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The Disclosure of Non-GAAP Earnings Following Regulation G: An Analysis of Transitory Gains

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SYNOPSIS: We investigate how managers report one-time gains resulting from legal settlements and insurance recoveries in press releases following Regulation G. Regulation G may have had the unintended consequence of allowing managers to omit mention of these transitory gains, resulting in higher reported performance absent non-GAAP disclosure. We find that while managers generally provide some information about transitory gains in the earnings announcement, there is a large amount of variation in the granularity of the detail. For example, the vast majority of managers (88.5 percent) mention the gain in the earnings announcement, but few (34 percent) report non-GAAP earnings per share summary figures explicitly excluding transitory gains. This percentage is significantly lower than pre-Regulation G, where approximately 62 percent of firms reported non-GAAP earnings per share excluding the transitory gain. Interestingly, we find that gains are less likely to be carved out of earnings when there are no concurrent transitory losses, providing some evidence that there continues to be an opportunistic component of non-GAAP reporting following Regulation G.

Keywords: non-GAAP earnings; one-time gains; Regulation G.

Data Availability: Data are available from sources identified in the text.

INTRODUCTION

The disclosure of non-GAAP earnings, which often exclude non-recurring or non-cash items, exploded in the late 1990s and early 2000s. By 2001, more than 300 companies in the S&P 500 excluded some GAAP expenses from the non-GAAP earnings numbers they published in press releases (Reason and Teach 2002). These disclosures elicited substantial

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regulatory scrutiny, as non-GAAP earnings generally exceed GAAP earnings (e.g., Bradshaw and Sloan 2002; Bhattacharya, Black, Christensen, and Larson 2003). Effective March 28, 2003, Regulation G requires firms to reconcile non-GAAP earnings figures to the closest GAAP earnings measure in the press release. The final rule explicitly states, "Regulation G and the amendments to our rules are intended to ensure that investors and others are not misled by the use of non-GAAP financial measures" (Securities and Exchange Commission [SEC] 2002). The rule does not require the disclosure of non-GAAP earnings in the presence of transitory items, and thus does not consider that managers can also strategically not disclose non-GAAP earnings.

We explore a possible unintended consequence of Regulation G—silence. In particular, it is possible that managers can strategically omit non-GAAP earnings information when doing so results in non-GAAP earnings numbers that are lower than GAAP earnings per share. To explore this possibility, we investigate whether managers disclose non-GAAP earnings in quarters where they experience a transitory gain. Our study is in the vein of Schrand and Walther (2000) who provide evidence that managers remind investors of prior-period transitory losses, but not transitory gains, in their earnings press releases to strategically lower the benchmark for evaluating current earnings.

We identify a sample of 253 firm-quarters from the S&P 500 that report a legal settlement or insurance recovery (i.e., a one-time gain) of at least one penny per share in their SEC filings from 2005–2007. We then investigate whether management discloses this transitory gain in the earnings press release. Unlike transitory losses, where investors may question the underlying motive for the press release disclosure—as non-GAAP earnings would be higher than GAAP earnings—the exclusion of a transitory gain results in lower non-GAAP earnings than GAAP earnings. Managers, however, could use the increased SEC scrutiny and implementation of Regulation G to support the suppression of disclosures regarding the transitory gain. In this case, the omission results in higher inferences of recurring earnings.

We find that the vast majority of managers mention both the one-time gain in firms' earnings press releases (88.5 percent) and provide the dollar amount of the gain (85.8 percent). Fewer managers, however, disclose the earnings per share effect of the gain (58.1 percent), and only about a third of the managers provide a summary non-GAAP earnings per share amount that excludes the settlement or insurance recovery. The disclosure granularity is similar prior to Regulation G, with the notable exception of non-GAAP earnings. Prior to Regulation G, we find that 62 percent of firms reporting transitory gains of at least one penny per share provide a non-GAAP earnings number. The decline to 34 percent following Regulation G is both economically and statistically significant.

We next investigate, for our post-Regulation G sample, which firms provide more disclosure granularity. We document greater disclosure granularity for larger gains, consistent with materiality affecting disclosure granularity. We also document, however, that disclosure granularity increases when transitory gains are recognized concurrently with transitory losses. Rather than materiality (as the transitory loss offsets the effect of the transitory gain), this finding provides some evidence that managers are more likely to limit disclosure when it reduces non-GAAP earnings, relative to when it increases non-GAAP earnings.[1] In other words, it appears that there continues to be an opportunistic component of non-GAAP reporting following Regulation G. Our study should be informative to regulators, as we document a sharp and continued decline in the disclosure of non-GAAP earnings excluding transitory gains following Regulation G, which is likely an

[1] Note that our sample is comprised of firms with transitory gains of one cent per share, but total special items could be income decreasing. Thus, when there is a transitory loss, non-GAAP earnings can exceed GAAP earnings.

unintended consequence of this regulation.[2] In addition, our descriptive evidence on the types of firms providing each level of disclosure granularity should be informative to investors and analysts wishing to assess the permanence of earnings at the time of the earnings announcement.

Our paper proceeds as follows. In the next section we motivate our analysis with a discussion of the related literature. We describe our sample selection procedure in the third section, and in the fourth section we discuss the variables, test design, and empirical findings. We conclude in the final section.

