

Market responses to Quality of Non-GAAP Earnings Exclusions following Regulation G and the SEC's Compliance and Disclosure Interpretations

Abstract

This paper examines the consequences of the non-GAAP reporting resulting from Regulation G as required by Section 401(b) of the Sarbanes-Oxley Act of 2002 and the SEC's issuance of Compliance & Disclosure Interpretations (C&DIs) in 2010. Similarly to Kolev et al. (2008) and Kyung (2014), we find (i) that both Regulation G and C&DIs are associated with an increase in the quality of non-GAAP earnings exclusions and, (ii) a decline in the probability of meeting or slightly exceeding analysts' forecasts when firms exclude positive non-GAAP exclusions. Moreover, we find (iii) a reduction in the earnings response coefficients (ERCs) during the post-C&DIs period, but an increase in the post-Regulation G period. This study contributes to the voluntary disclosure literature by providing evidence on whether Regulation G and C&DIs have encouraged informative or opportunistic non-GAAP earnings. Furthermore, this study adds to the expansion regarding the regulation literature by highlighting the unintended economic consequences of regulation by regulatory bodies.

Keywords: Non-GAAP earnings; Non-GAAP exclusions; Regulation G; C&DIs; Analysts' forecasts; ERCs.

1. Introduction

Over the past decade, the use of non-GAAP earnings (also known as “pro-forma”, “street”, or “core” earnings) has increased dramatically (Bradshaw and Sloan, 2002; Kolev et al., 2008). In 2003, the U.S. Securities and Exchange Commission (SEC) raised concerns regarding the potential misuse of non-GAAP earnings and intervened to regulate the reporting of non-GAAP earnings issuing Regulation G. In 2010, the SEC issued new Compliance and Disclosure Interpretations (C&DIs), relaxing the rigorous existing SEC 2003 general guidance (the FAQ) on Regulation G and S-K without changing the current regulation.¹ These new, non-binding, SEC staff interpretations allowed SEC registrants to use extensive discretion in their voluntary disclosure practice, presumably to improve the quality of non-GAAP disclosure following the C&DIs.

The objective of this study is to investigate the accounting information effects of both the SEC’s 2003 implementation of Regulation G and the 2010 issuance of C&DIs on the quality of exclusions from non-GAAP reporting. Specifically, we investigate (i) the association between the exclusions and future operating earnings, (ii) whether positive non-GAAP exclusions are associated with firm’s meeting or slightly exceeding analysts’ forecasts, and (iii) the market response to earnings announcements around each regulatory and interpretive guidance change. We consider earnings response coefficients (ERCs) change in general, as well as in the specific context of firms using positive exclusions from non-GAAP reporting. The first two objectives replicate prior work on the effectiveness of Regulation G (e.g., Kolev et al., 2008) and C&DIs (e.g., Kyung, 2014) respectively. Addressing these objectives (replications of Kolev et al., 2008 and Kyung, 2014) act to calibrate my dataset

¹ Item 10(e) of Regulation S-K applies additional and more stringent requirements to periodic reports and other documents filed with the SEC that includes non-GAAP financial measures (Source: <https://www.sec.gov/divisions/corpfin/guidance/nongaapinterp.htm>).

against theirs. We define the quality of exclusions as those that are more transitory (i.e., the “appropriate” items excluded from non-GAAP earnings) and have no predictive power for future operating earnings following Doyle et al. (2003), Gu and Chen (2004), Frankel et al. (2007), and Kolev et al. (2008).

The motivation for this study is two-fold. First, this study exploits two settings to investigate whether the SEC’s prior regulatory change (Regulation G) and interpretive guidance change (C&DIs) improve the quality of non-GAAP earnings exclusions. On January 22, 2003, the SEC implemented the new regulation called the “Regulation G”, which imposes additional disclosure and filing requirements on firms publicly disclosing non-GAAP earnings. Empirical evidence suggests that SEC intervention improves the quality of non-GAAP earnings exclusions and curtails firm’s opportunistic behaviour (e.g., Heflin and Hsu, 2008; Kolev et al., 2008; Frankel et al., 2011).

Subsequently, on January 11, 2010, the SEC’s Division of Corporation Finance issued new C&DIs of the rules adopted under the Securities Act on the use of non-GAAP financial measurements, which relaxes the restrictive Regulation G. These SEC staff interpretations are intended as general guidance, which is not binding due to its highly informal nature. The purpose of the SEC review of this new guidance is to ensure that the interpretations are not being read “in a way that would cause companies to keep key information out of their filings that they would otherwise communicate through earnings calls and press releases and which they believe is the most meaningful indicator to investors of how they are doing”.² These SEC staff interpretations may function as effectively as an actual regulation because it is practically able to bind related SEC registrants who are able to reduce the ambiguity

² Source: <https://www.sec.gov/divisions/corpfin/cfguidance.shtml>

regarding the disclosure of non-GAAP earnings in their financial statements and press releases. We are firstly motivated by the objective of SEC intervention, which is to improve the quality of non-GAAP earnings exclusions and to reduce managers' opportunistic behaviour over the SEC regulatory and interpretive guidance changes.

