (2)$$

The dependent variable is GAAP earnings per share summed over either the next one, two, or three years. We regress this variable on GAAP earnings per share in the current quarter (*GAAP_EPS*) and its interaction with *ROGUE_START*, our indicator for whether a firm has begun receiving coverage by rogue analysts. For controls, we include the following variables as previously defined: *ANALYSTS*, *DISPERSION*, *TURNOVER*, *SIZE*, *MOMENTUM*, *BTM*, *LOG_PRC*, *Q4*, and *EARNVOL*. We also include firm and year-quarter fixed effects and cluster by firm and year-quarter. The coefficient of interest is β_2, which we interpret as a shift in the persistence of bottom-line earnings after rogue analyst coverage.

We use *ROGUE_START* instead of *ROGUE* because if the presence of rogue analysts is associated with greater GAAP earnings persistence, then we expect the greater persistence to continue even if any disagreement between analysts has been resolved (i.e., even if future periods have *ROGUE* equal to zero). We also recognize that this model is similar to a staggered difference-in-differences, where *ROGUE_START* is analogous to a treatment-times-post variable. It is important to note that because we are not making the traditional exogeneity assumptions of a difference-in-differences design, we are not drawing causal inferences from the initiation of rogue coverage. Rather, we interpret rogue coverage as reflecting underlying information about firms' earnings persistence. However, in Section 5 we also discuss robustness tests similar to those used for staggered difference-in-differences designs.

Table 3 presents the results from estimating model 2. Notably, we observe a strong, positively significant coefficient on *GAAP_EPS* in all columns, indicating a baseline level of persistence for bottom-line GAAP earnings. Column 1 reports the results for earnings over the next year as the dependent variable (*GAAP_EPS_1*). Consistent with the view that the presence of rogue analysts conveys important information about firms' earnings persistence, we find a strong positive coefficient for *GAAP_EPS*×*ROGUE_START*, suggesting that bottom-line GAAP earnings persistence is higher after firms first experience an analyst going rogue. This effect is statistically significant and

economically meaningful. After rogue coverage begins, each dollar of increase (decrease) in earnings is associated with an additional 52 cents increase (decrease) in earnings over the next year, or 13 cents per quarter. Columns 2 and 3 report the results with dependent variableds corresponding to GAAP earnings summed over the next two (*GAAP_EPS_2*) and three years (*GAAP_EPS_3*), respectively. As these are cumulative, the difference between each column indicates the incremental change over the next year. The results suggest that the persistence in earnings continues over the next two or three years, getting steadily smaller with each additional year.

4.2.2. The components of earnings. The results in Table 3 reveal that bottom-line GAAP earnings are more persistent after rogue analyst coverage begins. This result could suggest that rogue analysts believe that more components of earnings (i.e., perhaps those excluded by consensus group analysts forecasting non-GAAP earnings) are persistent enough to matter for firm value. Next, we directly test individual components of earnings that are frequently excluded. We refrain from directly examining future exclusions as reported by I/B/E/S because, as explained previously, the definition of these exclusions can change over time. Thus, we focus on particular components of GAAP earnings to proxy for the items that are potentially excluded by consensus-group analysts but included by rogue analysts. We re-estimate Equation 2 by replacing *GAAP_EPS* with three components of earnings: depreciation and amortization (*DEPR*), special items (*SPECIAL*), and non-operating items (*NON_OPER*).

Table 4 presents the results. Columns 1 through 3 report the results for depreciation and amortization, summed over one (*DEPR_1*), two (*DEPR_2*) and three years (*DEPR_3*), respectively. We find a significantly positive coefficient for *DEPR×ROGUE_START* in the first two columns, consistent with the Table 3 results and suggesting that depreciation and amortization are more persistent after rogue analyst coverage begins. The results are roughly half the magnitude of the results in Table 3 for bottom-line earnings. Like in Table 3, the results continue to persist with each additional year but get statistically weaker. Next, we focus on special items in columns 4 through 6. Notably, the main effect of *SPECIAL* is insignificant in columns 4 through 6, indicating a general lack of persistence in special items (which is intuitive considering the usual one-off nature of these

earnings components). However, the *SPECIAL×ROGUE_START* coefficient is significantly positive when special items are summed over one year (i.e., in column 4 with *SPECIAL_1* as the dependent variable). This result suggests that when rogue analysts are present, firms exhibit more persistence even in special items. In columns 7 through 9, we turn to non-operating items and find positive but statistically insignificant coefficients for *NON_OPER×ROGUE_START*. Taken together, these results in Table 4 are consistent with the overall persistence results in Table 3 and shed some additional light on the components of earnings about which rogue analysts may disagree.

4.3 Manager-analyst discussions about street earnings.

Next, we explore whether rogue analysts focus on understanding specific components of GAAP earnings. To accomplish this objective, we utilize firms' earnings announcement conference calls, which are a valuable source of information to investors and analysts (e.g., Frankel et al., 1999; Bowen et al., 2002; Bushee et al., 2003; Brown et al., 2004; Mayew, 2008; Lansford et al., 2009; Hollander et al., 2010; Allen, 2011).[10] Particularly relevant to our goal of better understanding the factors that influence street earnings, the Q&A segment provides a venue for analysts to ask questions about earnings numbers and/or particular line items of interest (Bentley et al., 2018). As illustrated by the example in Appendix C, these types of questions and comments might be simple requests for clarification, but they could also be more probing in an attempt to identify managers' true motivations in (not) disclosing non-GAAP earnings. Since the Q&A portion of the conference call is interactive, analysts have the ability to request information that managers may, or may not, intend to reveal. Hence, the quantity and type of disclosures made during the presentation (which often reiterates information disclosed in the press release) may differ from information revealed during the Q&A

[10] Conference calls usually take place at least an hour after the earnings announcement to give analysts and institutional investors (the typical audience of quarterly conference calls) time to understand the information reported in the press release (Tasker, 1998). Calls may also take place during trading or non-trading hours. For those occurring during trading hours, the vast majority correspond to earnings announcements released during non-trading hours (i.e., the night before or morning of the call) (Brochet et al., 2018).

session, when participants can more easily influence the direction of the discussion (Matsumoto et al., 2011).[11]

We examine manager-analyst discussions about street earnings when there is more rogue coverage. To empirically capture manager-analyst discussions about street earnings, we use textual analysis to measure the percent of the total Q&A words that pertain to non-GAAP topics. We calculate *PNG_CCQA* as the percentage of total words in the conference call Q&A session pertaining to non-GAAP earnings and exclusions and use the following model to examine the role of rogue analysts:

$$PNG\_CCQA_{i,t} = \beta_0 + \beta_1 ROGUE_{i,t} + \delta CONTROLS_{i,t} + \gamma_i + \tau_t + \varepsilon_{i,t} \quad (3)$$

Unlike with earnings persistence, we do not believe that the start of rogue analyst coverage will lead to a long-term shift in discussions about non-GAAP earnings and exclusions, but rather only in the quarters where there is rogue analyst coverage. Thus, we use *ROGUE* (rather than *ROGUE_START*) as our independent variable of interest. We control for the amount of non-GAAP discussion in the presentation portion of the conference call, *PNG_CCP*. However, we also note that management may increase their discussion of street and non-GAAP words in the presentation portion in anticipation of questions by analysts, which may create reverse causality. We therefore estimate model 3 by alternatively excluding or including *PNG_CCP* as a control variable. We also control for additional variables as previously defined: *ANALYSTS*, *DISPERSION*, *TURNOVER*, *SIZE*, *MOMENTUM*, *BTM*, *LOG_PRC*, *Q4*, and *EARNVOL*. We include firm and year-quarter fixed effects and cluster by firm and year-quarter.