BACKGROUND AND MOTIVATION OF ANALYSES

Non-GAAP Earnings Background

Managers began pervasively reporting non-GAAP earnings numbers in their earnings announcements in the 1990s. These figures exclude many transitory or unusual charges, such as restructuring charges and asset write-offs (e.g., Bradshaw and Sloan 2002), as well as other relatively permanent charges such as research and development, interest, and tax expense (Bhattacharya, Black, Christensen, and Mergenthaler 2004). In addition, the expenses excluded from GAAP earnings vary widely by firm and even within firms across time, illustrating a lack of guidance and oversight on what charges should be included in, or excluded from, non-GAAP earnings (Bhattacharya et al. 2004; Barth, Gow and Taylor 2012).

Interestingly, even with little non-GAAP earnings guidance or oversight, research documents that non-GAAP earnings are useful to investors. For example, non-GAAP earnings are more relevant than GAAP earnings for valuation purposes (e.g., Bradshaw and Sloan 2002; Bhattacharya et al. 2003; Lougee and Marquardt 2004), consistent with non-GAAP earnings having a higher association with future earnings than GAAP earnings (Bhattacharya et al. 2003; Brown and Sivakumar 2003).[3]

Non-GAAP earnings, however, also generally result in a more positive earnings outcome than GAAP earnings, as the expenses excluded from non-GAAP earnings are generally income decreasing. For one three-month period in 2001, the average effect of excluding GAAP expenses was 60 cents of every dollar of operating earnings reported by the S&P 500 (Reason and Teach 2002). Because there is no set definition of non-GAAP earnings, they are often referred to as "earnings before the bad stuff." Consistent with some managers using non-GAAP reporting opportunistically, Black and Christensen (2009) and Doyle, Jennings, and Soliman (2013) provide evidence that managers are more likely to exclude expenses when doing so allows them to meet an earnings benchmark. Doyle, Lundholm, and Soliman (2003) document that the amounts "excluded" from non-GAAP earnings are associated with future cash flows and returns, suggesting that managers exclude expenses that should have been included in recurring earnings. In addition, within the press release, managers tend to first mention the performance measure (either GAAP or non-GAAP) that reports the higher earnings number (Bradshaw and Sloan 2002; Bowen, Davis, and Matsumoto 2005).

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[2] Following Regulation G, there was an initial decline in the disclosure of non-GAAP earnings (e.g., Entwistle, Feltham, and Mbagwu 2006; Marques 2006; Heflin and Hsu 2008), which had reverted to normal levels by 2004 (Black et al. 2012; Brown, Christensen, Elliott, and Mergenthaler 2012). Our sample is from 2005–2007, and thus should not be unduly affected by the temporary dip in disclosure. Our findings are not inconsistent with these prior studies, as our focus is on non-GAAP earnings in the presence of *transitory gains*, whereas these studies examine all non-GAAP earnings disclosures, the majority of which exclude *transitory losses*.

[3] Brown and Sivakumar (2003) compare non-GAAP earnings to GAAP operating earnings, an alternate measure of recurring earnings, and find that non-GAAP earnings dominates GAAP operating earnings, suggesting that a mechanical removal of charges that are generally deemed to be transitory is less informative than the exclusions put forth by management.

As an illustration of an egregious misuse of non-GAAP reporting, in 1999 Trump Hotels & Casino Resorts Inc., excluded a one-time expense of $81.4 million, but did not disclose a concurrent one-time gain of $17.2 million. By omitting the disclosure of the transitory gain, Trump Hotels was able to meet the analyst forecast with their non-GAAP earnings figure. It is important to note, however, that this non-GAAP earnings disclosure was deemed materially misleading by the SEC because explicitly excluding transitory losses from the non-GAAP earnings measure implied there were no transitory gains. It is not a requirement, pre-or post-Regulation G, to provide non-GAAP earnings excluding transitory items.

Regulation G

The SEC began scrutinizing the use of non-GAAP reporting in earnest in 2001, issuing cautionary guidance (Securities and Exchange Commission [SEC] 2001). Following the dictates of Congress in the Sarbanes-Oxley Act of 2002, the SEC promulgated Regulation G. Effective March 2003, Regulation G requires that firms disclosing non-GAAP earnings measures (1) provide a comparable GAAP measure, (2) reconcile the non-GAAP measure to the GAAP measure, and (3) file, within five days, a Form 8-K that explains why management believes the non-GAAP measure to be useful to investors. These dictates are intended to increase the transparency of non-GAAP reporting. Specifically, among firms reporting non-GAAP earnings both before and after Regulation G, the total amount of information provided to investors should increase. Consistent with this, research has documented an increase in the quality of these disclosures—that the additional disclosures and scrutiny have reduced the amount of opportunism (Bowen et al. 2005; Yi 2007; Heflin and Hsu 2008; Kolev, Marquardt, and McVay 2008; D. Black, E. Black, Christensen, and Heninger 2012). It is also possible, however, that managers may hesitate to provide non-GAAP earnings information in an effort to avoid regulatory scrutiny or avoid a stigma attached to non-GAAP earnings by the SEC (see, Heflin and Hsu 2008, 351 and Marques 2006, 554, respectively).

Motivation of Analyses

We investigate whether managers voluntarily disclose one-time gains to explore the possibility of an unintended consequence of Regulation G—silence. In this setting, silence limits the total amount of information provided to investors. We identify firms that are *ex post* identified as having one-time gains from legal settlements or insurance recoveries in their quarterly earnings, and we search firms' press releases to determine if they disclosed the transitory earnings component. Although some studies suggest managers are hesitant to provide non-GAAP earnings in the post-Regulation G regime (e.g., Marques 2006; Heflin and Hsu 2008), these arguments should be less applicable in the setting of transitory gains as, in this setting, the voluntarily disclosed non-GAAP earnings figure would generally be lower than GAAP earnings.

