

# The Disclosure of Non-GAAP Earnings Information in the Presence of Transitory Gains

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**ABSTRACT:** We examine the disclosure of non-GAAP earnings information in quarters containing transitory gains to investigate whether the primary motivation for these managers to disclose non-GAAP earnings is to inform or mislead. In this setting, non-GAAP earnings are more *informative* than GAAP earnings, even though they are *lower* than GAAP earnings. Thus, managers motivated to inform stakeholders about sustainable earnings will disclose non-GAAP earnings information excluding the gain, whereas managers motivated to report higher earnings will obscure the transitory nature of the gain by focusing on GAAP earnings. We find evidence that managers' disclosure choices vary widely across firms, and these choices affect investors' perceptions of core operating earnings. We then contrast how the *same firm* discloses non-GAAP earnings in the presence of transitory *losses* to provide additional evidence on the motives of individual firms' disclosures. We conclude that the most pervasive motivation to disclose non-GAAP earnings in the presence of transitory gains is to inform. An economically significant proportion of firms, however, appear opportunistic in that they only disclose non-GAAP earnings information when it increases investors' perceptions of core operating earnings. Our evidence is important because we speak to the influence that *each* motive has on the choice to disclose non-GAAP earnings and we provide evidence on the underlying motives behind *specific* firms' disclosures.

**Keywords:** *non-GAAP earnings; transitory items; transitory gains; disclosure incentives; voluntary disclosure.*

**Data Availability:** *All data are available from the sources cited in the text.*

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## I. INTRODUCTION

Managers regularly highlight the transitory components of GAAP earnings in their earnings announcements, and frequently disclose non-GAAP earnings excluding these transitory components.<sup>1</sup> The motivation for managers to disclose non-GAAP earnings, however, is heavily debated. On one hand, managers claim that they disclose non-GAAP earnings to aid investors in assessing the firm's core operating performance. On the other hand, regulators express concerns that some managers may be motivated to inflate perceptions of core operating performance, which could mislead investors. Essentially, this ongoing debate centers on whether managers disclose non-GAAP earnings to inform or mislead.

A number of prior studies are relevant to this debate. These studies contribute evidence consistent with both explanations. Non-GAAP earnings are generally more predictive of future operating earnings, but they can also be overstated to meet strategic earnings benchmarks on a non-GAAP basis.<sup>2</sup> Although these studies contribute to our understanding about the motives behind managers' disclosure of non-GAAP earnings, it is difficult to measure the influence that each motive has on this disclosure choice. In particular, because most transitory items are income-decreasing, both motives predict the same disclosure choice. Specifically, the informative incentive to provide a more precise measure of core operating performance and the opportunistic incentive to present a higher earnings measure both motivate managers to exclude income-decreasing transitory items when calculating non-GAAP earnings.<sup>3</sup>

Because both motives impact managers' non-GAAP disclosure, it is difficult to determine which motivation is more pervasive or to provide evidence that a particular disclosure is unambiguously informative or opportunistic. This led to calls in the literature for a cleaner designation between firms' informational versus opportunistic disclosure of non-GAAP earnings (Christensen 2007). Answering this call for additional research is particularly important because, although there was a temporary decline in the disclosure of non-GAAP earnings following Regulation G, the prevalence of these disclosures has been increasing steadily and is now at historic highs (Brown, Christensen, Elliott, and Mergenthaler 2012).

We revisit the debate on managers' motives to disclose non-GAAP earnings by focusing on a sample of firms that recognize transitory *gains* during the quarter. This setting allows us to more precisely assess managers' motives for disclosing non-GAAP earnings. Like income-decreasing items, excluding a transitory gain when calculating non-GAAP earnings provides an improved measure of core operating performance, consistent with managers attempting to inform investors. Unlike income-decreasing items, however, excluding a transitory gain *reduces* non-GAAP earnings relative to GAAP earnings, inconsistent with managers attempting to inflate investors' beliefs about core operating performance.<sup>4</sup> Therefore, the informative and opportunistic motivations no longer predict the *same* non-GAAP earnings disclosure choice.

<sup>1</sup> We use the term "non-GAAP earnings information" to refer to disclosures that allow investors to quickly and easily assess earnings per share excluding transitory items. Other terms used to refer to non-GAAP earnings include "street earnings" and "pro forma" earnings. Generally, "street earnings" refer to adjusted earnings numbers disclosed by analysts and forecast tracking services (e.g., I/B/E/S), and "pro forma earnings" refer to manager-disclosed adjusted earnings metrics. We identify the disclosure of non-GAAP earnings information from earnings announcements.

<sup>2</sup> See for example, Bradshaw and Sloan (2002); Bhattacharya, Black, Christensen, and Larson (2003); Doyle, Lundholm, and Soliman (2003); Lougee and Marquardt (2004); Johnson and Schwartz (2005); Black and Christensen (2009); Frankel, McVay, and Soliman (2011); Doyle, Jennings, and Soliman (2013).

<sup>3</sup> We use the terms "misleading" and "opportunistic" synonymously. We also use the terms "firm" and "manager" interchangeably. We posit that the manager chooses a specific disclosure choice, conditional on the manager's menu of options, which is affected by firm disclosure policies.

<sup>4</sup> To the extent that managers wish to *lower* investors' perceptions of operating earnings, these incentives once again lead to the same incentive to clearly describe the transitory nature of the gain. We investigate this possibility in our adjacent-quarter analyses, noting that less than 10 percent of our sample discloses non-GAAP earnings information in the presence of transitory gains, but not in the presence of transitory losses, yielding a subsample that we call "conservative" but that could reflect downward expectations management.

We consider transitory gain quarters as those with net income-increasing special items of at least one penny per share as disclosed in the 10-Q/K filings from 2004 to 2009. For these firm-quarters, we assess whether managers disclose non-GAAP earnings in their earnings announcements to highlight the transitory nature of the gain. For our sample of transitory gain firm-quarters, we expect “informative” managers to disclose non-GAAP earnings information excluding the transitory gain, whereas we expect that “opportunistic” managers will not. Among our final sample of 1,920 firm-quarters, approximately one-half behave as informative disclosers by disclosing non-GAAP earnings information that would allow investors to easily assess the operating performance of the firm excluding the effect of transitory gains.<sup>5</sup> In contrast, the remaining firms act as opaque disclosers by obscuring the effect of the transitory gain by highlighting operating performance metrics that *include* the gain.<sup>6</sup>

For non-GAAP earnings information to inform or mislead investors, it must affect investors’ perceptions about future operating performance. To test this prediction, we examine whether the informative disclosure of non-GAAP earnings information aids in the efficient pricing of transitory gains more than the opaque disclosure of transitory gains. To assess how efficiently investors price transitory gains, we compare the pricing of transitory gains at the time of the earnings announcement to the pricing of transitory gains at the time of the 10-Q/K filing. We then explore how these price reactions vary between informative and opaque disclosers. If investors efficiently process information about transitory gains at the earnings announcement, then we do not expect systematic revisions in the pricing of transitory gains at the time of the 10-Q/K filing.

We find evidence consistent with the informative disclosure of non-GAAP earnings information about transitory gains aiding investors in the efficient pricing of these gains. Specifically, the price reaction associated with a transitory gain is not significantly different from zero at either the earnings announcement or the 10-Q/K filing date among informative disclosers. This result suggests that, on average, investors identify and price these components of income as transitory. In contrast, among opaque disclosers we find evidence that investors positively price transitory gains at the earnings announcement and then exhibit a negative price reaction associated with the gain at the 10-Q/K filing date. These results are consistent with managers’ disclosure choices affecting investors’ perceptions of operating earnings at the earnings announcement (Bhattacharya et al. 2003).<sup>7</sup>

Although we find evidence consistent with non-GAAP information influencing investors’ perceptions of future operating performance, it is not clear whether the opaque disclosure of transitory gains is intentional, whether in an effort to mislead investors or simply a result of a firm-specific policy that prevents the disclosure of non-GAAP earnings information. Therefore, we explore how firms in our sample disclose non-GAAP earnings information in the presence of income-decreasing *transitory losses*. Specifically, we identify 202 firm-quarter observations where firms from our transitory gain sample recognize a transitory loss of a similar magnitude within four

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<sup>5</sup> In particular, “informative disclosers” disclose either (1) non-GAAP earnings per share excluding the gain, or (2) the earnings per share effect of the gain. We also require “informative disclosers” to mention the gain by the tenth sentence following the first disclosure of GAAP earnings per share. We motivate this categorization with specific examples in Section III. We confirm that these special items have different implications for future earnings than operating earnings, consistent with prior research (Burgstahler, Jambalvo, and Shevlin 2002). Accordingly, “informative” managers will transparently disclose these gains to their investors.

<sup>6</sup> Opaque disclosers could be opportunistic or simply “uninformative” by following a firm-specific policy that prevents the disclosure of non-GAAP earnings information.

<sup>7</sup> In approximately 90 percent of the 1,920 earnings announcements, managers disclosed quantitative information about the gain that was sufficient for a *diligent* investor to infer non-GAAP earnings per share excluding the gain. Hence, our results could be interpreted as evidence consistent with investors’ limited attention and processing power (Bloomfield 2002; Hirshleifer and Teoh 2003; Frederickson and Miller 2004; Elliott 2006; Allee, Bhattacharya, Black, and Christensen 2007).

fiscal quarters of the transitory gain. This sample selection allows us to control for the materiality of the transitory items, as well as firm differences that may influence disclosure policy. Because this analysis focuses on transitory losses, the disclosure of non-GAAP earnings information is informative about future operating performance as in the case of transitory gains. However, now non-GAAP earnings are *higher* than GAAP earnings, whereas transitory gains resulted in non-GAAP earnings that are *lower* than GAAP earnings.