The second motivation is to add to the debate on the disclosure of non-GAAP earnings. The extant literature proposes competing theories to explain the use of non-GAAP earnings. On one hand, the information hypothesis proposes that excluding transitory items when estimating non-GAAP earnings enables managers to provide enhanced earnings measurement for expecting future performance and future cash flow in order to calculate firm's equity valuation (Bradshaw and Sloan, 2002; Brown and Sivakumar, 2003; Doyle et al., 2003; Frankel and Roychowdhury, 2004; Klevor et al., 2008). On the other hand, the opportunism hypothesis argues that excluding certain income-decreasing components enables managers to report non-GAAP earnings metrics that exceed GAAP earnings figures, which could possibly yield greater equity valuations by augmenting the firm share price (Doyle et al., 2003; McVay, 2006; Black and Christensen, 2009; Brown et al., 2012). In this paper, we emphasise equally the information hypothesis and opportunism hypothesis because both motives affect managers' non-GAAP earnings disclosure practice because it is difficult to determine which motivation is more pervasive.

In order to maximise statistical power and capitalise on the availability of machine readable data, we use IBES actual earnings per share (IBES item VALUE) to proxy for the non-GAAP earnings figure issued in press releases by managers. With data from IBES, CRSP, and Compustat, the empirical tests employ the 48 quarters from the first calendar quarter of 2000 through the fourth calendar quarter of 2012. This study excludes firm-quarter

observations in 2008 due to the U.S. financial crisis. The final sample is 78,634 and 79,160 firm-quarter observations respectively to test for objectives (i) and (ii). We use a sample of 13,810 observations to test objective (iii).

We first conduct analyses to confirm the existing findings of Kolev et al. (2008) and Kyung (2014). A cross-sectional pooled regression is used with *SUM_FutOpEarn* as a dependent variable. To test the association between positive exclusions and analysts' forecasts, we use a probit regression with *MEF* (Meet or Exceed Analysts' Forecasts) as a dependent variable (set equal to one if the current quarter *q* of earnings surprise is greater than or equal to zero, and zero otherwise). To test the market response to earnings announcements around the SEC events, we use the *3_day_MAR* (Market-Adjusted Return) as a dependent variable.³ We also include the dummy variables of positive exclusions to examine the effect of firms with versus without using income-increasing exclusions. Following Doyle et al. (2003; 2013), all independent variables are decile-ranked and take value between zero and one (i.e., [decile less one]/nine).

Consistent with Doyle et al. (2003), Kolev et al. (2008), Kyung (2014), we separate non-GAAP earnings exclusions into special items (i.e., typically regarded as transitory or non-recurring) and other exclusions.⁴ Consistent with previous research (e.g., Kolev et al., 2008; Kyung, 2014), we find that the quality of other exclusions has improved following the

³ *3_day_MAR* represents the sum of difference between firm's value-weighted return, inclusive of dividends and other distributions, from one day before to one day after the IBES earnings announcement date, less the return on the value-weighted S&P 500 as a market portfolio from CRSP Daily Stock/Security file.

⁴ Doyle et al. (2003) divide total exclusions into special items and other exclusions and recognize special items as one-time items which firms reported in their press releases, such as gains or losses on assets, merger and acquisition costs, stock-related charges, and restructuring charges, while other exclusions include recurring items such as depreciation and amortization expenses, stock-based compensation costs, R&D expenses as well as other adjustments including interest-related charges, tax-related costs, investment costs.

Regulation G and C&DIs (i.e., more transitory). The evidence indicates that firms using positive non-GAAP earnings exclusions (i.e., income-increasing exclusions) particularly to increase non-GAAP earnings metrics are less likely to meet or slightly exceed analysts' forecasts following the Regulation G and C&DIs. Moreover, the market response test produces mixed results. Specifically, investors reduce the value of ERCs following the SEC's new issuance of staff interpretations but increase the coefficient of earnings surprise (ERCs) in the post-Regulation G period.