Examining how managers disclose transitory gains in the earnings press releases following Regulation G is important; maintaining silence would be misleading, as a component of GAAP earnings is not expected to recur. Thus, Regulation G may have had an unintended negative consequence to investors: allowing managers to dissemble by omission.[4]

[4] Our sample begins in 2005, which is after the temporary dip in non-GAAP reporting immediately following the new rule (Entwistle et al. 2006; Marques 2006; Heflin and Hsu 2008). Because Black et al. (2012) and Brown et al. (2012) provide evidence that non-GAAP reporting, on average, reverted to normal levels by the end of 2004, finding evidence of a continued decline among firms with transitory gains is more likely to be evidence of opportunism (to report higher earnings in the press release) than simply a desire to avoid non-GAAP earnings altogether.

We consider four variations in the disclosure of the gain, which are increasing in the degree of granularity: (1) if the gain is mentioned in the press release, (2) if the amount of the gain is provided, (3) if the EPS effect of the gain is provided, and (4) if a non-GAAP earnings number excluding the gain is provided.[5]

As an example of where the gain is mentioned without a dollar amount or an EPS effect, Ryder System disclosed, "Business segment NBT was positively impacted by lower safety and insurance costs, including a hurricane related recovery." JCPenney disclosed the dollar value of a litigation settlement, but did not provide the effect on earnings per share, "SG&A expenses in the third quarter included the previously disclosed one-time credit of approximately $13 million related to the favorable resolution of the Visa Check/MasterMoney antitrust litigation settlement." As an example of providing the earnings per share effect, Hormel Foods Corp. disclosed, "There is also a $6.2 million benefit ($.03 per share) from a litigation settlement included in the third quarter's results." Finally, Exxon Mobil Corporation provides a summary non-GAAP earnings per share figure that excludes the one-time gain, "Exxon Mobil Corporation today reported fourth quarter 2005 results. Earnings excluding special items were $10,320 million ($1.65 per share), an increase of $1,900 million from the fourth quarter of 2004. Fourth quarter net income included a special gain of $390 million from the resolution of a previously disclosed litigation issue. Including this gain, net income of $10,710 million ($1.71 per share) increased by $2,290 million [from the fourth quarter of 2004]." We also compare this disclosure granularity to a 12-quarter sample preceding the SEC scrutiny (from 1998–2000) to investigate whether this has changed following Regulation G.

We conclude our study with an examination of cross-sectional determinants of disclosure choice in following Regulation G. In particular, we provide descriptive evidence on the types of firms providing each level of disclosure granularity. We first consider the specific features of the transitory gain, and whether we expect materiality or opportunism to play a role in that particular firm-quarter. We also consider two general firm characteristics—disclosure quality and gain frequency—to capture expected disclosure for the firm (rather than for a particular gain).

With respect to specific transitory gain attributes, we expect that managers will be more likely to disclose material transitory gains. We consider larger gains to be more material and expect that the larger the gain, the more likely the manager will disclose the gain. We next investigate two incentives for managers to opportunistically disclose the existence of a specific transitory gain. First, we consider whether the inclusion of the gain in earnings would allow managers to meet an earnings benchmark. We expect that opportunistic managers will be less likely to disclose the gain in this setting. Second, we explore whether the firm concurrently discloses a transitory loss in the press release. We expect managers to be more likely to disclose the transitory gain when they concurrently disclose a transitory loss, as to omit mention of the gain in this setting is clearly a violation of the guidance provided by the SEC (recall the Trump Hotels materially misleading non-GAAP earnings disclosure).

Finally, we explore two general firm features: disclosure quality and gain frequency. Firm size is intended to capture the overall disclosure quality of the firm. We expect larger firms to provide more informative disclosures, all else equal, and thus be more likely to disclose the gain. We also consider the frequency with which individual firms experience transitory gains. It is possible, for example, that when settlements and insurance recoveries are a common occurrence, that managers are less likely to highlight these items as transitory. Thus, we expect the disclosure of the gain to be lower when transitory gains are recognized by the same firm across multiple quarters (i.e., are more frequent).

[5] Clearly diligent investors could infer non-GAAP earnings using the value or EPS effect of the gain. Interestingly, however, Curtis, McVay, and Whipple (2014), who investigate the pricing effects of disclosure granularity, provide evidence that investors do price the transitory gains differentially based on how transparently the firm discloses the gain.

SAMPLE

To form our sample, we first consider S&P 500 firms with nonmissing after-tax legal settlements or insurance recovery values on Compustat (Xpressfeed item SETAQ) from 2005–2007. Compustat identifies the transitory gains by searching the firm's subsequent SEC filings (10-Qs and 10-Ks).[6] We posit that legal settlements and insurance recoveries are relatively unambiguously "transitory."

We identify 270 firm-quarters with a transitory gain of at least one cent per share. We use one cent per share, rather than a percentage of assets or sales, because the omission of a penny per share can impact the outcome of meeting versus missing an earnings benchmark, such as the consensus analyst forecast. For each of these 270 firm-quarters, we locate the corresponding earnings press release and determine whether the gain was disclosed. In 224 of the 270 firm-quarters, a gain is mentioned in the press release. In the 46 instances where there is no disclosure of a transitory gain related to a settlement or recovery, we then search firms' 10-Qs (for quarters 1–3) and 10-Ks (for quarter 4) to verify that there was a transitory gain. In 29 firm-quarters, information in the SEC filing confirmed that there was a transitory gain, and that this gain was omitted from the firm's press release. We eliminate the remaining 17 firm-quarter observations, where legal settlement or insurance recovery information cannot be confirmed via subsequent SEC filings; we detail the specific reason for elimination in Table 1, and do not include these 17 firm-quarters in the subsequent analyses. Our final sample contains 253 firm-quarter observations, representing 145 unique firms.