Our results suggest that the most pervasive motivation to disclose non-GAAP earnings information is to inform, represented by the 37.6 percent of our matched sample that disclose in a consistently “informative” manner across transitory loss and transitory gain quarters. The second largest group of disclosures consists of 27.7 percent of our matched sample that are opportunistic by only disclosing non-GAAP earnings information in quarters with transitory losses, which is a significantly lower percentage than the informative group ( $p = 0.0256$  based on a test of proportions). The third largest group, comprising 25.2 percent of our matched sample, disclose in an “uninformative” manner by consistently not disclosing non-GAAP earnings information in either transitory gain or transitory loss quarters. Finally, 9.9 percent of our matched sample is “conservative” in that they disclose less non-GAAP earnings information in transitory loss quarters.

Our evidence contributes to the non-GAAP earnings literature and more generally to the disclosure literature. By focusing on firm-quarters with transitory gains, we are able to better disentangle the informative and opportunistic motives behind non-GAAP reporting and to more effectively classify the motives behind *individual firms’ disclosures*. Both of these designations have been difficult to assess in prior studies focusing on the disclosure of non-GAAP earnings in broader samples. We find that the informative disclosure of non-GAAP earnings information enables investors to better understand firms’ future operating performance relative to opaque disclosures. Further, our results suggest that the most pervasive motive behind the disclosure of non-GAAP earnings information is to inform, although an economically significant proportion of firms appear to be opportunistic in that they only disclose non-GAAP earnings information when it increases investors’ perceptions of core operating earnings. We also provide evidence that some firms’ disclosure policies consistently restrict the disclosure of non-GAAP earnings. Such policies apply even when disclosing would allow them to report both more informative and higher earnings. Finally, a small number of firms’ disclosures are actually conservative in the sense that non-GAAP earnings information is disclosed in transitory gain quarters but *not* in transitory loss quarters. Our study should be useful to investors, financial analysts, regulators, and researchers for assessing the non-GAAP disclosure motives of management and the effect of these motives on market participants.

## II. BACKGROUND AND MOTIVATION

Bradshaw and Sloan (2002) document a growing disparity between earnings based on Generally Accepted Accounting Principles (GAAP) and alternative non-GAAP earnings measures that exclude transitory items. They document that managers often highlight non-GAAP earnings in their earnings announcements and that analysts and investors focus on these non-GAAP earnings figures. They propose two possible explanations for the disclosure of non-GAAP earnings. First, the opportunism hypothesis suggests that excluding certain income-decreasing items allows managers to disclose non-GAAP earnings that exceed GAAP earnings, which could potentially garner higher equity valuations by inflating stock price. Second, the information hypothesis suggests that excluding transitory items when calculating non-GAAP earnings allows managers to provide an improved earnings measure for forecasting future earnings and cash flows in order to estimate firm value.

Because most transitory items are income-decreasing, it is difficult to disentangle evidence of the information and opportunism hypotheses as both hypotheses predict the same disclosure treatment for income-decreasing transitory items.<sup>8</sup> For example, managers acting to “inform” will remove income-decreasing transitory items when calculating non-GAAP earnings because excluding the item results in non-GAAP earnings that are more persistent than GAAP earnings. However, managers acting opportunistically will also exclude income-decreasing transitory items when calculating non-GAAP earnings because excluding the item results in non-GAAP earnings that exceed GAAP earnings.

A number of studies have investigated these competing motives, providing evidence consistent with both explanations. Consistent with the information hypothesis, non-GAAP earnings are more informative to investors relative to GAAP earnings, especially when GAAP-earnings informativeness is low or GAAP earnings are more subjective (Bradshaw and Sloan 2002; Bhattacharya et al. 2003; Brown and Sivakumar 2003a; Lougee and Marquardt 2004; Choi, Lin, Walker, and Young 2007). Non-GAAP earnings are also more predictive of future earnings, consistent with these earnings figures providing a better representation of core operating earnings (Brown and Sivakumar 2003b; Johnson and Schwartz 2005). Consistent with the opportunism hypothesis, exclusions of transitory losses from GAAP earnings allow managers to meet earnings benchmarks, and are associated with future operating earnings, suggesting these exclusions recur in subsequent periods (McVay 2006; Kolev, Marquardt, and McVay 2008; Black and Christensen 2009).<sup>9</sup> Because non-GAAP exclusions are most often income-decreasing, it is difficult to classify specific firms’ disclosures as either informative or opportunistic, as both motives predict disclosure of non-GAAP earnings in the presence of transitory losses.

By focusing on firm-quarters recognizing transitory gains, we are able to more accurately identify managers’ underlying motives. In this setting, we argue that an informative manager will disclose non-GAAP earnings information in the presence of transitory gains, whereas an opportunistic manager will not.<sup>10</sup> Specifically, the informative hypothesis suggests that excluding transitory gains when calculating non-GAAP earnings provides a better understanding of the firm’s core operating performance relative to GAAP earnings. Excluding the gain, however, results in

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<sup>8</sup> The disproportionate frequency of transitory losses, relative to transitory gains, is not necessarily evidence of opportunism, but rather is more likely a function of the conservative nature of GAAP. In particular, GAAP requires the recognition of contingent losses, but does not allow the recognition of contingent gains.

<sup>9</sup> Although the focus of our study is on transitory items, other studies examine the exclusion of “other” non-transitory item exclusions such as amortization expense and stock-based compensation expense, finding evidence consistent with opportunistically motivated disclosures of non-GAAP earnings (e.g., Doyle et al. 2003; Black and Christensen 2009; Barth, Gow, and Taylor 2012; Doyle et al. 2013). Subsequent to the sample period of many of these studies, in 2003 the Securities and Exchange Commission enacted Regulation G requiring managers issuing non-GAAP earnings to reconcile these figures to the most directly comparable GAAP measure (SEC 2003). Following Regulation G fewer managers release non-GAAP earnings in their press releases (Marques 2006; Entwistle, Feltham, and Mbagwu 2006), non-GAAP earnings are less likely to just reach analyst forecasts when GAAP earnings do not (Heflin and Hsu 2008), other exclusions tend to be less opportunistic and more transitory as they are less associated with future earnings and cash flows (Kolev et al. 2008; Whipple 2014), and mispricing is reduced (Zhang and Zheng 2011). Although Regulation G appears to have improved the quality of other exclusions, Kolev et al. (2008) find that managers tend to use special items more frequently to exclude recurring expenses because these transitory items offer “camouflage.”

<sup>10</sup> We implicitly assume that managers wish to report higher earnings (e.g., Kinney and Trezevant 1997). In the event that an opportunistic manager excludes the transitory gain to lower expectations about the future, the two hypotheses are no longer mutually exclusive. We feel that our implicit assumption is reasonable for two reasons. First, prior research finds evidence that most earnings management is conducted to increase earnings (Dechow, Hutton, and Sloan 1996; Bowen, Davis, and Matsumoto 2005; Graham, Harvey, and Rajgopal 2005). Second, including the transitory gain, and thus only presenting the higher GAAP earnings in the current period, does not preclude the exclusion of the transitory gain in subsequent periods when establishing prior period earnings benchmarks (Schrand and Walther 2000).

non-GAAP earnings that fall below GAAP earnings, which is inconsistent with the opportunistic explanation. We provide a numerical example illustrating this point in Appendix A.

In order to assess which is the dominant motive, we investigate whether managers disclose non-GAAP earnings information in the presence of transitory gains. We first replicate the results of prior research suggesting that Compustat-identified transitory gains are less persistent than recurring earnings—a necessary condition for us to expect managers to provide additional disclosure about these gains. Next, we test whether the disclosure of non-GAAP earnings information influences investors' perceptions of future operating performance—also a necessary condition for us to expect managers to provide/withhold additional disclosure about the gains. Finally, we examine how the same firm discloses non-GAAP information in the presence of a transitory loss in an adjacent quarter.

### III. SAMPLE AND DESCRIPTIVE STATISTICS

We examine a sample of 1,920 firm-quarters with transitory gains in the form of net income-increasing special items of at least one penny per share from 2004 to 2009.<sup>11</sup> As discussed in the prior section, focusing on transitory gains allows us to distinguish between the informational versus opportunistic motives to disclose non-GAAP earnings. We consider transitory gains that exceed one penny per share to focus our analysis on gains that might materially affect financial reporting outcomes such as meeting an earnings benchmark.

We require sample firms to have (1) CRSP coverage, (2) a non-missing earnings announcement date on Compustat, (3) a non-missing 10-Q/K filing date on EDGAR, (4) at least two days between the earnings announcement and filing dates, and (5) data available for each of the variables, including one-year-ahead earnings. By requiring two days between the earnings announcement and filing dates, we avoid attributing the earnings announcement reaction to the 10-Q/K filing (Li and Ramesh 2009). We also require that the firm is covered by I/B/E/S, as we use the most recent median consensus analyst forecast to proxy for earnings expectations. Finally, we exclude financial firms and utility firms to avoid regulatory features of these industries that might confound our analyses.

The disclosure requirements for firms' earnings announcements are more ambiguous than the disclosure requirements of firms' 10-Q/K filings, and auditor oversight of the earnings announcement is minimal during the years of our sample (Bronson, Hogan, Johnson, and Ramesh 2011). Moreover, although Regulation G requires managers to reconcile non-GAAP earnings to GAAP earnings, it does not mandate the disclosure of non-GAAP earnings information. In contrast, the FASB mandates that material transitory gains be broken out on the face of the income statement or disclosed in the footnotes of the 10-Q/K. Therefore, we identify transitory gains, *ex post*, based on Compustat's categorization of special items from firms' subsequent 10-Q/K filings.<sup>12</sup>

Our sample collection process is distinguished from prior studies, which either (1) use I/B/E/S earnings to proxy for manager-disclosed non-GAAP earnings (Doyle et al. 2003), or (2) search

<sup>11</sup> To identify special items of at least one penny per share, we use data item "SPIQ" from Compustat's Xpressfeed. Because Compustat provides this variable on a pre-tax basis, we adjust it to an after-tax basis using an assumed 35 percent tax rate. Finally, we scale the after-tax variable by the common shares for diluted EPS, "CSHFDQ." Compustat nets income-increasing and income-decreasing special items together to form SPIQ. Thus, it is possible that the offsetting income-decreasing special items could be unduly affecting our results. We explore this issue by replicating our analyses after separating income-increasing and income-decreasing components of SPIQ. Untabulated results confirm that our results are attributable to the income-increasing special items.