This study makes two contributions to the literature. First, this paper contributes to the voluntary disclosure literature. The research provides evidence whether Regulation G and the SEC's issuance of C&DIs have discouraged misleading non-GAAP earnings or informative non-GAAP earnings. Previous research has found that non-GAAP earnings both helps to inform investors in assessing firm's core operating performance (e.g., Bradshaw and Sloan, 2002; Brown and Sivakumar, 2003; Bhattacharya et al., 2003; Lougee and Marquardt, 2004; Kolev et al., 2008; Kyung, 2014) and also misleads investors thus inflating firm's equity valuation (e.g., Bradshaw and Sloan, 2002; Doyle et al., 2003; Bhattacharya et al., 2003, 2004; Lougee and Marquardt, 2004; Bowen et al., 2005; Black and Christensen, 2009; Doyle and Soliman, 2009; Brown et al., 2010). Hence, this research adds to a growing body of literature that investigates the consequences of Regulation G and the SEC's C&DIs by examining the impacts of disclosure regulation and interpretive guidance. Second, this study adds to the argument regarding the disclosure regulation literature by providing the economic consequences of regulation by regulatory bodies, which may curtail the frequency and quality of non-GAAP reporting.

The remainder of this study is arranged as follows. Section 2 provides an overview of Regulation G and the SEC's C&DIs, reviews previous literature on non-GAAP earnings, and develops the hypotheses. Section 3 provides a description of the sample selection and research design to test the hypotheses. The main results are outlined in Section 4 and Section 5 concludes.

2. Regulation background, literature review, and hypothesis development

2.1 Regulation G

In January 2003, the SEC introduced Regulation G on the use of non-GAAP financial metrics as required by Section 401(b) of the Sarbanes-Oxley Act of 2002 for the growing concerns that the disclosure of non-GAAP reporting misleads investors.⁵ This regulation requires public companies that disclose or release such non-GAAP earnings metrics to contain a presentation of the more prominent and comparable GAAP financial metrics and a reconciliation of the reported non-GAAP earnings to the most directly comparable GAAP earnings. These additional disclosure requirements under Regulation G have led some firms to abandon the reporting of non-GAAP earnings metrics in their press releases, however, the majority (60 percent) of the non-GAAP disclosers did not change their disclosure policy in the post-Regulation G (Marques, 2006; Heflin and Hsu, 2008).⁶

⁵ This Section 401(b) is listed under Title IV of the Sarbanes-Oxley act (Enhanced Financial Disclosures), and pertains to Disclosures in Periodic Reports (Source: <http://www.sarbanes-oxley-act.biz/SarbanesOxleySection401.htm>).

⁶ Heflin and Hsu (2008) find that the Regulation G generated (i) a modest decrease in non-GAAP earnings disclosures, (ii) a decrease in the magnitude of the differences between GAAP and non-GAAP earnings (i.e., total exclusions), (iii) a modest decrease in the probability firms report non-GAAP earnings that meet or slightly exceed analysts' expectations, and (iv) a decrease in the relation between returns and earnings forecast errors. They find the regulations declined the frequency and magnitude of non-GAAP earnings because the regulations enhanced managerial emphasis upon GAAP earnings. They also find, before the

Following Kolev et al. (2008) and Doyle et al. (2013), we readdress the questions of whether Regulation G affected the use of non-GAAP earnings by investigating the quality of non-GAAP earnings exclusions associated with future operating earnings, and the probability of exceeding analysts' forecasts associated with the use of the positive exclusions from non-GAAP earnings. Moreover, we examine the market response whether the change in regulation and interpretive guidance affected the firms' ERCs. we also include the dummy variables of positive exclusions to examine the effect of firms with versus without using income-increasing exclusions.

Regulation G potentially influences both opportunism and information of non-GAAP earnings reporting. The intention of the reconciliation and management-description provisions of the regulations is to make opportunism of non-GAAP earnings reporting transparent and costly. The objective of the SEC intervention is to enhance the quality of the exclusions from non-GAAP earnings. Kolev et al. (2008) find that after SEC intervention the components excluded from non-GAAP earnings figures are of greater quality by reporting that these exclusions are transitory and non-recurring.⁷ They also suggest that the negative correlation between excluded recurring items and future earnings is more statistically significant in the post-Regulation G period than in the pre-Regulation G period. Hence,

regulations, managers were using other exclusions to help them meet or exceed the earnings forecast benchmarks and that the regulations have helped reduce this managerial opportunistic behaviour.