EMPIRICAL ANALYSIS

Descriptive Statistics

We provide evidence on the frequency of the one-time gains in Table 2, Panel A. As noted above, by construction, each of the firm-quarter observations has a gain from settlement or insurance recovery of at least one cent per share. The majority of our sample firms report a settlement or insurance recovery only once during our 12-quarter sample period. Amerisource-Bergen Corp, a pharmaceutical company, reported gains in 11 of the 12 quarters examined, with the next-most-frequent reporters reporting gains in six of the 12 quarters examined.

In Panel B of Table 2, we partition our sample by industry. Retail has the greatest number of firm-quarters, comprising 15.8 percent of our sample, followed closely by Banks and Insurance, which comprise 15.4 percent of our sample. In terms of frequency by firm, Retail has the greatest frequency of gains within the same firm, followed by Mining and Construction.

In Panel A of Table 3, we present descriptive statistics on the magnitude of the one-time gains. The mean (median) pre-tax settlement amount is 47.11 (14.00) million, which is 1.93 (0.60) percent of sales. The mean (median) after-tax per diluted share settlement amount is 0.08 (0.03). Thus, the gains are economically significant, on average.

We tabulate the proportion of firms disclosing the gain, and the granularity of the disclosure in Table 3, Panel B. Of the 253 firm-quarter observations identified as experiencing a litigation settlement or insurance recovery of at least one cent per share, 88.5 percent mention the gain in the press release, 85.8 percent disclose the value of the transitory gain, 58.1 percent provide the

[6] We also form a benchmark sample of pre-SEC scrutiny firm-quarters, but we are not able to condition on the type of transitory gain, as Compustat does not provide a breakout of special items until 2001, when the SEC was already issuing non-GAAP reporting guidance and scrutinizing these disclosures. We discuss this benchmark sample in the next section.

TABLE 1

Sample Selection

S&P 500 firm-quarter observations from 2005–2007 with a legal settlement or insurance recovery of at least one cent per share	270
Eliminated 17 observations where legal settlement or insurance recovery information cannot be confirmed via subsequent SEC filings	
No information in the 10-Q or 10-K regarding a litigation settlement or insurance recovery	−8
Annual amount (versus quarter-4 amount) of litigation settlement or insurance recovery	−4
Fourth-quarter amount inferred by Compustat via the annual amount (subtracting off a prior quarter), but no mention in quarterly discussion	−2
Insurance recovery netted against current-quarter insurance losses (same event), and thus not actually "transitory gain," but rather appropriate netting	−2
Subsequent event (information not available at the time of the press release)	−1
Final Sample	253

earnings per share effect of the transitory gain, and 34.0 percent provide a non-GAAP earnings per share amount that excludes the gain.

In Panel C of Table 3 we tabulate the analogous disclosure granularity for a sample of firms reporting transitory gains prior to Regulation G. Specifically, we consider 292 firm-quarters from 1998–2000 where firms report income-increasing special items of at least one cent per share. Unlike in our main analysis, we do not have the underlying reason for the transitory gain. Thus, this sample has no instances where the net effect of special items is income-decreasing (i.e., net special items must reflect a gain). Our sample also includes additional transactions such as gains on asset sales.[7]

Of the firms reporting income-increasing special items of at least one cent per share, we obtain 264 usable observations. The proportion of firms mentioning the gain, providing the value of the gain, and providing an EPS effect of the gain are not statistically different across the two time periods. Interestingly, however, the proportion of firms providing non-GAAP earnings per share prior to Regulation G was notably higher, at 62 percent, than following Regulation G (34 percent). In other words, the use of non-GAAP earnings per share declined following Regulation G. Moreover, we do not find that the disclosure percentage increases by 2007 (not tabulated), suggesting that an unintended consequence of Regulation G is that some managers may be opportunistically excluding non-GAAP earnings per share figures when these figures result in lower earnings per share than GAAP.

Cross-Sectional Differences in Disclosure Granularity Post-Regulation G

To investigate cross-sectional differences in disclosure granularity in the post-Regulation G period, in Table 4 we partition our sample in five ways. In Panel A, we partition the sample by the size of the gain; we sort the sample into two groups based on the dollar value of the gain scaled by

[7] The post-Regulation G sample requires a gain of at least a penny, but this gain could occur in a quarter with net income-decreasing special items. Curtis et al. (2014) provide evidence that firms are more likely to provide non-GAAP earnings in quarters with net transitory losses relative to net transitory gains. Thus, the compositional difference would bias against us finding fewer non-GAAP earnings disclosures in the post-Regulation G period.

TABLE 2

Sample Composition

Panel A: Frequency Distribution

Firm-Quarters with Settlement or Recovery	Number of Firms
1	86
2	34
3	15
4	4
5	3
6	2
11	1

Panel B: Industry Distribution

Industry	Number of Firm-Quarters	Percent of Firm-Quarters	Average Frequency by Firm
Mining and Construction	8	3.2%	4.75
Food	19	7.5%	2.05
Textiles, Printing and Publishing	15	5.9%	2.47
Drugs and Medical Equipment	13	5.1%	2.08
Chemicals	13	5.1%	3.92
Refining and Extractive	21	8.3%	2.43
Rubber, Leather, and Metal	13	5.1%	2.38
Industrial Equipment	4	1.6%	1.00
Electrical Equipment	3	1.2%	1.67
Miscellaneous Equipment	15	5.9%	1.53
Computers	16	6.3%	1.63
Transportation	16	6.3%	2.75
Utilities	12	4.7%	1.50
Retail	40	15.8%	5.00
Services	6	2.4%	1.67
Banks and Insurance	39	15.4%	2.18