<sup>12</sup> The nature and financial effects of each unusual or infrequent event or transaction is required to be disclosed on the face of the income statement or in the notes to the financial statements (ASC 225-20-45-16). The most opportunistic managers could simply fail to disclose the transitory nature of the gains in the 10-Q/K and thus these gains will not be included in our sample because they will not be identified by Compustat.

earnings announcements for keywords indicating the disclosure of non-GAAP earnings (Bhattacharya et al. 2003). By using Compustat to identify firms that recognized a transitory gain in the 10-Q/K filing, we are able to investigate management's treatment of these charges without (1) conditioning on analysts' treatment of these charges or (2) identifying only those managers who choose to disclose the transitory items in their earnings announcements.<sup>13</sup>

To investigate the pervasiveness of the informational and opportunistic disclosure of non-GAAP earnings information, we read each earnings announcement where Compustat has *ex post* identified a transitory gain. If we cannot find information about the gain in the earnings announcement, then we confirm the existence of the gain in the firm's subsequent 10-Q/K filing. We exclude observations for which we cannot find the Compustat-identified gain in either the earnings announcement or the 10-Q/K filing because this could reflect Compustat errors, and where the gain is recognized because of a subsequent event because managers may not have had sufficient information about the gains at the time of the earnings announcements (Bronson et al. 2011).

This process results in 1,920 firm-quarter observations. We observe that almost half of our sample discloses non-GAAP earnings information in the earnings announcement. In particular, 42.7 percent disclose non-GAAP earnings per share that excludes the gain, and 39.3 percent provide an EPS effect of the gain. We consider both of these disclosure choices to be "non-GAAP" because it is extremely straightforward to infer non-GAAP earnings per share once the EPS effect of the gain is disclosed.<sup>14</sup> For example, in their July 28, 2005 earnings announcement, Therma-Wave disclosed the following:

Net income for the fiscal first quarter of 2006 was \$2.4 million, or \$0.07 per diluted share, compared to a net loss of \$1.2 million, or \$(0.03) per diluted share, in the fiscal first quarter of 2005, and sequentially, to a net loss of \$5.1 million, or \$(0.14) per diluted share, recorded in the fiscal fourth quarter of 2005.

Fiscal first quarter of 2006 net income includes a gain of \$8.6 million, or approximately \$0.23 per diluted share, from the previously announced sale of Therma-Wave's CCD-I integrated metrology product line and related assets to Tokyo Electron Limited (TEL) for a total consideration of approximately \$9.95 million.

With very little attention or processing, it is simple to infer non-GAAP operating earnings per share of -16 cents.

Although many firms provide non-GAAP information about the transitory gain, we see a great deal of variation in *where* the transitory gain is disclosed. In the Therma-Wave example, the gain is mentioned immediately following the GAAP earnings per share. However, approximately 35 percent of our sample firms does not mention the gain by the tenth sentence following the first disclosure of GAAP earnings per share. As an example, LP provided both the EPS effect of the gain and a non-GAAP earnings number that excludes the gain, but first provided the non-GAAP earnings information on the bottom of the third page of their press release. There was no indication during the discussion of GAAP earnings per share that there was a transitory component to the earnings figure.

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<sup>13</sup> Although we rely on Compustat's identification of transitory gains, this should not systematically affect our analyses. If Compustat fails to identify a transitory item, then the firm-quarter is not included in our sample.

<sup>14</sup> Most of these firms provide both the EPS effect of the gain and non-GAAP EPS excluding the gain. However, 268 of our 754 "informative" disclosers did not explicitly disclose a non-GAAP EPS measure. Excluding these 268 observations from our sample, in untabulated results, does not change our inferences regarding "informative" disclosers.

LP Reports Third Quarter 2006 Profits: Nashville, TN. (October 34, 2006)—Louisiana Pacific Corporation (LP) (NYSE: LPX) reported today third quarter net income of \$9.5 million, or \$0.09 per diluted share, on sales from continuing operations of \$535 million. In the third quarter of 2005, LP's net income was \$168 million, or \$1.53 per diluted share, on sales from continuing operations of \$621 million. For the first nine months of 2006, LP reported net income of \$148 million, or \$1.41 per diluted share, on sales from continuing operations of \$1.87 billion compared to net income of \$370 million, or \$3.34 per diluted share, on sales from continuing operations of \$197 billion for the first nine months of 2005.

Given limited attention and processing resources of investors, it is possible that deferring the discussion of the gain leads some investors to rely on GAAP earnings per share as their estimate of recurring earnings. Consistent with this argument, both [Bowen et al. \(2005\)](#) and [Elliott \(2006\)](#) find evidence that when managers discuss non-GAAP earnings earlier in the press release, relative to GAAP earnings, the incremental information content of non-GAAP earnings increases.

Finally, approximately 90 percent of our firm-quarter observations provide the dollar value of the gain. For example, Valmont Industries provides the dollar value of the gain immediately following the disclosure of their GAAP earnings per share.

Omaha, NE—Valmont Industries, Inc. (NYSE: VMI), a leading global manufacturer of engineered support structures for infrastructure, mechanized irrigation equipment for agriculture, and provider of coating services and tubular products, reported first quarter sales of \$303.6 million compared with \$265.7 million for the same period of 2005. First quarter 2006 net earnings were \$13.1 million, or 52 cents per diluted share, versus first quarter 2005 net earnings of \$6.8 million, or 27 cents per diluted share. Miscellaneous income includes a one-time gain of \$1.1 million related to discontinued retirement plan of a former subsidiary.

Using the disclosed dollar value of the transitory gain, diligent investors could form their own estimate of non-GAAP earnings per share that excludes the gain. In particular, they would need to determine whether the gain was reported on a pre- or post-tax basis and determine the firms' effect tax rate and weighted average shares outstanding. Even in these cases, the EPS effect of the gain is likely measured with some error and is subject to whether it affects the rounding of the original EPS numbers. As previously noted, however, it is possible that investors with limited time and processing resources will not back out the gain when forming their assessment of recurring earnings. [Hirshleifer and Teoh \(2003, 339\)](#) posit that “owing to limits to investor attention, information that is presented in salient, easily processed form is assumed to be absorbed more easily than information that is less salient, or that is only implicit in the public information set.” Similarly, [Bloomfield \(2002\)](#) describes the “Incomplete Revelation Hypothesis” where statistics that are more costly to extract from public data are less completely revealed in market prices. In addition, there is evidence that investors—especially unsophisticated investors—are subject to processing costs (e.g., [Frederickson and Miller 2004](#); [Elliott 2006](#); [Allee et al. 2007](#)). Thus, we do not consider providing the dollar value of the gain, absent the EPS effect, to be equivalent to disclosing non-GAAP earnings information.

Combining these different facets of how clearly managers highlight the transitory nature of the gain, we create an indicator variable “non-GAAP earnings information” that is equal to 1 if the firm provides non-GAAP earnings per share that excludes the gain or the EPS effect of the gain in the earnings announcement. We also require firms to provide these disclosures by the tenth sentence following the first disclosure of GAAP earnings per share. We set the indicator variable equal to 0 for firm-quarters that do not meet these requirements. Classifying firm-quarters that provide some



information about the gain as opaque disclosers biases against our finding evidence of differential effects of disclosure.

Table 1 provides descriptive statistics for the sample. 47.4 percent of our sample firms disclose non-GAAP earnings information. Operating earnings per share has a mean (median) of 0.355 (0.270), which is notably higher than studies examining income-decreasing special item firms. This evidence is consistent with transitory gains being less associated with poor underlying performance of the firm relative to most income-decreasing special items, such as restructuring charges and asset write-offs. Interestingly, however, operating earnings is significantly lower among opaque disclosers (0.309 versus 0.406, different at the  $p < 0.01$  level). We speculate that poorly performing firms have a stronger incentive to highlight the higher GAAP earnings in order to increase investors' perceptions of their performance.

Operating earnings surprise has a mean (median) of  $-0.007$  (0.000), suggesting that operating earnings tend to just miss analysts' expectations, based on the median consensus I/B/E/S forecast, particularly among opaque disclosers.<sup>15</sup> Analyst actual earnings per share is higher than operating earnings, on average, which is consistent with analysts excluding some recurring charges such as amortization and stock-based compensation from their earnings realizations, or perhaps including transitory gains as recurring income. This difference is significantly larger among opaque disclosers, suggesting that opacity about transitory gains might influence analysts to include these gains in their reported earnings, which are meant to represent recurring earnings.<sup>16</sup> Net income-increasing special items have a mean (median) of 0.160 (0.052) per share. This value is netted with concurrent income-decreasing special items, such as restructuring charges and, thus, the actual value of the transitory gain is sometimes larger. Clearly, the magnitude of these special items can be very material and, thus, how clearly managers disclose the transitory nature of these gains is important.

The mean (median) announcement return, the abnormal return over the three-day interval around the earnings announcement, of 0.009 (0.005) is consistent with the earnings announcement containing a small amount of good news, on average. In contrast, the mean and median filing returns are both  $-0.001$ , suggesting that the additional information provided at the time of the 10-Q/K filing by our sample of firms tends to temper the information from the earnings announcement. There are an average of 14 days between the earnings announcement and the 10-Q/K filing, and this is similar across both the informative and opaque disclosers. The book-to-market ratio is 0.535 and not statistically different across the two groups, although informative disclosers tend to have larger market cap, total assets, and sales. Our benchmark variables indicate that in 26.7 (15.0) percent of the firm-quarter observations, the manager would be able to meet the analyst forecast (prior period earnings) if the transitory gain were included in operating earnings, but would miss the benchmark if the transitory gain were excluded from operating earnings.