[11] Frankel et al. (1999) discuss the advantages of conference calls for managers and analysts. In particular, they note that conference calls represent an efficient way of communicating information to analysts and also of alleviating selective disclosure concerns. Bowen et al. (2002) and Irani (2004) find that conference calls increase analysts' ability to accurately forecast earnings. Mayew (2008) argues that analysts also reap private information benefits from public answers to their conference call questions, and Chapman and Green (2018) find that managers respond to analysts' conference call requests for earnings guidance.

Table 5 presents the results. Column 1 includes the results without controlling for discussion in the presentation portion of the conference call. We find a positive and statistically significant association with street earnings discussion in the conference call. Column 2 presents the results after controlling for discussion in the presentation portion of the conference call. We continue to find a significantly positive association, although the magnitude and significance decrease slightly. These results provide additional evidence that rogue analysts make efforts to understand various components of earnings as they form their divergent views about which components matter for firm value.

4.4. Market returns

4.4.1. Market returns following rogue analyst coverage. To address our third research question, we next turn our attention to market returns in the presence of rogue analysts. Thus far, the results suggest that on average, rogue analysts are associated with more persistent exclusions which the consensus group is not incorporating in their forecasts. If market participants are constrained for attention or resources, they may only have access to the consensus numbers. Thus, they may react more slowly to any information conveyed by the opinion of rogue analysts regarding the persistence of particular components of earnings (typically expenses) that matter for firm value. We estimate the following model:

$$BHAR_{i,t+k} = \beta_0 + \beta_1 ROGUE_{i,t} + \delta CONTROLS_{i,t} + \gamma_i + \tau_t + \varepsilon_{i,t} \quad (3)$$

We measure buy-and-hold abnormal returns (*BHAR*) over several windows. We first measure this return over the short, two-day window on the day of and day after the earnings announcement (*BHAR[0,1]*). We then measure the drift in returns over days 2 through 75 after the earnings announcement (*BHAR[2,75]*). For longer horizons, and consistent with our prior tests, we measure returns over the next one, two and three years, beginning on the month after the earnings

announcement, which we label *BHAR_1*, *BHAR_2*, and *BHAR_3*, respectively. We multiply all returns variables by 100. We control for the unexpected portion of street earnings, *SUE*, and the unexpected portion of GAAP earnings, *SUE_GAAP*, both of which we define in Appendix A. We also control for additional variables as previously defined: *ANALYSTS*, *DISPERSION*, *TURNOVER*, *SIZE*, *MOMENTUM*, *BTM*, *LOG_PRC*, *Q4*, and *EARNVOL*. We include firm and year-quarter fixed effects and cluster by firm and year-quarter.

Table 6 presents the results. We find that returns drift negatively over days 2 through 75 after the earnings announcement date, consistent with the market underreacting to the persistence of excluded expenses in the presence of rogue analysts. The longer-window returns are negative over the next three years, but only marginally significant in the *BHAR_2* model in column 4. These results suggest that market participants do not fully incorporate the information conveyed by the presence of rogue analysts about the persistence of earnings exclusions, and that these future expenses lead to predictably more negative returns in the future.

4.4.2. Rogue analysts and the market response to earnings. To shed additional light on the association between rogue analyst coverage and market returns, we next consider whether rogue analyst coverage is associated with the market response to earnings news. If rogue analyst coverage reflects underlying information about components of GAAP earnings, and if the items excluded from consensus-determined street earnings are more persistent, then it is important to consider how the market responds to GAAP and street earnings news. We estimate the following model:

$$\begin{aligned} BHAR_{i,t+k} = {} & \beta_0 + \beta_1 SUE_{i,t} + \beta_2 SUE_{i,t} \times ROGUE\_START_{i,t} + \beta_3 SUE\_GAAP_{i,t} \\ & + \beta_4 SUE\_GAAP_{i,t} \times ROGUE\_START_{i,t} + \beta_5 ROGUE\_START_{i,t} \\ & + \delta CONTROLS_{i,t} + \gamma_i + \tau_t + \varepsilon_{i,t} \end{aligned} \quad (4)$$

The BHAR measures over various windows are as defined previously in model 3. Because the components of GAAP earnings become more persistent after the initiation of rogue coverage (see Table 3) and we are interested in exploring whether the investors appreciate this level of persistence, we use *ROGUE_START* in model 4 (rather than *ROGUE* in model 3). We interpret this model as estimating shifts in the earnings response coefficient (ERC) or post-earnings announcement drift (PEAD) after at least one of a firm's analysts goes rogue for the first time. We control for additional variables as previously defined: *ANALYSTS*, *DISPERSION*, *TURNOVER*, *SIZE*, *MOMENTUM*, *BTM*, *LOG_PRC*, *Q4*, and *EARNVOL*. We also interact the street and GAAP unexpected earnings variables with each of the control variables. We include firm and year-quarter fixed effects and cluster by firm and year-quarter.

Table 7 presents the results. Column 1 includes the ERC results with short-window returns (*BHAR[0,1]*) as the dependent variable. We find that the start of rogue coverage is not associated with a change in the response to street earnings news (i.e., the *SUE×ROGUE_START* interaction term is not significant). However, we find a significantly positive coefficient on the *SUE_GAAP×ROGUE_START* interaction term, indicating that the market does respond more to bottom-line GAAP information after rogue analyst coverage initiation. We note that as explained by Bradshaw et al. (2018), when both street and GAAP surprises are included in the same model, the coefficient on GAAP surprises captures the market response to excluded items; thus, the positive *SUE_GAAP×ROGUE_START* coefficient is consistent with at least some investors recognizing the same persistence in consensus-excluded items that is implied by the presence of rogue analysts.