The sample period is quarters from fiscal years 2005–2007 and the sample comprises S&P 500 firms reporting a settlement or insurance recovery of at least 0.01 per share in a given quarter. Industry classifications are compiled using the following SIC codes: Agriculture 100–999; Mining: 1000–1299, 1400–1999; Food: 2000–2199; Textiles: 2200–2799; Drugs: 2830–2839, 3840–3851; Chemicals: 2800–2829, 2840–2899; Refining: 1300–1399, 2900–2999; Rubber: 3000–3499; Industrial: 3500–3569, 3580–3659; Electrical: 3660–3669, 3680–3699; Miscellaneous Equipment: 3700–3839, 3852–3999; Computers: 3570–3579, 3670–3679, 7370–7379; Transportation: 4000–4899; Utilities: 4900–4999; Retail: 5000–5999; Banks: 6000–6999; Services: 7000–7369, 7380–8999.

TABLE 3

Descriptive Statistics

Panel A: Descriptive Statistics of Post-Regulation G Sample

	Mean	Median	Min.	Max.
Settlement amount (pre-tax, in millions)	47.11	14.00	0.10	1,056
Settlement amount as a percent of sales	1.93%	0.60%	0.01%	154.26%
Settlement EPS amount (diluted, after-tax)	0.08	0.03	0.01	1.19

Panel B: Disclosure Granularity after Regulation G (from 2004–2007)

Disclosure Granularity	Number of Firm-Quarters	Percent of Firm-Quarters
Mentioned in press release	224	88.5%
Value disclosed	217	85.8%
EPS amount disclosed	147	58.1%
Non-GAAP EPS excluding gain	86	34.0%

Panel C: Disclosure Granularity before Regulation G (from 1998–2000)

Disclosure Granularity	Number of Firm-Quarters	Percent of Firm-Quarters
Mentioned in press release	245	93.2%
Value disclosed	227	86.4%
EPS amount disclosed	141	53.6%
Non-GAAP EPS excluding gain	163	61.7%*

* Statistically different from firm-quarters after Regulation G at $p < 0.05$ under both a t-test and Wilcoxon Rank Sum test.

The post-Regulation G sample period is 253 firm-quarters from fiscal years 2005–2007, and the sample comprises S&P 500 firms reporting a settlement or insurance recovery of at least 0.01 per share in a given quarter. The pre-Regulation G sample period is 264 firm-quarters from fiscal years 1998–2000, and the sample comprises S&P 500 firms reporting net income-increasing special items of at least 0.01 per share in a given quarter.

sales (approximately 50 percent each by construction).[8] We expect that the larger gains are more likely to be disclosed, as they are more material. We find that managers are more likely to mention the gain, and provide the amount of the gain, when the gain is larger. This difference, however, does not extend to the provision of the earnings per share effect of the gain, or the provision of a summary non-GAAP earnings per share figure that excludes the gain.

In Panel B of Table 4, we consider whether the inclusion of the gain in recurring income would allow the manager to meet an earnings benchmark: the median consensus analyst forecast (15

[8] We consider the decile rank of each of our continuous variables in the subsequent tables (the correlation matrix and regression analysis). As an alternative partition, we split the sample by the gain's effect on earnings per share (less than or equal to 0.03 per share and greater than 0.03 per share, where 0.03 is the median per share effect of the gain; see Table 3). Results are very similar; firms with larger gains exhibit a greater frequency of mentioning the gain and are more likely to provide the dollar value of the gain, but this difference does not extend to the likelihood of providing the earnings per share effect or a summary non-GAAP earnings measure.

TABLE 4

Disclosure Granularity across Partitions

Panel A: Disclosure Statistics by Size of the Gain

	Percent of Firm-Quarters	
Disclosure Granularity	**Small Gains (49.8 Percent of Sample)**	**Large Gains (50.2 Percent of Sample)**
Mentioned in press release	82.5%	94.5%*
Value disclosed	79.4%	92.1%*
EPS amount disclosed	56.3%	59.8%
Non-GAAP EPS excluding gain	31.0%	37.0%

* Statistically different from firm-quarters with small gains at $p < 0.05$ under both a t-test and Wilcoxon Rank Sum test.

Panel B: Disclosure Statistics by whether Inclusion of the Gain Allows Managers to Meet the Median Consensus Analyst Forecast

	Percent of Firm-Quarters	
Disclosure Granularity	**Immaterial for Benchmark (85.0 Percent of Sample)**	**Material for Benchmark (15.0 Percent of Sample)**
Mentioned in press release	87.9%	92.1%
Value disclosed	84.7%	92.1%
EPS amount disclosed	60.5%	44.7%*
Non-GAAP EPS excluding gain	34.4%	31.6%

* Statistically different from firm-quarters where inclusion or exclusion of the gain does not impact meeting the median consensus analyst forecast at $p < 0.10$ under both a t-test and Wilcoxon Rank Sum test.

Panel C: Disclosure Statistics by Disclosure of Concurrent Transitory Loss

	Percent of Firm-Quarters	
Disclosure Granularity	**No Transitory Loss Disclosed (42.3 Percent of Sample)**	**Transitory Loss Disclosed (57.7 Percent of Sample)**
Mentioned in press release	79.4%	95.2%*
Value disclosed	77.6%	91.8%*
EPS amount disclosed	46.7%	66.4%*
Non-GAAP EPS excluding gain	26.2%	39.7%*

* Statistically different from firm-quarters with no transitory loss disclosed at $p < 0.05$ under both a t-test and Wilcoxon Rank Sum test.