⁷ Kolev et al. (2008) report that the quality of other exclusions has substantially increased after SEC intervention period into non-GAAP earnings disclosures. However, they also find that the quality of special items has declined following SEC intervention, which suggests that managers may have adapted to the new disclosure environment by switching more recurring items into special exclusions. Consistent with this perspective, they further find that a propensity to shift from using other exclusions before SEC intervention period to special items after post-intervention era is related to lower quality of special items in the latter period. Further, their results indicate that the average quality has enhanced and that the firms that stopped releasing non-GAAP financial metrics tended generally to have lower quality before SEC intervention period are generally consistent with Heflin and Hsu (2008)'s findings, though they take a different methodological approach to the issue.

investors can understand more details of adjustments and would not be misled by non-GAAP earnings in the post-Regulation G era.

2.2 C&DIs

On January 11, 2010, the SEC's Division of Corporation Finance issued new Compliance and Disclosure Interpretations (C&DIs) related to the non-GAAP earnings measurements in SEC filings and other public disclosures. In keeping with the SEC staff's focus on enhancing disclosures for the benefit of investors, the staff was conducting a review of the existing interpretations on non-GAAP measurements. This interpretive guidance replaces the Frequently Asked Questions Regarding the Use of Non-GAAP Measures (the FAQs) that were issued by the SEC staff in June 2003, along with the new regulation (Regulation G), and the November 22, 2004 Form 8-K Frequently Asked Questions.⁸

For example, Question 102.03 replaces previous the FAQs question 8 and provides updated guidance on Regulation G and Item 10(e) of Regulation S-K, which prohibits adjusting a non-GAAP financial performance measurement to eliminate or smooth items identified as non-recurring, infrequent, or unusual when the nature of the charge or gain is such that it is reasonably likely to recur within two years or there was a similar charge or gain within the prior two years. The C&DIs clarify that the prohibition is based on the description, not the nature, of the charge or gain and that SEC registrants can make

⁸ Form 8-K is the form on which public companies report, on a current basis, the occurrence of significant corporate events. A reportable event is a transaction or occurrence of major significance that identifies the non-GAAP financial measures contained in the incorporated reports and provides the required reconciliation. The SEC periodically expands the list of items requiring disclosure on Form 8-K and alters the time within which a Form 8-K must be filed (Source: <http://www.sec.gov/answers/form8k.htm>).

adjustments they believe are appropriate, subject to Regulation G and other requirements of Item 10(e) of Regulation S-K.⁹

These interpretations may function as efficiently as an actual regulation because they are practically able to bind related entities such as SEC registrants. According to staff interpretations, SEC registrants are able to curtail the ambiguity regarding the extent to which the staff interpretations can have binding effect though they are not technically binding. Encountered with this change in disclosure practice that is recommended, but mandated in the traditional form, firms might prefer to provide disclosure under the terms of the C&DIs so as to alleviate future litigations of the SEC. Thus, these interpretations may be equally likely to have influences on the SEC registrants' disclosure practices even though they are not technically binding (Kyung, 2014).

While prior empirical studies have shed light on the quality of exclusion from non-GAAP reporting, little is known on the information content of these exclusions following the C&DIs. One notable exception is the study by Kyung (2014). Specifically, Kyung (2014) investigates non-GAAP earnings exclusions and their components (i.e., special items and other exclusions). Special items, by definition, are regarded as high quality exclusions for they have little predictive ability for future operating earnings (i.e., non-recurring), while other exclusions are the exclusions which managers subjectively exclude because they believe the exclusions do not reflect core performance (Doyle et al., 2003). Kyung (2014) finds a positive and significant coefficient on other exclusions but an insignificant and

⁹ 2003 SEC guidance FAQs question 8 states that: "Companies should never use a non-GAAP financial measure in an attempt to smooth earnings. Further, while there is no per se prohibition against removing a recurring item, companies must meet the burden of demonstrating the usefulness of any measure that excludes recurring items, especially if the non-GAAP financial measure is used to evaluate performance." (Source: <https://www.sec.gov/divisions/corpfin/faqs/nongaapfaq.htm>)

inconclusive result on special items in the post-C&DIs. This suggests that the enhancement in the quality of exclusions is driven by the quality of other exclusions following the C&DIs. It also implies that a relaxation of restrictive 2003 SEC interpretive guidance on non-GAAP earnings enhances the quality of exclusions by allowing managers to exercise greater discretion to exclude some items to better communicate firm's core performance in the post-C&DIs period. Kyung (2014) also finds that the frequency of meeting or slightly exceeding earnings benchmarks using positive non-GAAP exclusions is lower in the post-C&DIs period.