Columns 2 through 5 present the PEAD results with longer-term returns over various windows as the dependent variables. Interestingly, in column 2 with returns over the [+2, +75] window after the earnings announcement, we see a negative coefficient on the response to street earnings news (i.e., the *SUE×ROGUE_START* interaction term is negatively significant, albeit at the

10% level). In the same model, we also observe a positive association with the response to GAAP earnings news (i.e., a significantly positive *SUE_GAAP×ROGUE_START* interaction term), which is several times larger in magnitude than the same coefficient in the short-window ERC model (column 1). Taken together, these two columns suggest that after at least one analyst goes rogue, markets react more strongly to components of GAAP earnings excluded from consensus-defined street earnings. However, investors do not seem to react fully, leading to a drift in the direction of the GAAP earnings surprise. Moreover, it appears that investors overreact to the street earnings news, as evidenced by the reversal in column 2. Thus, markets do not appear to fully incorporate the information about the persistence of exclusions that may be conveyed by the presence of rogue analysts. These results appear to only last one quarter, as the drift results are insignificant for subsequent three years (columns 3 through 5).

4.5. Additional specifications for earnings persistence tests

4.5.1. Earnings persistence and contemporaneous rogue analyst coverage. We re-estimate model 2 by replacing the staggered rogue indicator variable (*ROGUE_START*) with the contemporaneous variable indicating the presence of rogue analysts during each firm-quarter (*ROGUE*). This specification relies on different assumptions than model 2 where we assume that rogue analyst initiation is associated with a shift in the persistence of excluded items. By using *ROGUE* defined at the firm-quarter level, we are testing whether the effect only holds in periods with rogue coverage and goes away once rogue coverage ends. It is not clear ex ante which of these assumptions is better reflected in the data. Table 8 Panel A presents the results. We find that contemporaneous rogue coverage is positively but insignificantly associated with the persistence of earnings. As a result, it appears that the assumptions underlying model 2 better represent the association between earnings persistence and rogue analyst coverage.

4.5.2. Stacked regression design. As mentioned previously, our estimation of model 2 is analogous to a staggered difference-in-differences, wherein different entities are treated at different times. Recent research has identified concerns with these types of designs when the treatment effects are dynamic over time (e.g., Baker et al., 2022; Barrios, 2022). While we do not interpret our results as a difference-in-differences estimator, our design is the same and could potentially suffer from similar concerns. To address this potential concern, we re-estimate model 2 (i.e., using the *ROGUE_START* variable) using the stacked design as in Cengiz et al. (2019). For each quarter beginning in 2012, we create a separate dataset of all the firms that started receiving coverage from a rogue analyst in that quarter as well as all the firms that never receive coverage from a rogue analyst. For each dataset, we retain observations between 12 quarters prior and 12 quarters after the focal quarter. We then recombine these separate datasets and re-estimate model 2 using firm-dataset and year-quarter-dataset fixed effects. Because an observation can appear in multiple datasets, we cluster at the firm and year-quarter level. Table 8 Panel B presents the results. Across all three models, the coefficient on the *GAAP_EPS*×*ROGUE_START* interaction term is positive and statistically significant. Moreover, the coefficient magnitudes are similar those in Table 3, alleviating concerns about using the staggered regression design.

4.5.3. Refining the comparison group. We next repeat the stacked regression design from the previous section with one additional criterion: we limit the sample to observations that have had a shift in the I/B/E/S definition of earnings in the past year (see Section 3.2 for discussion about these shifts). Our determinants model (Table 2) suggests that these shifts may prompt rogue analyst coverage. Thus, in this test we investigate firms that have had I/B/E/S shifts and comparing those who then received rogue coverage relative to those that did not. While this approach restricts the sample size significantly compared to the previous section, we believe this comparison is useful. We interpret this test as comparing firms with a shift in the earnings definition and subsequent

disagreement among analysts to firms with a shift in the earnings definition and no subsequent disagreement among analysts. Table 8 Panel C presents the results. Even with the restricted sample, we find significantly positive results for the *GAAP_EPS*×*ROGUE_START* coefficient term for GAAP earnings over the first year (column 1). The interaction term is positive but insignificant in columns 2 and 3 when we consider GAAP earnings over the subsequent two and three years. Overall, this more restrictive sample provides additional evidence consistent with our inference that rogue analysts convey information about the underlying persistence of GAAP earnings components.

5. Conclusion

We study the presence of rogue analysts (i.e., those whose forecasts are excluded from the consensus group)—who play important yet underexplored roles in the process by which street earnings are determined. These analysts tend to "go rogue" following shifts in the consensus group definition of earnings and when analysts or managers rely on non-GAAP earnings. Our results suggest that these rogue analysts disagree about the definition of earnings, and more importantly, about the persistence of the items excluded by consensus-group analysts. We find that rogue analyst coverage is associated with more persistent earnings and specifically with more persistent depreciation and amortization and special items. Rogue analyst coverage is also associated with more discussion of non-GAAP topics by analysts in conference calls. Moreover, capital markets appear to not immediately incorporate all the information about these persistent exclusions, leading to predictably negative future returns and significant drift in the market response to components of GAAP earnings excluded from street earnings.

We contribute to the street earnings literature by offering a more complete investigation into the "black box" of street earnings numbers described by Abarbanell and Lehavy (2007). Since researchers and investors pay considerable attention to forecasting and understanding firms' earnings

numbers, we believe that understanding the information conveyed by the presence role of rogue analysts is informative for both academia and practice. We believe a useful avenue for future research would be to examine how investors and researchers might be able to better interpret the implications of earnings news that is announced by firms characterized by rogue analysts. These efforts could yield insights into potential trading strategies or characteristics of investors that are better equipped to distinguish signals from noise for these firms and situations.