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<sup>15</sup> Operating earnings surprise excludes Compustat-identified transitory items from the earnings realization, whereas the street earnings surprise could exclude additional items, for example, amortization (Baik, Farber, and Petroni 2009; Whipple 2014) or could include Compustat-identified transitory items (Gu and Chen 2004; Choi et al. 2007). The analyst actual value is, generally, the standard measure of earnings realizations. We use the operating earnings surprise in our regression analysis, rather than the analyst-generated surprise, as we do not want to condition on how analysts treat the gain. For example, Gu and Chen (2004) document variation in how analysts treat transitory items. Untabulated results provide evidence that our inferences are similar using a random walk rather than the analyst forecast to proxy for the earnings expectation.

<sup>16</sup> In untabulated results, we confirm that the transitory gains map into analysts' reported earnings more strongly for opaque disclosers than for informative disclosers. Similar to our returns tests, this provides evidence that managers' disclosure or non-disclosure of non-GAAP earnings information influences market participants' beliefs about future operating performance and could therefore be used to inform or mislead market participants.

**TABLE 1**  
**Descriptive Statistics**

Variable	Full Sample (n = 1,920)		Informative Disclosers (n = 910)		Opaque Disclosers (n = 1,010)		t-test
	Mean	Median	Mean	Median	Mean	Median	
<i>Non-GAAP Earnings Information</i>	0.474	0.000	1.000	1.000	0.000	0.000	NA
<i>Operating Earnings</i>	0.355	0.270	0.406	0.340	0.309	0.210	4.19
<i>Analyst Actual</i>	0.421	0.320	0.441	0.359	0.403	0.279	1.61
<i>Analyst Forecast</i>	0.363	0.276	0.396	0.332	0.333	0.230	2.97
<i>Operating Earnings Surprise</i>	-0.007	0.000	0.009	0.011	-0.022	-0.010	3.80
<i>Street Earnings Surprise</i>	0.049	0.030	0.041	0.022	0.056	0.030	2.24
<i>Transitory Gain</i>	0.160	0.052	0.203	0.072	0.122	0.041	5.55
<i>Announcement Return</i>	0.009	0.005	0.015	0.012	0.002	-0.001	3.36
<i>Filing Return</i>	-0.001	-0.001	-0.002	-0.003	0.000	0.000	1.21
<i>Announcement Difference</i>	14.376	12.000	14.644	13.000	14.134	12.000	1.08
<i>Book-to-Market Ratio</i>	0.535	0.445	0.534	0.446	0.535	0.444	0.07
<i>Market Value of Equity</i>	5,584.098	1,219.741	6,748.398	1,510.811	4,535.076	969.377	3.56
<i>Total Assets</i>	4,858.183	1,272.763	5,510.310	1,826.245	4,270.624	949.820	2.77
<i>Sales</i>	1,220.209	306.573	1,383.916	408.720	1,072.710	234.400	2.51
<i>Beta</i>	1.232	1.188	1.210	1.166	1.253	1.205	1.80
<i>Benchmark—Analyst Forecast</i>	0.267	0.000	0.277	0.000	0.258	0.000	0.91
<i>Benchmark—Prior Period</i>	0.150	0.000	0.171	0.000	0.131	0.000	2.50
<i>Benchmark—Profit</i>	0.079	0.000	0.080	0.000	0.078	0.000	0.16
<i>Transitory Gain Value</i>	0.914	1.000	1.000	1.000	0.837	1.000	13.32
<i>Disclosed</i>							
<i>Gain Disclosed Quickly</i>	0.654	1.000	1.000	1.000	0.343	0.000	32.08
<i>Transitory Gain EPS Disclosed</i>	0.393	0.000	0.697	1.000	0.119	0.000	27.76
<i>Non-GAAP EPS Excluding Gain</i>	0.427	0.000	0.705	1.000	0.175	0.000	41.77
<i>Disclosed</i>							
<i>Non-GAAP EPS Including Gain</i>	0.053	0.000	0.000	0.000	0.100	0.000	10.05
<i>Disclosed</i>							

The sample includes firm-quarters with after-tax transitory gains of at least one penny per share (diluted) from fiscal years 2004 to 2009.

All earnings variables reported in Table 1 are on a basic per share basis. All continuous variables (with the exception of the lower bound of *Transitory Gain*) are winsorized at the extreme 1 percent. I/B/E/S data are obtained from the unadjusted summary dataset and diluted per share variables have been adjusted to basic so that variables are comparable.

**Variable Definitions:**

*Non-GAAP Earnings Information* = an indicator variable equal to 1 if the firm disclosed the EPS effect of the transitory gain or non-GAAP EPS excluding the gain, and mention the gain by the tenth sentence following the first disclosure of GAAP earnings per share, and 0 otherwise;

*Operating Earnings* = operating earnings per share (Compustat OPEPSQ);

*Analyst Actual* = realized earnings per share (I/B/E/S Actual - EPS);

*Analyst Forecast* = median consensus analyst forecast (I/B/E/S - Medest EPS);

*Operating Earnings Surprise* = *Operating Earnings* minus *Analyst Forecast*;

*Street Earnings Surprise* = *Analyst Actual* minus *Analyst Forecast*;

*Transitory Gain* = after-tax transitory gain per share (Compustat (SPIQ × 0.65)/CSHPRQ) if SPIQ is a positive value;

*Announcement Return* = three-day buy-and-hold market-adjusted return (value-weighted) centered on the earnings announcement date;

*Filing Return* = three-day buy-and-hold market-adjusted return (value-weighted) centered on the financial statement filing date;

(continued on next page)

TABLE 1 (continued)

*Announcement Difference* = number of days between the earnings announcement date and the financial statement filing date;

*Book-to-Market Ratio* = book value of equity divided by the market value of equity (Compustat SEQQ/(CSHOQ × PRCCQ));

*Market Value of Equity* = firm market value of equity in millions (Compustat CSHOQ × PRCCQ);

*Total Assets* = firm assets in millions (Compustat ATQ);

*Sales* = firm sales in millions (Compustat SALEQ);

*Beta* = firm risk proxy estimated using one year of daily returns, ending 46 days prior to the earnings announcement. Firms must have a minimum of 120 daily returns in the estimation window;

*Benchmark—Analyst Forecast* = an indicator variable equal to 1 if including the transitory gain in EPS results in meeting the analyst forecast, and 0 otherwise;

*Benchmark—Prior Period* = an indicator variable equal to 1 if including the transitory gain in EPS results in meeting the four-quarters-ago EPS, and 0 otherwise;

*Benchmark—Profit* = an indicator variable equal to 1 if including the transitory gain in EPS results in a profit, and 0 otherwise;

*Transitory Gain Value Disclosed* = an indicator variable equal to 1 if the earnings announcement contains the transitory gain value, and 0 otherwise;

*Gain Disclosed Quickly* = an indicator variable equal to 1 if the transitory gain is disclosed by the tenth sentence following the first disclosure of GAAP EPS in the earnings announcement, and 0 otherwise;

*Transitory Gain EPS Disclosed* = an indicator variable equal to 1 if the earnings announcement contains the EPS effect of the transitory gain, and 0 otherwise;

*Non-GAAP EPS Excluding Gain Disclosed* = an indicator variable equal to 1 if the earnings announcement contains a non-GAAP EPS value excluding the transitory gain, and 0 otherwise; and

*Non-GAAP EPS Including Gain Disclosed* = an indicator variable equal to 1 if the earnings announcement contains a non-GAAP EPS value including the transitory gain, and 0 otherwise.

#### IV. TEST DESIGN AND EMPIRICAL ANALYSIS

##### Overview

We use a three-part design to investigate the proportion of firms disclosing non-GAAP earnings to be informative or opportunistic. We first confirm that income-increasing special items have different implications for future earnings than operating earnings for our sample firms, consistent with the results of prior research (Burgstahler et al. 2002). To the extent that they have the same implications for future earnings as operating earnings, we would not expect managers to highlight them as transitory in the firm's earnings announcement.<sup>17</sup>

We next examine whether managers' non-GAAP disclosure choices in the presence of transitory gains influences investors' assessments of future operating performance. To do this, we examine earnings announcement response coefficients, measured over the three-day interval around the earnings announcement, and filing response coefficients, measured over the three-day interval around the 10-Q/K filing date, associated with transitory gains. We also examine how these price reactions vary with how clearly managers highlight the transitory nature of the gain in the earnings announcement.<sup>18</sup>

<sup>17</sup> We generally do not expect transitory gains to persist, although some firms have a pattern of transitory items (Elliott and Hanna 1996; Black, Carnes, and Richardson 2000) and, thus, it is possible that within these firms, gains exhibit positive autocorrelation with future net income, and that the disclosure choice varies for this reason (Choi et al. 2007; Riedl and Srinivasan 2010). To explore this possibility, we repeat our persistence analyses among opaque disclosers after deleting all firms that appear more than once in our sample. In untabulated results, our sample size for opaque disclosers falls to 366 firm-quarter observations, and we continue to find a negative and significant coefficient (coefficient = -0.767; t-statistic = -2.50).

<sup>18</sup> In untabulated results, we examine the robustness of our evidence to five-day- and seven-day-return event windows, our results are qualitatively similar.

Finally, we verify how the choice to disclose non-GAAP earnings information changes within the *same firms* in adjacent quarters with transitory losses. In particular, some firms might have a policy restricting the disclosure of non-GAAP earnings information; such a policy would be opaque, but not opportunistic. Evidence of the disclosure of non-GAAP earnings information in transitory loss quarters, however, provides stronger evidence of opportunism.