Panel D: Disclosure Statistics by Size of the Firm (Disclosure Quality)

	Percent of Firm-Quarters	
Disclosure Granularity	**Small Firms (49.8 Percent of Sample)**	**Large Firms (50.2 Percent of Sample)**
Mentioned in press release	84.9%	92.1%
Value disclosed	83.3%	88.2%
EPS amount disclosed	54.8%	61.4%
Non-GAAP EPS excluding gain	25.4%	42.5%*

* Statistically different from small firms at $p < 0.05$ under both a t-test and Wilcoxon Rank Sum test.

(continued on next page)

TABLE 4 (continued)

Panel E: Disclosure Statistics by Gain Frequency

	Percent of Firm-Quarters	
Disclosure Granularity	**Fewer than Three Gains (60.9 Percent of Sample)**	**At Least Three Gains (39.1 Percent of Sample)**
Mentioned in press release	87.7%	89.9%
Value disclosed	83.8%	88.9%
EPS amount disclosed	54.6%	63.6%
Non-GAAP EPS excluding gain	33.8%	34.3%

* Statistically different from firms with fewer than three gains at $p < 0.05$ under both a t-test and Wilcoxon Rank Sum test.

The sample period is quarters from fiscal years 2005–2007, and the sample comprises S&P 500 firms reporting a settlement or insurance recovery of at least 0.01 per share in a given quarter.

Variable Definitions:

Large Gain = observations in the top half of the distribution of the dollar amount of the gain scaled by sales;

Met Benchmark = observations where including the gain in recurring income would allow the firm to meet the median consensus analyst forecast when they would not have otherwise;

Transitory Loss = observations where the manager concurrently discloses information about a transitory loss in the press release;

Large Firms = those in the top half of the distribution of total assets; and

Gain Frequency = number of firm-quarters the firm reports a transitory gain from 2004–2007.

percent of the sample).[9] If managers are strategic in their use of non-GAAP reporting and continue to use this reporting mechanism opportunistically in the post-Regulation G time period, they may be less likely to disclose information about the transitory gain when including it in recurring earnings allows them to meet the analyst forecast. We find that managers of these firms are less likely to provide the EPS effect of the gain in the press release, suggesting some potential opportunism in the choice of disclosure granularity, but this difference does not extend to the providing non-GAAP earnings per share summary figures.

We next partition the sample by firms that concurrently disclose transitory losses (57.7 percent of the sample). If the low percentage of non-GAAP reporting documented in Table 3 (34 percent) is evidence of managers shying away from reporting non-GAAP earnings following Regulation G, we may see even fewer firms disclosing non-GAAP earnings when there are transitory losses—when non-GAAP earnings could exceed GAAP earnings. If, however, managers are less likely to carve out gains when net special items are income increasing, we expect there to be more firms disclosing non-GAAP earnings among firms concurrently disclosing transitory losses. Turning to Panel C of Table 4, we find that each of the disclosure percentages is lower among firms that do not concurrently disclose a transitory loss. For example, 79.4 (95.2) percent of firms without (with) a transitory loss disclosure mention the gain. Similarly, 26.2 (39.7) percent of firms without (with) a transitory loss disclosure provide a

[9] We also considered two other benchmarks: meeting four-quarters-ago earnings and achieving profitability. Neither of these alternate benchmarks was associated with disclosure granularity in the univariate or multivariate analyses (not tabulated). There are several explanations for the disparity across the benchmarks. First, for profitability, the transitory gain would have allowed only one of our sample firms to achieve profitability. Second, for prior-period earnings, managers may have strategically lowered the prior-period-earnings benchmark by highlighting that the prior period included a transitory gain (Schrand and Walther 2000); thus, the earnings per share figure we use may not be the appropriate benchmark.

summary non-GAAP earnings per share figure excluding the transitory gain. Each of these differences is statistically different under both a t-test and Wilcoxon Rank Sum test at $p < 0.05$, providing some evidence that managers continue to use non-GAAP reporting opportunistically following Regulation G.

We examine firm size, our proxy for disclosure quality, which we measure as total assets, in Panel D (approximately 50 percent each by construction). In general, we expect larger firms to provide more disclosure. Interestingly, the only difference across the partition is that larger firms tend to be more likely to provide non-GAAP earnings per share (25.4 percent among small firms compared to 42.5 percent among large firms).

Finally, in Panel E of Table 4, we investigate whether disclosure granularity differs by the frequency with which an individual firm recognizes settlements or insurance recoveries (where 60.9 percent of the sample has fewer than three gains during the 12-quarter sample period). It is possible that managers provide less information when they experience frequent transitory gains (i.e., these gains are a more "normal" part of their business). In contrast to our expectations, however, we see no differences across the partition for any of the levels of disclosure granularity.

In Table 5, we present a correlation matrix to explore the associations across each of our cross-sectional variables. In the prior analysis, we partitioned the sample into two groups. In the correlation matrix, however, we explore whether there is an association once we allow the continuous variables to have more partitions, and thus we decile rank each of our continuous variables (gain size, total assets, and gain frequency). We present the Pearson (Spearman) correlations in the upper right (lower left) corner.

Each of our disclosure variables is positively associated, which is reasonable, as a firm that does not mention the gain would also not provide additional granularity. We see that the size of the transitory gain (again, as a decile rank) is associated with three of the four disclosure levels (all but providing the EPS effect of the gain) and the size of the gain is also positively associated with *Met Benchmark*. *Transitory Loss* is associated with each level of disclosure granularity, while our proxy for disclosure quality (the decile rank of total assets) is positively associated with only two levels (mentioning the gain and providing non-GAAP earnings). *Disclosure Quality* is also positively associated with *Transitory Loss*, as larger firms tend to disclose more income-decreasing transitory items. Finally, *Gain Frequency* is not associated with any of the levels of disclosure granularity.