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Appendix A

Variable Definitions*

Variable	Definition
ROGUE	An indicator variable equal to one for firm-quarters that have at least one rogue analyst, and zero otherwise. Source: IBES detail
ROGUE_START	An indicator variable equal to one for firm-quarters on or after the first quarter a firm has at least one rogue analyst, and zero otherwise. Source: IBES detail
ANALYSTS	The natural log of one plus the number of analysts in the consensus group following a firm. Source: IBES summary
BHAR[0,1]	Size-adjusted buy-and-hold abnormal returns over days 0 to +1 relative to the earnings announcement date. Source: CRSP daily
BHAR[2,75]	Size-adjusted buy-and-hold abnormal returns over days +2 to +75 relative to the earnings announcement date. Source: CRSP daily
BHAR_1	Size-adjusted buy-and-hold abnormal returns over one year starting on the month after the earnings announcement date. Source: CRSP monthly
BHAR_2	Size-adjusted buy-and-hold abnormal returns over two years starting on the month after the earnings announcement date. Source: CRSP monthly
BHAR_3	Size-adjusted buy-and-hold abnormal returns over three years starting on the month after the earnings announcement date. Source: CRSP monthly
BTM	Book value of shareholders equity divided by market value. Source: Compustat
DEPR	Depreciation and amortization per share for the current quarter. Source: Compustat
DEPR_1	Depreciation and amortization per share summed over the next year. Source: Compustat
DEPR_2	Depreciation and amortization per share summed over the next two years. Source: Compustat
DEPR_3	Depreciation and amortization per share summed over the next three years. Source: Compustat
DISPERSION	Standard deviation of consensus EPS forecasts. Source: IBES summary
EARNVOL	Earnings volatility, defined as the standard deviation of return on assets over the prior eight quarters, requiring at least six quarters of data. Return on assets is income available to common shareholders for the quarter divided by assets at the end of the previous quarter. Source: Compustat
GAAP_EPS	GAAP earnings per share for the current quarter. Source: Compustat
GAAP_EPS_1	GAAP earnings per share summed over the next year. Source: Compustat
GAAP_EPS_2	GAAP earnings per share summed over the next two years. Source: Compustat
GAAP_EPS_3	GAAP earnings per share summed over the next three years. Source: Compustat
LOG_PRC	The log of the stock price at the end of the fiscal quarter. Source: Compustat
$MGRGAAP_{t-1}$	An indicator equal to one if management's reported pro forma earnings was equal to GAAP earnings last quarter. Source: Kurt Gee's personal website
$MGRGAAP\_MISSING_{t-1}$	An indicator equal to one if $MGRGAAP_{t-1}$ is missing for that observation.
MOMENTUM	Market adjusted returns over the prior three months. Source: CRSP monthly
NON_OPER	Non-operating items per share for the current quarter. Source: Compustat

Appendix A, continued

Variable Definitions*

Variable	Definition
NON_OPER_1	Non-operating items per share summed over the next year. Source: Compustat
NON_OPER_2	Non-operating items per share summed over the next two years. Source: Compustat
NON_OPER_3	Non-operating items per share summed over the next three years. Source: Compustat
Q4	An indicator for the fourth fiscal quarter. Source: Compustat
$SHIFT_{t-1}$	An indicator equal to one if there was a shift in the IBES definition of earnings for the prior quarter. Source: IBES go-forward actuals
SIZE	Log of market capitalization. Source: CRSP monthly
SPECIAL	Special items per share for the current quarter. Source: Compustat
SPECIAL_1	Special items per share summed over the next year. Source: Compustat
SPECIAL_2	Special items per share summed over the next two years. Source: Compustat
SPECIAL_3	Special items per share summed over the next three years. Source: Compustat
STREET_EPS	Actual reported street earnings per share for the current quarter. Source: IBES summary
STREETDISCUSS_P	The percentage of street or non-GAAP related words in the presentation portion of the conference call.
STREETDISCUSS_QA	The percentage of street or non-GAAP related words in the Q&A portion of the conference call.
$STREETGAAP_{t-1}$	An indicator equal to one if IBES street actuals were equal to IBES GAAP actuals last quarter. Source: IBES actuals
SUE	Standardized unexpected earnings. IBES actual earnings per share minus median IBES consensus estimate, scaled by the stock price at the end of the fiscal quarter. We then decile-rank this variable within year and within price quintile, where price quintiles are formed within year.
SUE_GAAP	Standardized unexpected GAAP earnings. IBES actual GAAP earnings per share minus median IBES consensus GAAP estimate, scaled by the stock price at the end of the fiscal quarter. We then decile-rank this variable within year and within price quintile, where price quintiles are formed within year.
TURNOVER	Average monthly share turnover over the prior three months, where monthly share turnover is monthly share volume divided by shares outstanding.

*We winsorize the following variables at 1% and 99%: *BHAR[0,1], BHAR[2,75], BHAR_1, BHAR_2, BHAR_3, BTM, DEPR, DEPR_1, DEPR_2, DEPR_3, GAAP_EPS, GAAP_EPS_1, GAAP_EPS_2, GAAP_EPS_3, NON_OPER, NON_OPER_1, NON_OPER_2, NON_OPER_3, SPECIAL, SPECIAL_1, SPECIAL_2, SPECIAL_3, STREET_EPS*. We winsorize the following variables at 99%: *DISPERSION, EARNVOL, STREETDISCUSS_P, STREETDISCUSS_QA, TURNOVER.*

Appendix B

Procedures Used to Measure Non-GAAP Words and Phrases

Textual Parsing Notes

Each individual text file (earnings announcement, conference call presentation, or conference call Q&A) is first searched for the non-GAAP words and phrases listed here. When a word or phrase is found, we replace it with "CCKSNONGAAP". Then, each file is split into tokens, where a token is any combination of at least two alphabetic letters (not numbers, symbols, etc.). The instances of "CCKSNONGAAP" are then counted and form the numerator for our textual variables. The denominator is determined by counting the number of tokens that appear in the Loughran and McDonald master dictionary (available at Bill McDonald's website: http://www3.nd.edu/~mcdonald/Word_Lists.html) and adding the total number of instances of "CCKSNONGAAP". After scaling, the ratio is multiplied by 100 so that the textual variables are stated in percentage points.