### Transitory Gain Persistence

We first confirm that the implications of transitory gains differ from the implications of recurring operating income by examining the persistence of the gain to determine its implications for future earnings. There are several ways to estimate the persistence of earnings components (Fairfield, Sweeney, and Yohn 1996; Burgstahler et al. 2002; Doyle et al. 2003). We follow the estimation procedure outlined by Doyle et al. (2003) because this procedure does not impose a specific expectation of whether the future implications will occur in the next quarter, four quarters hence, or over several future quarters. This more general structure works well for special items since we do not have an *ex ante* prediction for when transitory gains should affect future earnings. Thus, we estimate the following pooled regression:

$$\begin{aligned} \text{Future Operating Earnings} = & \alpha_0 + \alpha_1 \text{Operating Earnings} + \alpha_2 \text{Transitory Gain} \\ & + \alpha_3 \text{Sales Growth} + \alpha_4 \text{Ln(Total Assets)} \\ & + \alpha_5 \text{Earnings Volatility} + \alpha_6 \text{Loss} + \alpha_7 \text{Book-to-Market Ratio} \\ & + \varepsilon. \end{aligned} \tag{1}$$

Each of these variables is defined in Table 1 or 2. We use future operating earnings per share summed over the next four quarters as our dependent variable, following Kolev et al. (2008).<sup>19</sup>

We estimate this regression using a panel approach with fixed effects and robust standard errors. We include industry fixed effects to control for common mean effects at the industry level because earnings surprises are correlated at the industry level, and classify industries into the 48 industries in Fama and French (1997). We include year fixed effects to control for common effects that vary over time. We also use White's robust standard errors, which corrects for unknown heteroscedasticity and serial correlation.<sup>20</sup> Our coefficient of interest is  $\alpha_2$ , which measures the association between future operating earnings and transitory gains. If the gains are perfectly transitory, then  $\alpha_2$  will not be statistically different from 0 ( $\alpha_2 = 0$ ), whereas a coefficient of 4 ( $\alpha_2 = 4$ ) indicates that it is perfectly permanent, reflecting that the independent variable is operating earnings for a single quarter while the dependent variable is future operating earnings summed over four quarters.

The first column of Table 2 presents the results for our full sample. The coefficient on operating earnings is 2.463, suggesting that \$1 of operating earnings is associated with \$2.46 of operating

<sup>19</sup> Doyle et al. (2003) concentrate their examination of future implications of non-GAAP earnings exclusions on future cash flows. It is possible, however, for cash flows to be realized in response to the special item, especially in the year following the special item; for example the firm could receive the cash from a litigation settlement. Thus, following Kolev et al. (2008), we focus on future operating earnings, which should not have a mechanical association with transitory charges. Nevertheless, we consider three alternative dependent variables: one-year-ahead cash from operations, a three-year-average of cash from operations, and a three-year-average of operating earnings. We find no evidence of positive persistence in any of these estimations.

<sup>20</sup> Controlling for these effects is more appropriate than clustering standard errors at the firm level because, while the residual may include a firm-specific component, the median firm only has a single observation in the sample. As such, correlation between the residuals is unlikely to be attributable to correlation between firm-specific components in the residual.

**TABLE 2**  
**Earnings Persistence Tests**

$$\begin{aligned} \text{Future Operating Earnings} = & \alpha_0 + \alpha_1 \text{Operating Earnings} + \alpha_2 \text{Transitory Gain} \\ & + \alpha_3 \text{Sales Growth} + \alpha_4 \text{Ln(Total Assets)} \\ & + \alpha_5 \text{Earnings Volatility} + \alpha_6 \text{Loss} + \alpha_7 \text{Book-to-Market Ratio} \\ & + \varepsilon. \end{aligned}$$

Independent Variables	Full Sample Coefficient (t-statistic)	Informative Disclosers Coefficient (t-statistic)	Opaque Disclosers Coefficient (t-statistic)
Intercept	0.016 (1.63)	-0.004 (-0.36)	0.033** (2.27)
<i>Operating Earnings</i>	2.463*** (16.08)	3.053*** (16.33)	2.141*** (10.33)
<i>Transitory Gain</i>	-0.414*** (-3.40)	-0.142 (-1.12)	-0.657*** (-3.47)
<i>Sales Growth</i>	-0.010 (-0.24)	0.091** (2.12)	-0.085 (-1.33)
<i>Ln(Total Assets)</i>	0.004*** (3.54)	0.003*** (2.59)	0.003* (1.85)
<i>Earnings Volatility</i>	-0.258*** (-3.63)	-0.096 (-1.09)	-0.304*** (-3.40)
<i>Loss</i>	0.005 (0.65)	0.037*** (3.10)	-0.010 (-1.13)
<i>Book-to-Market Ratio</i>	-0.029*** (-5.71)	-0.020*** (-2.90)	-0.033*** (-4.86)
Year and Industry Fixed Effects	Included	Included	Included
Adjusted R <sup>2</sup>	57.9%	64.7%	54.7%
Number of Observations	1,920	910	1,010

\*, \*\*, \*\*\* Indicate  $p < 0.10$ ,  $p < 0.05$ , and  $p < 0.01$ , respectively (two-tailed).

All continuous variables (with the exception of the lower bound of Transitory Gain) are winsorized at the extreme 1 percent. Each regression contains year and industry (Fama-French 48 industry classification) fixed effects. We use White's robust standard errors to calculate the t-statistics. *Future Operating Earnings*, *Operating Earnings*, *Transitory Gain*, and *Sales Growth* are on a per share basis and then scaled by assets per share.

**Variable Definitions:**

*Future Operating Earnings* = operating earnings per share summed over four quarters starting with quarter  $q+1$ ;

*Sales Growth* = sales growth per share from quarter  $q-4$  to quarter  $q$  (Compustat SALEQ);

*Earnings Volatility* = standard deviation of income before extraordinary items divided by total assets over at least six of the prior eight quarters (Compustat IBCOMQ/ATQ); and

*Loss* = an indicator variable equal to 1 if income before extraordinary items is less than 0, and 0 otherwise

All other variables are defined in Table 1.

earnings over the next four quarters. In contrast, the coefficient on transitory gains is  $-0.414$ , suggesting that \$1 of transitory gains is associated with a *reduction* in earnings of 41 cents over the next four quarters, on average.<sup>21</sup> This association suggests that a manager motivated to disclose non-GAAP earnings to be more informative, would want to disclose the transitory nature of the gain since the implications for future earnings are significantly different from those of operating earnings.

We partition our sample by disclosure choice in the next two columns of Table 2, with informative disclosers (opaque disclosers) in the second (third) column. If all managers are motivated to inform, then we would expect the persistence of the transitory gains to vary with the managers' disclosure choice. In particular, we would expect the persistence of transitory gains to differ from that of operating earnings among informative disclosers, but not among opaque disclosers, thereby reducing the need for disclosure among opaque disclosers. In other words, if Compustat identifies a gain that management expects to recur as transitory, then we do not expect management to disclose it as transitory.

The coefficient on transitory gains is not statistically different from zero among informative disclosers, consistent with the choice to highlight the transitory gain, and reflecting that transitory gains are not associated with future earnings. Among opaque disclosers, however, transitory gains are *negatively* associated with the next four quarters of operating earnings (coefficient =  $-0.657$ ). Although we had not expected to find evidence of negative persistence, these analyses suggest that the choice to be "opaque" is not simply because these gains have similar attributes as operating earnings. We further explore the negative persistence results at the end of this section and find evidence consistent with the negative persistence stemming from the sale of productive assets. Regardless of the underlying reason for the negative persistence, however, it is clear that transitory gains have different implications for future earnings than operating earnings, consistent with the expectation that the disclosure of the gain would be informative to investors due to its differing nature.

### Earnings Response Coefficients

We examine the earnings response coefficient on transitory gains at the earnings announcement and subsequent 10-Q/K filing to investigate the market's assessment of the permanence of these gains relative to operating earnings. To examine the earnings response coefficient on transitory gains at the time of the earnings announcement, we estimate the following pooled regression:

$$\begin{aligned} \text{Announcement Return} = & \alpha_0 + \alpha_1 \text{Operating Earnings Surprise} + \alpha_2 \text{Transitory Gain} \\ & + \alpha_3 \text{Book-to-Market Ratio} + \alpha_4 \text{Market Value of Equity} + \alpha_5 \text{Beta} \\ & + \varepsilon. \end{aligned} \tag{2}$$

<sup>21</sup> This coefficient differs from that found in [Burgstahler et al. \(2002\)](#), where income-increasing special items are positively associated with four-quarters-ahead earnings. Our estimations differ in at least four ways. First, our time period does not overlap with the sample used in [Burgstahler et al. \(2002\)](#). Second, we omit all firm-quarters that do not have income-increasing special items of at least one penny per share. Third, we consider a summation of four quarters of future earnings rather than focusing on four-quarters-ahead earnings, a single quarter. Finally, we consider future operating earnings, while [Burgstahler et al. \(2002\)](#) consider future unexpected net income. To further investigate this difference, we replicate the [Burgstahler et al. \(2002\)](#) results and extend the analysis to the post-Regulation G period. We find that the coefficient on transitory gains is not statistically different from zero in each of the subsequent three quarters. For the fourth-quarter-ahead period, we find that transitory gains exhibit negative persistence, suggesting the time-series properties of transitory gains have changed over time.

We define these variables in Table 1. As the distribution of transitory gains is both skewed and truncated because we only consider positive transitory items, we follow Doyle et al. (2003) and decile-rank the independent variables. Our coefficient of interest,  $\alpha_2$ , measures the association between the earnings announcement return and the transitory gain. The first column in Table 3 presents results for our pooled sample. The coefficient on unexpected earnings is 0.071, but the coefficient on transitory gains is not statistically different from zero. The results suggest that, on average, investors price transitory gains as if they are transitory.

We partition our sample by disclosure choice in the next two columns of Table 3, with informative and opaque disclosers in the second and third column, respectively. Among informative disclosers there is no price reaction to the transitory gain, on average. This does not extend, however, to the price reactions among opaque disclosers. Transitory gains have a positive and significant coefficient (coefficient = 0.021; t-statistic = 2.16), which is in sharp contrast to the evidence in Table 2 that these gains are associated with *negative* future earnings implications. Thus, the evidence in Table 3 provides preliminary evidence that opacity could be motivated by opportunism to the extent that managers choose to obscure the transitory nature of the gains and investors positively price these gains. This price reaction is marginally statistically larger than the price reaction to transitory gains among informative disclosers (two-tailed  $p = 0.069$ ; not tabulated), even though the future implications of these gains are more negative.