Regression Analysis

In the prior section, we find that there is variation in the amount of information disclosed by management in the earnings press releases. In this section, we simultaneously examine possible determinants of disclosure granularity from Tables 4 and 5 in a logistic regression analysis (Table 6) to see how each characteristic affects the likelihood of disclosure in the presence of the other characteristics.[10] Specifically, we estimate the following logistic regression:

$$\begin{aligned} Disclosure = {} & \beta_0 + \beta_1 Size\ of\ Gain + \beta_2 Met\ Benchmark + \beta_3 Transitory\ Loss \\ & + \beta_4 Disclosure\ Quality + Year\ and\ Industry\ Indicator\ Variables + \varepsilon, \end{aligned}$$

where *Disclosure* is each of our four disclosure choices: *Mention*, *Dollar Amount*, *EPS Effect*, and

[10] We exclude gain frequency, as it does not appear to be a determinant of disclosure granularity based on Tables 4 and 5. In untabulated analyses, we consider four measures of gain frequency, none of which load, and none of which affect our inferences. We consider two indicator variables, one for more than one gain and one for more than two gains, and we consider the continuous variable "gain frequency," as well as the decile rank of gain frequency. We also excluded all firms with at least three gains during the 12-quarter period; results are similar.

TABLE 5

Correlation Matrix

	Mention	*Dollar Value*	*EPS Effect*	*Non-GAAP*	*Size of Gain*	*Met Benchmark*	*Trans. Loss*	*Disclosure Quality*	*Gain Freq.*
Mention		0.883	0.424	0.258	0.197	0.047	0.245	0.111	0.062
		0.0001	0.0001	0.0001	0.0016	0.4559	0.0001	0.0788	0.3236
Dollar Value	0.883		0.411	0.292	0.190	0.076	0.201	0.063	0.093
	0.0001		0.0001	0.0001	0.0024	0.2269	0.0013	0.3145	0.1408
EPS Effect	0.424	0.411		0.474	0.037	−0.114	0.197	0.023	0.022
	0.0001	0.0001		0.0001	0.5586	0.0705	0.0016	0.7162	0.7271
Non-GAAP	0.258	0.292	0.474		0.104	−0.021	0.141	0.142	−0.072
	0.0001	0.0001	0.0001		0.0976	0.7346	0.0245	0.0236	0.2569
Size of Gain	0.197	0.190	0.037	0.104		0.201	−0.065	−0.078	−0.064
	0.0016	0.0024	0.5576	0.0974		0.0013	0.3026	0.2138	0.3103
Met Benchmark	0.047	0.076	−0.114	−0.021	0.201		0.046	0.050	0.060
	0.4559	0.2269	0.0705	0.7346	0.0013		0.4626	0.4291	0.3397
Transitory Loss	0.245	0.201	0.197	0.141	−0.065	0.046		0.119	0.088
	0.0001	0.0013	0.0016	0.0245	0.3013	0.4626		0.0581	0.1620
Disclosure Quality	0.111	0.063	0.023	0.143	−0.078	0.050	0.119		0.010
	0.0788	0.3154	0.7166	0.0232	0.2155	0.4311	0.0585		0.8745
Gain Frequency	0.062	0.092	0.031	−0.059	−0.069	0.056	0.093	0.012	
	0.3247	0.1446	0.6287	0.3469	0.2726	0.3745	0.1414	0.8526	

The sample period is quarters from fiscal years 2005–2007, and the sample comprises S&P 500 firms reporting a settlement or insurance recovery of at least 0.01 per share in a given quarter.

Variable Definitions:
Size of Gain = decile rank of the dollar amount of the gain scaled by sales;
Met Benchmark = 1 if including the gain in recurring income would allow the firm to meet the median consensus analyst forecast when they would not have otherwise;
Transitory Loss = observations where the manager concurrently discloses information about a transitory loss in the press release;
Disclosure Quality = decile rank of total assets; and
Gain Frequency = decile rank of the number of firm-quarters the firm reports a transitory gain from 2004–2007.

Non-GAAP. *Disclosure* is an indicator variable that is equal to 1 if the manager discloses the aforementioned degree of granularity in the earnings announcement, and 0 otherwise. We rank our continuous variables (from 0 to 1) to mitigate the influence of outliers, thus, *Size of Gain* is the decile rank of the dollar amount of the gain scaled by sales. *Met Benchmark* is an indicator variable that is equal to 1 if including the transitory gain in recurring income would allow the firm to meet the median consensus analyst forecast, and 0 otherwise. *Transitory Loss* is an indicator variable that is equal to 1 if the manager discloses information about a transitory loss in the press release, and 0 otherwise. *Disclosure Quality* is the decile rank of total assets, as large firms tend to disclose more, on average. We include industry and year indicator variables in each of the estimations to control for general trends in disclosure across industries and time.