Regular Expressions for Street/Non-GAAP Words and Phrases

r\&d	loss(es)?.from
amortization	one.time.expenses?
depreciation	stock.compensation
interest.expenses?	special.items?
pro.?forma	core.?operations
non.?gaap	non.operating
gains?.on	non.cash.items?
adjusted.?ebit(da)?	special.charges?
Ongoing.?basis	share.based.compensation
other.expenses?	other.charges?
restructuring.charges?	tax.charges?
loss(es)?.on	debt.retirement
gains?.from	interest.charges?
research.and.development	debt.extinguishment
normalized?.?basis	miscellaneous.items?
cash.?basis	share.compensation
impairment.charges?	impairment.loss(es)?
stock.based.compensation	impairment.expenses?
one.time.charges?	gaap.?(one.?time.?)?adjusted
tax.expenses?	research.\&.development
unusual.items?	change.in.accounting.principles?
discontinued.operations?	core.?basis
adjust(ed|ing).?(e\.?p\.?s|(net.?)?(earnings?|loss(es)?|income)(.?of.?\$?(\d|\.)+)?(.?per.?(common|basic|diluted)?.?share)?)	(e\.?p\.?s|(net.?)?(earnings?|loss(es)?|income)(.?of.?\$?(\d|\.)+)?(.?per.?(common|basic|diluted)?.?share)?).?adjust(ed|ing)
core.?(e\.?p\.?s|(net.?)?(earnings?|loss(es)?|income)(.?of.?\$?(\d|\.)+)?(.?per.?(common|basic|diluted)?.?share)?)	(e\.?p\.?s|(net.?)?(earnings?|loss(es)?|income)(.?of.?\$?(\d|\.)+)?(.?per.?(common|basic|diluted)?.?share)?).?without
cash.?(e\.?p\.?s|(net.?)?(earnings?|loss(es)?|income)(.?of.?\$?(\d|\.)+)?(.?per.?(common|basic|diluted)?.?share)?)	(e\.?p\.?s|(net.?)?(earnings?|loss(es)?|income)(.?of.?\$?(\d|\.)+)?(.?per.?(common|basic|diluted)?.?share)?).?excluding
normalized?.?(e\.?p\.?s|(net.?)?(earnings?|loss(es)?|income)(.?of.?\$?(\d|\.)+)?(.?per.?(common|basic|diluted)?.?share)?)	management.?(e\.?p\.?s|(net.?)?(earnings?|loss(es)?|income)(.?of.?\$?(\d|\.)+)?(.?per.?(common|basic|diluted)?.?share)?)
(e\.?p\.?s|(net.?)?(earnings?|loss(es)?|income)(.?of.?\$?(\d|\.)+)?(.?per.?(common|basic|diluted)?.?share)?).?before	(e\.?p\.?s|(net.?)?(earnings?|loss(es)?|income)(.?of.?\$?(\d|\.)+)?(.?per.?(common|basic|diluted)?.?share)?).?including
ongoing.?(e\.?p\.?s|(net.?)?(earnings?|loss(es)?|income)(.?of.?\$?(\d|\.)+)?(.?per.?(common|basic|diluted)?.?share)?)	(e\.?p\.?s|(net.?)?(earnings?|loss(es)?|income)(.?of.?\$?(\d|\.)+)?(.?per.?(common|basic|diluted)?.?share)?).?absent
recurring.?(e\.?p\.?s|(net.?)?(earnings?|loss(es)?|income)(.?of.?\$?(\d|\.)+)?(.?per.?(common|basic|diluted)?.?share)?)	(e\.?p\.?s|(net.?)?(earnings?|loss(es)?|income)(.?of.?\$?(\d|\.)+)?(.?per.?(common|basic|diluted)?.?share)?).?except.?for
base.?(e\.?p\.?s|(net.?)?(earnings?|loss(es)?|income)(.?of.?\$?(\d|\.)+)?(.?per.?(common|basic|diluted)?.?share)?)	

Appendix C

Example of a Street Earnings Discussion from the Q&A segment of Nuverra Environmental Solution's 2012 Q2 Conference Call

Analyst: Okay. The startup costs, we're excluding them from the EBITDA. Yet, this is a fairly dynamic market where things change fairly frequently within three- and six-month periods. What gives you guys the confidence of essentially taking what is an item that is increasingly looking like a recurring item, and saying that it is non-recurring? Will it really be a non-recurring item going forward? Will it reduce? Do you see it going away next year? Help us understand that a little bit.

COO: We are in the process of building out our platform in both the Marcellus and the Eagle Ford. I think if you look at both those shale plays in Q2 of last year, we had almost no revenue in either place. What will happen is, our businesses gain a little bit of maturity -- and we're still in the process of having that happen -- the organizations become much more stable. And, in both cases, we have significant businesses now in the Marcellus and in the Eagle Ford. And we don't expect to have the recurring startup costs as we go forward, although the market is very dynamic and we certainly could be upset. But the actual reason is just if you look at the growth in both of those areas, it's phenomenal. And we finally, I think, are getting to the point where we have some organizational stability in both plays.

CEO: Yes, Scott, I'd got a little step further and say that, if you look at the quarter-over-quarter growth, up 23% in Marcellus and 57% in the Eagle Ford, we're not going to grow 57% a quarter in the Eagle Ford. And we're not going to grow at 23% forever in the Marcellus. To get 57%, there's a lot of hiring, there's a lot of training. There's a lot of drivers training for two and three weeks in the right seat. We brought in literally trailer after trailer after trailer for affordable housing. We run vans from San Antonio to the Eagle Ford until we can get people housing. We do the same thing in the Marcellus. I don't think it is fair to say that these are costs that are going to be there every quarter because we just have so much growth. And until the infrastructure gets in place up there, we don't have any choice but to spend money that you wouldn't ordinarily spend if you were adding five drivers. But, we are adding 50.

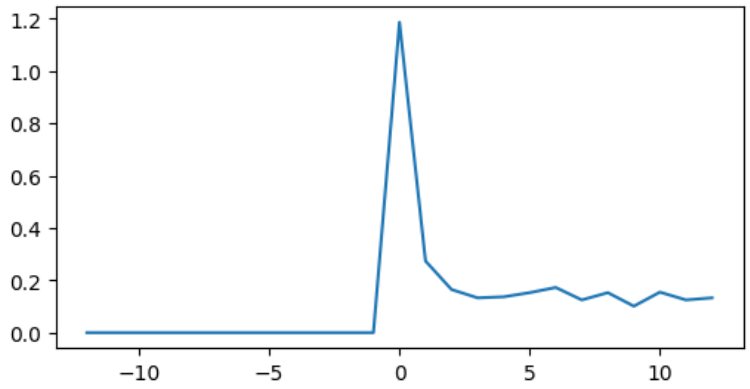
Analyst: I don't question that. I'm just asking why it would be considered a non-recurring item when it seems like it will recur for a little while.

CEO: We didn't have any of it in the Haynesville this quarter. And that's our most mature field. We didn't have any of it there.

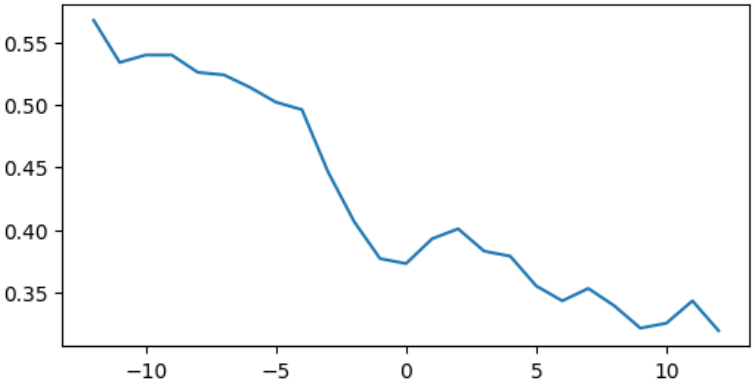
Figure 1

Time Trends Around Firms' First Rogue Analyst Quarter

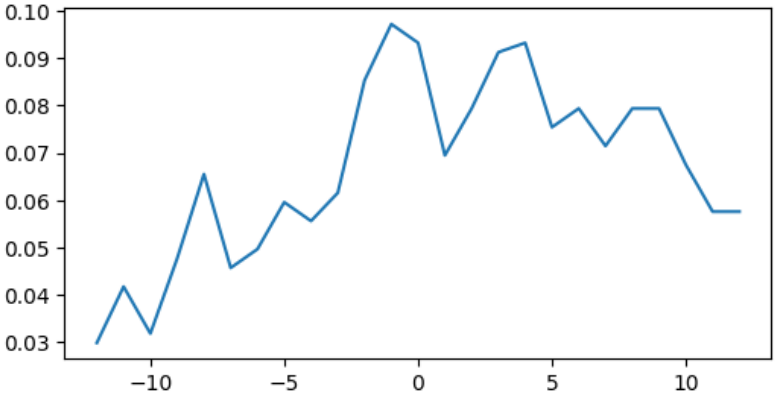
Panel A: Average Number of Rogue Analysts Around First Rogue Analyst Quarter