We also examine the subsequent 10-Q/K filing returns in Table 4 to investigate whether the pricing of the gain at the earnings announcement is appropriate. If the pricing is appropriate, then we would not expect the transitory gains to be associated with the subsequent 10-Q/K filing returns. De Franco, Wong, and Zhou's (2011) evidence suggests that more complex information, such as that disclosed in the notes to the financial statements, is priced at the time of the 10-K filing. To the extent that earnings announcements are uninformative about the nature of the transitory gain, the stricter disclosure requirements of transitory items in the 10-Q/K filing may be informative. We would expect opaque disclosers' transitory gains that are positively priced at the earnings announcement to be negatively associated with the subsequent 10-Q/K filing returns, as investors incorporate information about the transitory gain.

To examine the earnings response coefficient on transitory gains at the time of the 10-Q/K filing, we estimate the following pooled regression:

$$\begin{aligned} \text{Filing Return} = & \alpha_0 + \alpha_1 \text{Operating Earnings Surprise} + \alpha_2 \text{Transitory Gain} \\ & + \alpha_3 \text{Book-to-Market Ratio} + \alpha_4 \text{Market Value of Equity} + \alpha_5 \text{Beta} + \varepsilon. \end{aligned} \quad (3)$$

As in our examination of announcement returns, we measure the return over a three-day window and decile-rank the independent variables. The first column in Table 4 presents results for the full sample. The coefficient on operating earnings surprise is not statistically different from zero, consistent with price reflecting the bulk of the information in operating earnings at the time of the earnings announcement. The coefficient on transitory gains is negative ( $-0.007$ ) and significant (t-statistic =  $-1.91$ ), however, providing some evidence that managers obscured the transitory nature of the gains in the earnings announcements.

We again partition our sample by disclosure choice in the next two columns of Table 4, with informative and opaque disclosers in the second and third columns, respectively. Among

**TABLE 3**  
**Earnings Response Tests**

$$\begin{aligned} \text{Announcement Return} = & \alpha_0 + \alpha_1 \text{Operating Earnings Surprise} + \alpha_2 \text{Transitory Gain} \\ & + \alpha_3 \text{Book-to-Market Ratio} + \alpha_4 \text{Market Value of Equity} + \alpha_5 \text{Beta} \\ & + \varepsilon. \end{aligned}$$

Independent Variables	Full Sample Coefficient (t-statistic)	Informative Disclosers Coefficient (t-statistic)	Opaque Disclosers Coefficient (t-statistic)
Intercept	−0.055*** (−6.35)	−0.036*** (−2.69)	−0.063*** (−5.16)
<i>Operating Earnings Surprise</i>	0.071*** (10.48)	0.058*** (5.66)	0.077*** (8.43)
<i>Transitory Gain</i>	0.009 (1.31)	−0.004 (−0.39)	0.021** (2.16)
<i>Book-to-Market Ratio</i>	0.017** (2.27)	0.019* (1.72)	0.013 (1.28)
<i>Market Value of Equity</i>	0.003 (0.48)	−0.017 (−1.64)	0.016* (1.73)
<i>Beta</i>	0.012* (1.82)	0.006 (0.61)	0.017* (1.90)
Year and Industry Fixed Effects	Included	Included	Included
Adjusted R <sup>2</sup>	7.9%	7.6%	8.7%
Number of Observations	1,920	910	1,010

\*, \*\*, \*\*\* Indicate  $p < 0.10$ ,  $p < 0.05$ , and  $p < 0.01$ , respectively (two-tailed).

We use White's robust standard errors to calculate the t-statistics. *Operating Earnings Surprise* and *Transitory Gain* are on a per share basis and then scaled by price per share as of the last day of the fiscal quarter. All independent variables are decile-ranked and assigned to deciles ranging from 0 to 1, which then replaces the associated continuous variable in the regressions. *Announcement Return* is winsorized at the extreme 1 percent. Each regression contains year and industry (Fama-French 48 industry classification) fixed effects.

Variables are defined in Table 1.

informative disclosers we find no discernible market response to the transitory gain, consistent with these firms appropriately highlighting the future earnings implications of the transitory gains at the earnings announcement and the market reacting, accordingly. However, among opaque disclosers we find a negative association between transitory gains and the filing return (coefficient  $-0.012$ ; t-statistic  $-2.30$ ), which differs significantly from the relation of the informative disclosers (two-tailed p-value = 0.028; not tabulated). This evidence is consistent with managers' disclosure of non-GAAP earnings information affecting investors' perceptions of operating earnings at the time of the earnings announcement. Specifically, our results are consistent with these firms obscuring value-relevant information about the persistence of



**TABLE 4**  
**Filing Return Tests**

$$\text{Filing Return} = \alpha_0 + \alpha_1 \text{Operating Earnings Surprise} + \alpha_2 \text{Transitory Gain} \\ + \alpha_3 \text{Book-to-Market Ratio} + \alpha_4 \text{Market Value of Equity} + \alpha_5 \text{Beta} + \varepsilon.$$

Independent Variables	Full Sample Coefficient (t-statistic)	Informative Disclosers Coefficient (t-statistic)	Opaque Disclosers Coefficient (t-statistic)
Intercept	−0.003 (−0.56)	0.002 (0.22)	−0.008 (−1.06)
<i>Operating Earnings Surprise</i>	−0.000 (−0.05)	−0.002 (−0.46)	0.001 (0.27)
<i>Transitory Gain</i>	−0.007* (−1.91)	0.003 (0.73)	−0.012** (−2.30)
<i>Book-to-Market Ratio</i>	0.004 (1.07)	−0.003 (−0.57)	0.012** (2.05)
<i>Market Value of Equity</i>	0.002 (0.41)	−0.002 (−0.29)	0.005 (0.86)
<i>Beta</i>	−0.000 (−0.04)	−0.009* (−1.66)	0.006 (1.08)
Year and Industry Fixed Effects	Included	Included	Included
Adjusted R <sup>2</sup>	0.3%	3.1%	0.7%
Number of Observations	1,920	910	1,010

\*, \*\*, \*\*\* Indicate  $p < 0.10$ ,  $p < 0.05$ , and  $p < 0.01$ , respectively (two-tailed).

We use White's robust standard errors to calculate the t-statistics. *Operating Earnings Surprise* and *Transitory Gain* are on a per share basis and then scaled by price per share as of the last day of the fiscal quarter. All independent variables are decile-ranked and assigned to deciles ranging from 0 to 1, which then replace the associated continuous variable in the regressions. *Filing Return* is winsorized at the extreme 1 percent. Each regression contains year and industry (Fama-French 48 industry classification) fixed effects.

Variables are defined in Table 1.

transitory gains in the earnings announcement. We also find evidence that the reversal at the time of the 10-Q/K for opaque disclosers appears incomplete as the response of −0.012 does not fully reverse the original positive price reaction of 0.021, suggesting that managers' disclosure choices could have longer-term pricing effects.<sup>22</sup>

<sup>22</sup> We test this explicitly for opaque disclosers by estimating the association between the transitory gain and a return spanning the earnings announcement return window and the 10-Q/K filing return window, controlling for the same variables as in Tables 3 and 4 and find consistent results. Specifically, we find that the coefficient on transitory gain is 0.022 with a t-statistic of 1.58 (one-tailed p-value = 0.057, not tabulated). Thus, benefits to the opportunistic (non)disclosure of non-GAAP earnings could include (1) insider trading between the earnings announcement and 10-Q/K filing, a period of approximately 14 days, during which insiders are generally allowed to trade (Bettis, Coles, and Lemmon 2000; Frankel et al. 2011), (2) increased compensation to the extent that managers highlight the same items as transitory to both investors and the board of directors or compensation committee (J. Gaver and K. Gaver 1998), and (3) longer-term pricing differences due to investor myopia, of which we find some evidence. These latter results are consistent with the conclusions of prior research, that investors pay more attention to information released in the earnings announcement than to the information released in the 10-Q/K (Stice 1991; Louis, Robinson, and Sbaraglia 2008).

## Uninformative versus Opportunistic

As previously noted, it is possible that opaque disclosers simply follow a consistent policy of not disclosing non-GAAP earnings information. A consistent non-disclosure policy would not speak to the underlying disclosure motives we wish to examine. It is also possible, however, that managers intentionally fail to highlight the transitory nature of the gain in order to garner higher valuations. We disentangle these alternative explanations in this section by examining how the choice to disclose non-GAAP earnings information changes in the presence of a net transitory *loss* by the *same firm*.

We hand-collect data on the disclosure of non-GAAP earnings information by the same firm in an adjacent quarter. We first identify from Compustat all net income-decreasing, i.e., transitory loss, firm-quarters within four quarters of the transitory gain quarter. We restrict this sample to adjacent quarters that have a transitory loss per share that is *smaller* than the transitory gain, but by no more than one penny per share.<sup>23</sup> For this subset of observations, Table 5 reports whether the firm discloses non-GAAP earnings information for the Compustat-identified transitory *loss*.

Among our 202 matched firm-quarters, managers are more likely to disclose non-GAAP earnings information in transitory loss quarters, relative to transitory gain quarters, *in the same firm*.<sup>24</sup> Table 5, Panel A, indicates that 47.5 percent of firms provide non-GAAP earnings information in transitory gain quarters, but 64.9 percent of the same firms provide non-GAAP earnings information in transitory loss quarters. More specifically, we find that managers are more likely to disclose the value and EPS effect of transitory losses than transitory gains, and that they identify the loss more quickly. Although this analysis uses the firm as its own control, we compare other firm variables across the transitory loss versus transitory gain quarters. Transitory loss quarters have more losses and slightly lower operating earnings per share, but are otherwise indistinguishable from transitory gain quarters. In other words, size or growth does not systematically change across the four quarters.