Results are presented in Table 6. Turning first to the size of the gain, proxying for materiality, we find that the size of the gain increases the likelihood of disclosing the gain for all of our measures of disclosure. This finding is consistent with managers being more likely to disclose information about transitory gains that are more important. Interestingly, the coefficients and p-values fall as the degree of granularity increases, suggesting that while the size of the gain is

TABLE 6

Logistic Regression Analysis

		Dependent Variable Disclosure =			
	Pred. Sign	*Mention* Logit Estimate (p-value)	*Dollar Value* Logit Estimate (p-value)	*EPS Effect* Logit Estimate (p-value)	*Non-GAAP* Logit Estimate (p-value)
Intercept		−1.997	−1.465	−2.394	−14.169
		(0.2083)	(0.3054)	(0.0627)	(0.9578)
Size of Gain	+	5.015	4.141	1.122	1.303
		(0.0001)	(0.0002)	(0.0707)	(0.0477)
Met Benchmark	−	−0.784	−0.218	−0.925	−0.342
		(0.3241)	(0.7704)	(0.0296)	(0.4488)
Transitory Loss	+	2.190	1.698	1.092	0.830
		(0.0003)	(0.0008)	(0.0006)	(0.0168)
Disclosure Quality	+	1.460	0.525	0.308	1.704
		(0.1341)	(0.5440)	(0.5427)	(0.0017)
Industry Indicators		Included	Included	Included	Included
Year Indicators		Included	Included	Included	Included
Number of Disclosures		224	217	147	86
Number of Total Observations		253	253	253	253
Likelihood Ratio		75.846	78.236	58.997	68.705
		(0.0001)	(0.0001)	(0.0001)	(0.0001)
Pseudo Adj. R^2		50.85%	47.60%	27.98%	32.91%

The sample period is quarters from fiscal years 2005–2007, and the sample comprises S&P 500 firms reporting a settlement or insurance recovery of at least 0.01 per share in a given quarter.
The above table presents the estimates from the following logistic regression:

$$Disclosure = \beta_0 + \beta_1 Size\ of\ Gain + \beta_2 Met\ Benchmark + \beta_3 Transitory\ Loss + \beta_4 Disclosure\ Quality + \varepsilon,$$

where *Disclosure* is each of our four disclosure choices: *Mention* (if the gain is mentioned in the press release), *Dollar Amount* (if the dollar amount of the gain is provided in the press release), *EPS Effect* (if the earnings per share effect of the gain is provided in the press release), and *Non-GAAP* (if a summary non-GAAP earnings per share figure excluding the gain is provided in the press release).
Industries are identified in Table 2.

Variable Definitions:
Disclosure = an indicator variable that is equal to 1 if the manager discloses the aforementioned degree of granularity in the earnings announcement, and 0 otherwise;
Size of Gain = decile rank (from 0 to 1) of the dollar amount of the gain scaled by sales;
Met Benchmark = an indicator variable that is equal to 1 if including the gain in recurring income would allow the firm to meet the median consensus analyst forecast, and 0 otherwise;
Transitory Loss = an indicator variable that is equal to 1 if the manager discloses information about a transitory loss in the press release, and 0 otherwise; and
Disclosure Quality = decile rank (from 0 to 1) of total assets, as large firms tend to disclose more, on average.

important for all disclosure choices, it is most important in the choice to mention the existence of the gain and provide the dollar value effect of the gain.

Our second determinate of disclosure granularity, whether including the gain in recurring earnings allows the manager to meet the analyst forecast, is not associated with the likelihood of disclosing the transitory gain in the press release in three of our four estimations. We continue to find evidence, however, that managers are *less* likely to provide the earnings per share effect of the transitory gain when including the gain in recurring earnings would allow them to meet the analyst

forecast, consistent with the univariate results in Table 4, Panel B, providing some evidence of opportunism.

Next, we find that, across all four degrees of disclosure granularity, the concurrent reporting of a transitory loss is significantly associated with disclosure of the transitory gain. In other words, managers are less likely to disclose transitory gain information when there is not a concurrent transitory loss, on average.[11] This result is inconsistent with managers hesitating to provide transitory gain information to avoid the negative connotations of non-GAAP earnings, as the negative connotations would be strongest in the presence of transitory losses, where non-GAAP earnings could be higher than GAAP earnings. Rather, the results suggest that there continues to be an element of opportunism in the post-Regulation G use of non-GAAP reporting. Finally, disclosure quality is only a determinant of providing non-GAAP earnings per share, similar to Panel D of Table 4.

CONCLUSION

We examine management's disclosure of transitory gains following Regulation G. We find that managers generally disclose the existence of transitory gains, but are much less likely to provide a non-GAAP earnings figure excluding this gain. We find that disclosure levels increase with the size of the gain (materiality) but are also higher if the firm concurrently reports a transitory loss, which provides some evidence of opportunism in the post-Regulation G era. Specifically, managers appear to prefer to report non-GAAP earnings that improve performance.

Our study should be informative to regulators, as we document a sharp and continued decline in the disclosure of non-GAAP earnings excluding transitory gains following Regulation G, which is likely an unintended consequence of this regulation. In addition, our descriptive evidence on the types of firms providing each level of disclosure granularity should be informative to investors and analysts wishing to assess the permanence of earnings at the time of the earnings announcement.

Our study is subject to several limitations. First, although we attempt to control for disclosure quality in our regression analysis, our sample is limited to only those quarters where Compustat identifies a transitory gain in the firm's 10-Q or 10-K, and thus we do not condition our analysis on the firm's general disclosure policy (i.e., whether the firm discloses non-GAAP earnings in adjacent quarters). We attempt to mitigate this limitation by examining how disclosure changes in the presence of a concurrent transitory loss or the ability to beat analyst forecasts. Second, we limit our examination of transitory gains to the S&P 500, and thus our results may not be generalizable to smaller firms. Future research might investigate changes around Regulation G for smaller firms, or might investigate the determinants of disclosure further. For example, we find that approximately 12 percent of our sample firms do not reference the transitory gain in the press release. Although we do document some cross-sectional variation, there are likely additional determinants of this disclosure choice.

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