Panel B: Frequency of Street Earnings Equaling GAAP Earnings Around First Rogue Analyst Quarter



Panel C: Frequency of IBES Shift Around First Rogue Analyst Quarter



This figure presents various time trends around firms' first quarter with a rogue analyst. Panel A presents the average number of rogue analysts; Panel B presents the average frequency of IBES street earnings equaling GAAP earnings; and Panel C presents the average frequency of IBES reporting a shift in their consensus earnings definition.

Table 1

Descriptive Statistics

	N	Mean	StDev	25%	50%	75%
ROGUE	113,298	0.081	0.272	0	0	0
ROGUE_START	113,298	0.450	0.497	0	0	1
ANALYSTS	113,298	1.887	0.855	1.386	1.946	2.565
BHAR[0,1]	113,298	-0.036	8.447	-4.232	-0.074	4.103
BHAR[2,75]	113,298	-0.095	23.982	-11.765	-1.115	9.385
BHAR_1	113,298	0.448	55.225	-26.274	-3.811	18.824
BHAR_2	107,113	0.567	82.981	-42.151	-8.425	26.918
BHAR_3	99,600	0.711	104.204	-55.368	-12.972	32.452
BTM	113,298	0.564	0.629	0.230	0.449	0.763
DEPR	113,298	0.298	0.426	0.048	0.157	0.376
DEPR_1	113,298	1.236	1.766	0.204	0.655	1.565
DEPR_2	106,953	2.579	3.675	0.437	1.385	3.283
DEPR_3	100,874	4.039	5.750	0.706	2.206	5.139
DISPERSION	113,298	0.049	0.078	0.010	0.030	0.050
EARNVOL	113,298	0.027	0.053	0.004	0.010	0.025
GAAP_EPS	113,298	0.326	0.999	-0.060	0.230	0.622
GAAP_EPS_1	113,298	1.439	3.759	-0.210	1.000	2.580
GAAP_EPS_2	106,953	3.231	7.720	-0.370	2.150	5.430
GAAP_EPS_3	100,874	5.383	11.935	-0.450	3.460	8.670
LOG_PRC	113,298	3.017	1.219	2.298	3.157	3.854
$MGRGAAP_{t-1}$	113,298	0.411	0.492	0	0	1
$MGRGAAP\_MISSING_{t-1}$	113,298	0.228	0.419	0	0	0
MOMENTUM	113,298	0.046	0.247	-0.081	0.031	0.144
NON_OPER	113,298	-0.012	0.206	-0.008	0.002	0.022
NON_OPER_1	113,298	-0.040	0.761	-0.027	0.008	0.089
NON_OPER_2	106,955	-0.073	1.541	-0.051	0.018	0.187
NON_OPER_3	100,876	-0.100	2.340	-0.075	0.032	0.311
PNG_CCP	61,343	0.340	0.283	0.126	0.265	0.480
PNG_CCQA	61,346	0.042	0.063	0	0.018	0.058
Q4	113,298	0.227	0.419	0	0	0
$ROGUE_{t-1}$	113,298	0.080	0.271	0	0	0
$SHIFT_{t-1}$	113,298	0.054	0.225	0	0	0
SIZE	113,298	14.057	1.890	12.730	14.008	15.271
SPECIAL	113,298	-0.077	0.300	-0.043	0	0
SPECIAL_1	113,298	-0.348	1.028	-0.312	-0.048	0
SPECIAL_2	106,959	-0.725	1.830	-0.742	-0.161	0
SPECIAL_3	100,884	-1.139	2.642	-1.254	-0.305	-0.012
STREET_EPS	113,298	0.432	0.828	0.020	0.300	0.690
$STREETGAAP_{t-1}$	113,298	0.461	0.498	0	0	1
SUE	113,298	4.439	2.888	2	4	7
SUE_GAAP	113,298	4.472	2.886	2	4	7
TURNOVER	113,298	0.211	0.224	0.095	0.154	0.252

This table presents descriptive statistics for the variables used in our analyses. Our primary sample consists of 113,298 firm-quarters; however, some of the variables have fewer observations due to data availability or because they rely on data from various future time periods. See Appendix A for detailed variable definitions.

Table 2

Determinants of Rogue Analyst Coverage

	(1)	(2)
Dep. Variable	*ROGUE*	*ROGUE*
$ROGUE_{t-1}$	0.348***	0.208***
	(25.407)	(17.733)
$STREETGAAP_{t-1}$	-0.025***	-0.032***
	(-7.702)	(-9.572)
$SHIFT_{t-1}$	0.030***	0.014**
	(3.798)	(2.055)
$MGRGAAP_{t-1}$	-0.013***	-0.009***
	(-3.655)	(-2.617)
$MGRGAAP\_MISSING_{t-1}$	-0.008***	-0.002
	(-2.624)	(-0.498)
ANALYSTS	0.012***	-0.040***
	(5.167)	(-9.857)
DISPERSION	0.106***	0.108***
	(4.422)	(3.722)
TURNOVER	0.048***	0.038***
	(4.818)	(4.877)
SIZE	0.003***	0.027***
	(7.818)	(6.303)
MOMENTUM	-0.006**	-0.022***
	(-2.055)	(-5.445)
BTM	-0.003*	0.006**
	(-1.671)	(2.506)
LOG_PRC	-0.002*	-0.007*
	(-1.785)	(-1.833)
Q4	-0.014***	-0.014***
	(-5.385)	(-4.686)
EARNVOL	-0.046***	-0.055**
	(-2.577)	(-2.450)
Observations	113,298	113,298
Adjusted R-Squared	0.218	0.210
Within R-Squared	0.030	0.053
Firm FE	No	Yes
Year-Quarter FE	No	Yes

This table presents our determinants model for rogue analyst coverage. Column 1 excludes fixed effects, while column 2 includes fixed effects. *t*-statistics are reported in parentheses. Significance levels are denoted by * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.01$. Standard errors are clustered by firm and year-quarter. See Appendix A for detailed variable definitions.