Table 5, Panel B, provides evidence on the proportion of firms that disclose consistently across transitory gain and transitory loss quarters. Informative disclosers consistently disclose non-GAAP earnings information in both quarters and represent 37.6 percent of our sample (76/202). Uninformative disclosers consistently fail to disclose non-GAAP earnings information in both quarters and represent 25.2 percent of our sample (51/202). Opportunistic disclosers disclose non-GAAP earnings information in loss quarters, but not gain quarters, and represent 27.2 percent of our sample (55/202). Finally, conservative disclosers, 9.9 percent of our sample, disclose non-GAAP earnings information in gain quarters, but not loss quarters. Consistent with prior research, we find evidence of both informative and opportunistic motives. We are able, however, to quantify the influence of each incentive and identify that the informative motive is more pervasive than the opportunistic motive ( $p < 0.05$  based on a test of proportions).

## Determinants of Disclosure Choice

Next, we provide an examination of some determinants of disclosure choice. We consider two outcome variables. The first represents opaque disclosers and, thus, is equal to 1 for the 1,010 firm-quarters that do not disclose non-GAAP earnings information in transitory gain quarters. Our

<sup>23</sup> In this setting, the transitory gain is *always* larger in magnitude than the transitory loss, suggesting that the materiality of the transitory items biases for managers to be *more* forthcoming about the gain than the loss.

<sup>24</sup> Untabulated results suggest that the transitory nature of the losses and gains do not statistically differ, alleviating the concern that managers are simply more forthcoming about transitory losses because the losses are less persistent than the gains.

**TABLE 5**  
**Disclosure Choice**  
**Adjacent Quarter Analyses**

**Panel A: Descriptive Statistics Partitioned by Transitory Item Sign**

Variable	Transitory Gain (n = 202)		Transitory Loss (n = 202)		Paired t-test: (t-statistic)
	Mean	Median	Mean	Median	Mean
<i>Non-GAAP Earnings Information</i>	0.475	0.000	0.649	1.000	4.21
<i>Operating Earnings</i>	0.364	0.300	0.298	0.300	1.62
<i>Loss</i>	0.129	0.000	0.223	0.000	3.77
<i>Book-to-Market Ratio</i>	0.480	0.428	0.473	0.450	0.38
<i>Market Value of Equity</i>	9,232.759	2,070.887	9,467.473	1,984.374	0.76
<i>Total Assets</i>	7,100.793	2,030.125	7,168.911	2,114.116	0.78
<i>Sales</i>	1,833.411	448.150	1,811.511	450.500	0.65
<i>Transitory Item</i>	0.042	0.030	-0.038	-0.025	22.83
<i>Transitory Item Value Disclosed</i>	0.901	1.000	0.965	1.000	2.64
<i>Transitory Item EPS Disclosed</i>	0.401	0.000	0.495	0.000	2.42
<i>Non-GAAP EPS Excluding Item Disclosed</i>	0.485	0.000	0.520	1.000	1.02
<i>Item Disclosed Quickly</i>	0.614	1.000	0.802	1.000	4.50

**Panel B: Disclosure Choice in Quarters with Transitory Gains versus Transitory Losses**

		Transitory Loss Hand Collection		Total
		Informative	Opaque	
Transitory Gain Hand Collection	Informative	76 "Informative"	20 "Conservative"	96
	Opaque	55 "Opportunistic"	51 "Uninformative"	106
	Total	131	71	202

This subsample contains firms from our full sample that also recognize a transitory loss in an adjacent quarter within one year of the transitory gain. The transitory loss must be smaller in magnitude than the transitory gain, and the difference cannot exceed one penny per share. Transitory items are identified using Compustat SPIQ, where positive values are gains (see Table 1), whereas negative values are losses. All other variables are defined in Tables 1 and 2.

second outcome variable considers 101 firm-quarters that provided a non-GAAP earnings number that *included* the transitory gain but excluded other expenses.<sup>25</sup> In this latter instance, the firm clearly does not have a policy restricting managers from disclosing non-GAAP earnings, as they do disclose non-GAAP earnings, but did not remove the gain from this figure.

We estimate a logistic regression model to identify some determinants of disclosure choice, as follows:

<sup>25</sup> Three of these 101 firm-quarters could have been classified as "informative" disclosers because they met the requirements discussed in Section III. However, including the gains in their non-GAAP earnings per share figures counters this informativeness and, thus, we consider them as "opaque" disclosers. Our results are not sensitive to this research design choice.

$$\begin{aligned}
 \text{Disclosure Choice} = & \alpha_0 + \alpha_1 \text{Ln}(\text{Announcement Difference}) + \alpha_2 \text{Loss} \\
 & + \alpha_3 \text{Benchmark} - \text{Analyst Forecast} + \alpha_4 \text{Benchmark} - \text{Prior Period} \\
 & + \alpha_5 \text{Benchmark} - \text{Profit} + \alpha_6 \text{Book-to-Market Ratio} + \alpha_7 \text{Fourth Quarter} \\
 & + \alpha_8 \text{Ln}(\text{Total Assets}) + \alpha_9 \text{Transitory Gain} + \alpha_{10} \text{Frequency} + \varepsilon.
 \end{aligned}
 \tag{4}$$

We consider two disclosure outcomes: “Opaque Discloser” and “Non-GAAP EPS Includes Gain.” As previously discussed, Opaque Discloser includes “uninformative” disclosers, whereas our interest is in “opportunistic” disclosers. Including “uninformative” disclosers should weaken, but not systematically bias, our analysis. We also consider *Non-GAAP EPS Including Gain* as a more restrictive and more precise indicator of opportunism.

We expect managers to be more likely to report opportunistically when there are more days between the earnings announcement and SEC filing (announcement difference), which will provide them a longer trading window in which to trade on the market mispricing. We expect managers to have a higher incentive to disclose opportunistically when they are performing poorly (loss) and when including the gain in earnings allows them to meet an earnings benchmark, consisting of the consensus analyst forecast, four-quarters-ago EPS, or profitability. We consider the book-to-market ratio to proxy for market valuation incentives, and include an indicator variable corresponding to the fourth fiscal quarter as it is possible that the total amount of information varies in the fourth quarter. We control for firm size and the size of the transitory gain because we expect more disclosure among larger firms, all else equal, and more disclosure of larger transitory gains. Finally, we control for the number of times the firm is included in our sample of transitory gains (frequency), as more frequent transitory gains may be perceived as recurring by management.

The results in Table 6 show that among our incentive variables, only loss is significantly positively associated with the choice to disclose opaquely; both firm size and the size of the gain are negatively associated with opaque disclosers. Because some gains are so large that the manager has little choice as to whether to be strategic in the disclosure of the gain, we next re-estimate the regression excluding gains that exceed five cents per share. This is presented in the “Subsample” columns. Among this subsample, we find that meeting benchmarks now plays a role. For example, in the Opaque Discloser sample, we find positive and significant coefficients on *Benchmark—Analyst Forecast* (0.573,  $p < 0.001$ ) and on *Benchmark—Profit* (0.625,  $p < 0.01$ ). This suggests that managers appear to be more likely to highlight GAAP earnings in their earnings announcement if the inclusion of the gain in earnings allows them to meet the analyst forecast or reach profitability.

We next examine the choice to include the gain in non-GAAP earnings, arguably our strongest evidence of opportunism. The results presented in the final two columns of Table 6 indicate that the more days between the earnings announcement and the SEC filing date, the more likely the manager is to disclose non-GAAP earnings including the transitory gain, consistent with intent to mislead investors. Loss is again positively associated with the more opportunistic disclosure choice. Interestingly, managers appear to be less likely to behave opportunistically in the fourth quarter (for example the coefficient on *Fourth Quarter* in the full sample, is  $-0.713$ ,  $p < 0.001$ ), perhaps due to auditor oversight or other governance mechanisms. We also find evidence that managers are more likely to include the transitory gain in their non-GAAP earnings figure when doing so allows them to meet prior period earnings (with the coefficient on *Benchmark—Prior Period* equal to 0.854,  $p < 0.001$ ). Turning to the control variables, size is not a significant determinant, consistent with the notion that this particular disclosure choice is not an artifact of general disclosure quality, but instead is more consistent with a conscious decision to mislead investors. The larger the gain, the less likely managers are to behave opportunistically. Finally, frequency has some explanatory power, consistent with managers perceiving these gains to be recurring. We find similar results when we exclude firm-quarters with gains that exceed five cents a share.

**TABLE 6**  
**Logistic Regression for Determinants of Disclosure Choice**

$$\begin{aligned} \text{Disclosure Choice} = & \alpha_0 + \alpha_1 \text{Ln(Announcement Difference)} + \alpha_2 \text{Loss} \\ & + \alpha_3 \text{Benchmark—Analyst Forecast} + \alpha_4 \text{Benchmark—Prior Period} \\ & + \alpha_5 \text{Benchmark—Profit} + \alpha_6 \text{Book-to-Market Ratio} + \alpha_7 \text{Fourth Quarter} \\ & + \alpha_8 \text{Ln(Total Assets)} + \alpha_9 \text{Transitory Gain} + \alpha_{10} \text{Frequency} + \varepsilon. \end{aligned}$$

Independent Variables	Dependent Variable =			
	Opaque Discloser		Non-GAAP EPS Includes Gain	
	Full Sample Coefficient (z-statistic)	Subsample Coefficient (z-statistic)	Full Sample Coefficient (z-statistic)	Subsample Coefficient (z-statistic)
<i>Ln(Announcement Difference)</i>	-0.099 (-1.41)	-0.073 (-0.73)	0.509*** (2.94)	0.812*** (3.83)
<i>Loss</i>	0.907*** (4.75)	0.474 (1.55)	1.137*** (4.85)	1.134*** (2.86)
<i>Benchmark—Analyst Forecast</i>	0.009 (0.08)	0.573*** (2.98)	0.041 (0.18)	0.373 (1.18)
<i>Benchmark—Prior Period</i>	-0.085 (-0.50)	0.301 (1.32)	0.854*** (3.93)	1.037*** (2.69)
<i>Benchmark—Profit</i>	0.169 (0.85)	0.625** (1.98)	0.316 (0.94)	0.801* (1.76)
<i>Book-to-Market Ratio</i>	0.037 (0.19)	0.446 (1.48)	0.276 (1.30)	0.357 (0.98)
<i>Fourth Quarter</i>	0.105 (1.07)	0.114 (0.67)	-0.713*** (-2.95)	-0.886*** (-2.98)
<i>Ln(Total Assets)</i>	-0.153*** (-4.00)	-0.226*** (-4.30)	0.037 (0.40)	0.068 (0.63)
<i>Transitory Gain</i>	-0.783*** (-3.00)	-21.728*** (-4.11)	-3.140** (-2.45)	-19.271* (-1.81)
<i>Frequency</i>	0.012 (0.42)	0.031 (0.57)	0.107* (1.69)	0.171*** (2.73)
Year and Industry Fixed Effects	Included	Included	Included	Included
Pseudo R <sup>2</sup>	4.29%	5.88%	10.61%	12.07%
Observations = 1	1,010	587	101	71
Number of Observations <sup>a</sup>	1,920	936	1,920	936

\*, \*\*, \*\*\* Indicate  $p < 0.10$ ,  $p < 0.05$ , and  $p < 0.01$ , respectively (two-tailed).