Table 3

Rogue Analysts and the Persistence of Bottom-Line GAAP Earnings

	(1)	(2)	(3)
Dep. Variable	*GAAP_EPS_1*	*GAAP_EPS_2*	*GAAP_EPS_3*
GAAP_EPS	0.584***	1.042***	1.423***
	(4.756)	(4.283)	(3.946)
GAAP_EPS×ROGUE_START	0.515***	0.789***	0.957**
	(4.541)	(3.183)	(2.430)
ROGUE_START	-0.301***	-0.541***	-0.655***
	(-4.967)	(-3.888)	(-2.939)
ANALYSTS	-0.318***	-0.607***	-0.839***
	(-6.597)	(-5.744)	(-4.924)
DISPERSION	3.334***	7.584***	11.602***
	(3.521)	(4.553)	(4.989)
TURNOVER	-0.794***	-1.413***	-1.971***
	(-8.200)	(-7.019)	(-5.805)
SIZE	0.143	-0.150	-0.764**
	(1.487)	(-0.713)	(-2.330)
MOMENTUM	0.252***	0.564***	0.756***
	(4.015)	(3.844)	(3.647)
BTM	-0.511***	-0.740***	-0.799***
	(-5.776)	(-4.542)	(-3.260)
LOG_PRC	0.557***	1.314***	2.329***
	(5.914)	(6.322)	(6.951)
Q4	0.033	0.056	0.070
	(0.891)	(0.924)	(0.802)
EARNVOL	0.584	2.490***	1.832
	(1.564)	(2.962)	(1.461)
Observations	113,298	106,953	100,874
Adjusted R-Squared	0.670	0.724	0.758
Within R-Squared	0.175	0.153	0.142
Firm FE	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes

This table presents our results for investigating the association between rogue analysts and earnings persistence. Column 1 presents results for GAAP earnings per share summed over the next year, column 2 for GAAP earnings summed over the next two years, and column 3 for GAAP earnings summed over the next three years. *t*-statistics are reported in parentheses. Significance levels are denoted by * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.01$. Standard errors are clustered by firm and year-quarter. See Appendix A for detailed variable definitions.

Table 4

Rogue Analysts and the Persistence of the Components of Earnings

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Dep. Variable	*DEPR_1*	*DEPR_2*	*DEPR_3*	*SPECIAL_1*	*SPECIAL_2*	*SPECIAL_3*	*NON_OPER_1*	*NON_OPER_2*	*NON_OPER_3*
DEPR	3.221***	5.996***	8.536***						
	(36.730)	(24.277)	(17.689)						
DEPR×ROGUE_START	0.184***	0.405**	0.549						
	(3.422)	(2.314)	(1.591)						
SPECIAL				0.072	0.064	0.018			
				(1.376)	(0.892)	(0.222)			
SPECIAL×ROGUE_START				0.105**	0.099	0.050			
				(2.004)	(1.111)	(0.397)			
NON_OPER							0.489***	0.721***	0.891***
							(4.350)	(3.359)	(2.872)
NON_OPER×ROGUE_START							0.068	0.146	0.462
							(0.495)	(0.599)	(1.433)
ROGUE_START	-0.054***	-0.129**	-0.188*	-0.024	-0.089*	-0.103	-0.004	0.000	0.035
	(-3.334)	(-2.522)	(-1.872)	(-1.107)	(-1.922)	(-1.435)	(-0.329)	(0.017)	(0.821)
Observations	113,298	106,953	100,874	113,298	106,959	100,884	113,298	106,955	100,876
Adjusted R-Squared	0.962	0.952	0.941	0.269	0.390	0.477	0.675	0.719	0.764
Within R-Squared	0.785	0.713	0.640	0.015	0.022	0.030	0.040	0.029	0.032
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

This table presents our results for the persistence of individual earnings components. Columns 1, 2, and 3 present results for depreciation and amortization summed over the next one, two, and three years. Columns 4, 5, and 6 present results for special items over the same periods. Columns 7, 8, and 9 present results for non-operating items over the same periods. *t*-statistics are reported in parentheses. Significance levels are denoted by * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.01$. Standard errors are clustered by firm and year-quarter. See Appendix A for detailed variable definitions.

Table 5

Rogue Analysts and Non-GAAP Discussions in Earnings Conference Calls

	(1)	(2)
Dep. Variable	*PNG_CCQA*	*PNG_CCQA*
ROGUE	0.003**	0.002*
	(2.209)	(1.655)
PNG_CCP		0.041***
		(20.478)
ANALYSTS	-0.003***	-0.002**
	(-2.618)	(-1.981)
DISPERSION	0.029***	0.026***
	(3.970)	(3.638)
TURNOVER	-0.002	-0.003
	(-0.809)	(-0.985)
SIZE	0.001	0.001
	(0.618)	(0.615)
MOMENTUM	0.003**	0.003*
	(2.187)	(1.822)
BTM	0.002	0.001
	(1.274)	(1.023)
LOG_PRC	-0.002	-0.002*
	(-1.424)	(-1.672)
Q4	0.011***	0.009***
	(18.014)	(17.289)
EARNVOL	0.003	0.003
	(0.317)	(0.321)
Observations	61,346	61,343
Adjusted R-Squared	0.195	0.206
Within R-Squared	0.009	0.021
Firm FE	Yes	Yes
Year-Quarter FE	Yes	Yes

This table presents our results for investigating the association between rogue analysts and the discussion of non-GAAP topics in the Q&A portion of earnings conference calls. Column 1 excludes discussion of non-GAAP topics in the presentation portion of the call as a control variable, while column 2 includes it. *t*-statistics are reported in parentheses. Significance levels are denoted by * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.01$. Standard errors are clustered by firm and year-quarter. See Appendix A for detailed variable definitions.

Table 6

Rogue Analyst Coverage and Market Returns

	(1)	(2)	(3)	(4)	(5)
Dep. Variable	*BHAR[0,1]*	*BHAR[2,75]*	*BHAR_1*	*BHAR_2*	*BHAR_3*
ROGUE	0.148	-0.619**	-1.077	-2.295*	-2.027
	(1.173)	(-2.278)	(-1.428)	(-1.917)	(-1.293)
SUE	0.803***	-0.049	0.957***	0.746***	0.587***
	(33.048)	(-1.392)	(8.320)	(4.747)	(3.028)
SUE_GAAP	0.270***	0.034	0.303***	0.096	0.361**
	(18.514)	(0.740)	(2.691)	(0.612)	(2.085)
ANALYSTS	0.057	-1.513***	-6.576***	-10.003***	-13.833***
	(0.561)	(-3.117)	(-5.746)	(-5.443)	(-5.927)
DISPERSION	1.128	5.786**	24.339**	3.014	6.782
	(1.612)	(2.291)	(2.547)	(0.345)	(0.624)
TURNOVER	-0.567**	0.184	-6.970	-18.365***	-30.083***
	(-2.255)	(0.069)	(-1.402)	(-3.053)	(-3.981)
SIZE	-0.983***	-6.656***	-23.217***	-46.366***	-64.845***
	(-7.625)	(-9.787)	(-12.157)	(-16.584)	(-18.933)
MOMENTUM	-0.882***	0.151	-1.238	0.283	1.066
	(-3.935)	(0.124)	(-0.421)	(0.091)	(0.371)
BTM	0.187	1.353**	5.823**	12.721**	11.283*
	(1.584)	(2.112)	(2.172)	(2.437)	(1.902)
LOG_PRC	-0.184	-2.385**	-9.204***	-13.877***	-18.325***
	(-1.412)	(-2.576)	(-3.411)	(-3.699)	(-4.508)
Q4	0.246**	0.777*	0.759	0.524	0.846
	(2.174)	(1.788)	(1.195)	(0.493)	(0.752)
EARNVOL	0.613	5.636	8.785	-3.941	-42.238
	(0.512)	(1.260)	(0.630)	(-0.173)	(-1.527)
Observations	113,298	113,298	113,298	107,113	99,600
Adjusted R-Squared	0.137	0.079	0.239	0.364	0.466
Within R-Squared	0.116	0.033	0.107	0.157	0.191
Firm FE	Yes	Yes	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes	Yes	Yes

This table presents results for market returns in the presence of rogue analysts. Column 1 presents results for the 2-day abnormal return beginning on the earnings announcement date. Column 2 presents results for abnormal returns over the next 74 days. Columns 3, 4, and 5 present abnormal returns taken over the next one, two, and three years beginning with the month after the earnings announcement. We multiply all returns by 100. *t*-statistics are reported in parentheses. Significance levels are denoted by * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.01$. Standard errors are clustered by firm and year-quarter. See Appendix A for detailed variable definitions.

Table 7

Rogue Analyst Coverage and the Market Response to Earnings News

	(1)	(2)	(3)	(4)	(5)
Dep. Variable	*BHAR[0,1]*	*BHAR[2,75]*	*BHAR_1*	*BHAR_2*	*BHAR_3*
SUE	2.425***	0.082	4.039***	4.373**	2.921
	(15.648)	(0.149)	(2.925)	(2.368)	(1.415)
SUE×ROGUE_START	0.011	-0.124*	0.064	0.254	0.061
	(0.354)	(-1.769)	(0.272)	(0.729)	(0.165)
SUE_GAAP	0.874***	0.416	1.546	0.988	1.425
	(7.384)	(1.092)	(1.584)	(0.601)	(0.712)
SUE_GAAP×ROGUE_START	0.055**	0.193**	0.175	-0.044	-0.039
	(2.299)	(2.173)	(0.686)	(-0.116)	(-0.094)
ROGUE_START	-0.241	-1.288**	-4.515***	-6.213***	-3.710
	(-1.358)	(-2.367)	(-3.453)	(-3.040)	(-1.353)
Observations	113,298	113,298	113,298	107,113	99,600
Adjusted R-Squared	0.145	0.080	0.241	0.366	0.466
Within R-Squared	0.124	0.033	0.107	0.155	0.189
Controls, interacted	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes	Yes	Yes

This table presents our results for the association between rogue analyst coverage and the market response to earnings news. Column 1 presents results for the 2-day abnormal return beginning on the earnings announcement date. Column 2 presents results for abnormal returns over the next 74 days. Columns 3, 4, and 5 include abnormal returns taken over the next one, two, and three years beginning with the month after the earnings announcement. The interaction terms denote the incremental response to earnings news after initial rogue analyst coverage. We multiply all returns by 100. *t*-statistics are reported in parentheses. Significance levels are denoted by * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.01$. Standard errors are clustered by firm and year-quarter. See Appendix A for detailed variable definitions.

Table 8

Additional Specifications for Earnings Persistence

Panel A: Replacing Start Indicator with Contemporaneous Indicator

	(1)	(2)	(3)
Dep. Variable	*GAAP_EPS_1*	*GAAP_EPS_2*	*GAAP_EPS_3*
GAAP_EPS	0.919***	1.550***	2.072***
	(6.548)	(6.640)	(5.985)
GAAP_EPS×ROGUE	0.161	0.324	0.186
	(1.384)	(1.521)	(0.726)
ROGUE	-0.194***	-0.359***	-0.384**
	(-3.578)	(-3.456)	(-2.519)
Observations	113,298	106,953	100,874
Adjusted R-Squared	0.667	0.722	0.757
Within R-Squared	0.169	0.149	0.140
Firm FE	Yes	Yes	Yes
Year-Quarter FE	Yes	Yes	Yes

Panel B: Stacked Regression Design

	(1)	(2)	(3)
Dep. Variable	*GAAP_EPS_1*	*GAAP_EPS_2*	*GAAP_EPS_3*
GAAP_EPS	0.116	0.195	0.331
	(0.811)	(0.772)	(1.045)
GAAP_EPS×ROGUE_START	0.505***	0.567**	0.734*
	(4.292)	(2.510)	(1.959)
ROGUE_START	-0.291***	-0.390**	-0.360
	(-3.347)	(-2.404)	(-1.455)
Observations	670,214	613,219	562,403
Adjusted R-Squared	0.722	0.817	0.863
Within R-Squared	0.026	0.013	0.008
Firm-Cohort FE	Yes	Yes	Yes
Year-Quarter-Cohort FE	Yes	Yes	Yes

Table 8, continued

Panel C: Stacked Regression Design with Restricted Sample

	(1)	(2)	(3)
Dep. Variable	*GAAP_EPS_1*	*GAAP_EPS_2*	*GAAP_EPS_3*
GAAP_EPS	0.242***	0.331	0.362
	(2.744)	(1.470)	(1.136)
GAAP_EPS×ROGUE_START	0.292**	0.444	0.592
	(2.350)	(1.346)	(1.431)
ROGUE_START	-0.168	-0.305	-0.410
	(-1.402)	(-1.151)	(-1.000)
Observations	80,540	76,240	71,078
Adjusted R-Squared	0.734	0.820	0.859
Within R-Squared	0.037	0.020	0.014
Firm-Cohort FE	Yes	Yes	Yes
Year-Quarter-Cohort FE	Yes	Yes	Yes

This table presents results replicating our main earnings persistence results from Table 3 using alternative specifications. In Panel A, we replace the indicator for initial rogue analyst coverage with the indicator for rogue analyst coverage in a particular firm-quarter. In Panel B, we use a stacked regression design similar to Cengiz et al. (2019). In Panel C, we replicate the stacked regression design using only observations that have had a shift in the I/B/E/S definition of earnings in the year prior to the event date. *t*-statistics are reported in parentheses. Significance levels are denoted by * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.01$. Standard errors are clustered by firm and year-quarter. See Appendix A for detailed variable definitions.