<sup>a</sup> Actual observations may differ as we lose some observations due to a lack of variation in industry fixed effects; results are similar if we exclude industry fixed effects with the exception of *Benchmark—Profit*, which is no longer significant at the 10 percent level.

We use White's robust standard errors to calculate the z-statistics. The subsample contains firms in our full sample with *Transitory Gain* less than or equal to five cents per share. All continuous variables (with the exception of the lower bound of *Transitory Gain*) are winsorized at the extreme 1 percent. The regression contains year and industry (Fama-French 48 industry classification) fixed effects.

Variable Definitions:

*Fourth Quarter* = an indicator variable equal to 1 if the observation relates to the fourth fiscal quarter, and 0 otherwise; and *Frequency* = number of fiscal quarters that a firm is in our full sample.

All other variables are defined in Tables 1 and 2.

## Further Exploration of the Negative Persistence of Transitory Gains

In our main analysis, we provide evidence of a negative relation between transitory gains and future operating income. In this section, we briefly explore this relation by examining the size and type of transitory gains. We first decompose aggregate special items into the particular components in Table 7. Several components exhibit negative and significant coefficients, such as asset sales, M&A items, and debt extinguishments. It is important to note, however, that these components include income-*decreasing* special items, and there is prior evidence that managers shift recurring expenses to transitory expenses (McVay 2006; Kolev et al. 2008). To isolate the impact on sales versus expenses, we next consider how these components are associated with future sales, and find that only asset sales are negatively associated with future sales. The coefficient of  $-3.488$  ( $p < 0.001$ ) is strongly consistent with these asset sales being sales of revenue-generating, or productive, assets. Thus, our evidence is consistent with the negative persistence stemming from the sale of productive assets.

If we exclude the largest net special items (the top decile), then the negative persistence is no longer evident, whereas, in untabulated analyses, evidence from our primary analyses are similar or even strengthened, suggesting that the negative persistence does not unduly impact our conclusions. As previously noted, regardless of the underlying reason for the negative persistence, it is clear that transitory gains have different implications for future earnings than operating earnings, consistent with the expectation that the disclosure of the gain would be informative to investors due to its differing nature.

## V. CONCLUSION

We examine how managers disclose transitory gains to disentangle two competing explanations for the disclosure of non-GAAP earnings. Non-GAAP earnings usually exclude transitory items, which makes the measure of earnings, on average, a better predictor of future earnings. The disclosure of non-GAAP earnings could therefore be motivated by managers wishing to provide investors with a more informative measure of core operating earnings. The excluded transitory items, however, are frequently income-decreasing. Thus, the exclusion of these items tends to *increase* non-GAAP earnings, relative to GAAP earnings, and could be opportunistically motivated to increase investors' perceptions of operating earnings. Because the exclusion of one-time gains *decreases* non-GAAP earnings, but provides a better depiction of core operating earnings relative to GAAP earnings, the examination of transitory gains allows us to better assess the motivations for disclosing non-GAAP earnings.

Overall, we find that the most pervasive motivation for non-GAAP reporting in the presence of transitory gains is to inform. Nearly half of our sample discloses non-GAAP earnings information that allows investors to quickly and easily assess operating performance excluding the gain. Furthermore, investors of these firms appear to efficiently price the transitory nature of these gains. In contrast, the remaining earnings announcements contain more opaque disclosures. Among these firms, investors price the gain positively at the time of the earnings announcement, but this partially reverses at the time of the subsequent 10-Q/K filing. Our evidence is consistent with investors not fully incorporating the transitory nature of the gain at the time of the earnings announcement. Among opaque disclosers, we find that approximately half appear to follow a consistent policy of non-disclosure across both transitory gain and transitory loss quarters. The other half, however, appear opportunistic because they disclose non-GAAP earnings information in transitory loss quarters, but not transitory gain quarters. We also find some evidence of egregious opportunism. In 101 firm-quarters, which is 5.3 percent of our sample, managers explicitly disclose non-GAAP earnings, excluding expenses but *including* transitory gains; this is more prevalent when it allows them to meet earnings benchmarks.

**TABLE 7**  
**Further Earnings Persistence Tests Identifying the Effects of Gain Type and Size**

$$\begin{aligned} \text{Future Performance} = & \alpha_0 + \alpha_1 \text{Operating Earnings} + \alpha_2 \text{M\&A Items} + \alpha_3 \text{Asset Sales} \\ & + \alpha_4 \text{Goodwill Impairment} + \alpha_5 \text{Settlements} + \alpha_6 \text{Restructuring} \\ & + \alpha_7 \text{Write-Downs} + \alpha_8 \text{Debt Extinguishment} + \alpha_9 \text{Other Special Items} \\ & + \text{controls} + \varepsilon. \end{aligned}$$

Independent Variables	Dependent Variable = Future Operating Earnings		Dependent Variable = Future Sales	
	Full Sample Coefficient (t-statistic)	Subsample Excluding Top Decile Coefficient (t-statistic)	Full Sample Coefficient (t-statistic)	Subsample Excluding Top Decile Coefficient (t-statistic)
Operating Earnings	2.469*** (16.36)	2.531*** (16.57)	2.867*** (3.31)	3.030*** (2.96)
M&A Items	-0.898** (-2.30)	-0.590 (-0.73)	-0.551 (-0.08)	-2.224 (-0.26)
Asset Sales	-0.429*** (-3.74)	-0.663 (-1.30)	-3.488*** (-5.15)	-4.103 (-1.01)
Goodwill Impairment	-0.890 (-1.05)	-0.356 (-0.16)	-8.711 (-0.53)	50.621* (1.95)
Settlements	-0.049 (-0.25)	-0.099 (-0.16)	-1.399 (-1.31)	0.443 (0.09)
Restructuring	-1.661 (-1.37)	-0.583 (-0.50)	-13.093 (-1.28)	-15.641 (-1.13)
Write-Downs	-3.622 (-1.11)	-2.721 (-0.82)	7.394 (0.69)	-1.836 (-0.13)
Debt Extinguishment	-1.351*** (-2.85)	-1.064 (-1.08)	0.568 (0.13)	3.111 (0.34)
Other Special Items	-1.697*** (-2.91)	-0.570 (-0.95)	-0.370 (-0.12)	4.479 (0.80)
Controls, Year and Industry Fixed Effects	Included	Included	Included	Included
Adjusted R <sup>2</sup>	58.8%	57.5%	41.0%	42.4%
Number of Observations	1,920	1,728	1,914	1,724

\*, \*\*, \*\*\* Indicate  $p < 0.10$ ,  $p < 0.05$ , and  $p < 0.01$ , respectively (two-tailed).

Robust t-statistics in parentheses We use White's robust standard errors to calculate the z-statistics.

In this table we partition total special items into the specific components provided by Compustat. Although special items aggregate to a gain of at least one penny per share, individual components can be income-decreasing. All continuous variables are winsorized at the extreme 1 percent. The regression contains year and industry (Fama-French 48 industry classification) fixed effects.

Although the examination of transitory gains allows us to better disentangle the motives for non-GAAP reporting, it also introduces certain limitations to our study. Most importantly, we examine managers' disclosure choices of transitory gains to infer their motives when disclosing transitory losses. It is possible that our results will not generalize to the transitory loss setting. We

attempt to address this limitation by examining the disclosure of non-GAAP earnings information in matched transitory loss quarters, but due to the restrictive requirements used in matching the loss quarters, this sample is smaller than our full sample. To the extent that this sample systematically differs from the underlying transitory loss population, the generalizability of our study is limited.

Despite this limitation, our evidence has implications for regulators. Although prior studies have documented an overall improvement in the quality of non-GAAP earnings following Regulation G, we find that at least some managers appear to obscure information about transitory gains to portray higher operating earnings. To the extent that the omission of informative non-GAAP earnings figures affects investors' assessments of the persistence of earnings, as our results suggest, regulators might consider requiring the disclosure of some non-GAAP earnings information in the presence of transitory gains.

Future researchers might investigate the benefits to the informative disclosure of non-GAAP earnings. For example, do investors weight these firms' non-GAAP earnings more heavily in quarters with net transitory losses? Are these managers deemed more reputable? Does this behavior attract analysts, institutional investors, or media attention? Our results could also be extended by investigating how the disclosure of non-GAAP earnings information about transitory gains varies with incentives that are manager-specific, such as exercisable options, or firm-specific, such as secondary equity issuances. Finally, we provide some evidence that analysts include transitory gains in their determination of recurring earnings, and that this is more pervasive among opaque disclosers. Future researchers might investigate whether this varies with either the skills or incentives of the individual analysts.

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## APPENDIX A

### Non-GAAP Earnings Example

Prior Research	Our Design				
Transitory Loss * Informative or Opportunistic?	Transitory Gain * Informative		Transitory Gain * Opportunistic		
GAAP EPS	1.00	GAAP EPS	1.00	GAAP EPS	1.00
Exclude (add back) Restructuring Charge	+0.25	Exclude Litigation Gain	−0.25	Include Litigation Gain	
Non-GAAP EPS	1.25	Non-GAAP EPS	0.75	Non-GAAP EPS	1.00

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