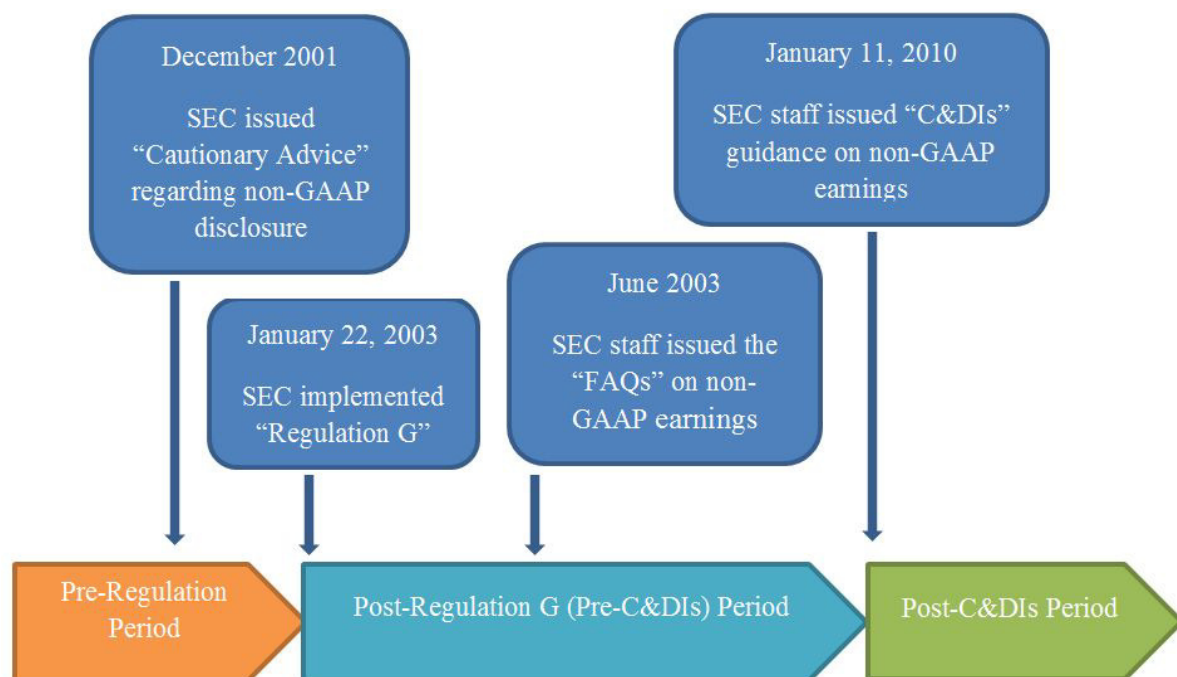
2.3 Literature review

Non-GAAP earnings measurements became increasingly more prevalent during the 1990s (Bradshaw and Sloan, 2002). These non-GAAP figures tend to be more value-relevant, on average, than GAAP earnings (Bradshaw and Sloan, 2002; Bhattacharya et al., 2003; Frankel and Roychowdhury, 2004). The rationale put forward by managers and in the business press is that the exclusions from non-GAAP earnings are regarded as being transitory and non-recurring, non-cash, or uninformative of the firm's core operating earnings (Doyle et al., 2003; Gu and Chen, 2004). Numerous studies have found evidence supporting this information perspective of non-GAAP earnings. For instance, Lougee and Marquardt (2004) find that non-GAAP earnings help predict future profitability when a firm's GAAP earnings informativeness is low and that this firm is more likely to report non-GAAP figures. Bradshaw and Sloan (2002) and Lougee and Marquardt (2004) find evidence that investors consider non-GAAP earnings as a more informative figure.

However, since non-GAAP earnings disclosures are less regulated and therefore self-determined by corporate managers, a number of studies explore the possibility that

opportunism explains the use of non-GAAP earnings (Fredrickson and Miller, 2004). For example, Doyle et al. (2003) find that non-GAAP earnings exclusions have predictive ability for future operating earnings and abnormal returns, which indicates that these exclusions may be recurring in the subsequent period. As well, managers seem to use non-GAAP earnings financial metrics to meet or exceed analysts' forecasts (Lougee and Marquardt, 2004; Doyle and Soliman, 2005).

Figure 1 (Timeline - Regulation G and C&DIs on non-GAAP earnings)



2.4 Hypothesis development

There are two competing views supporting the use of non-GAAP earnings; the opportunism hypothesis and the information hypothesis (Brown et al., 2012). First, the opportunism hypothesis posits that excluding certain income-decreasing expenses enables managers to report non-GAAP earnings metrics that exceed GAAP earnings figures, which could possibly yield greater equity valuations by augmenting the firm share price. Second, the information hypothesis proposes that excluding transitory nature of items when

estimating non-GAAP earnings enables managers to provide enhanced earnings measurement for expecting future performance and future cash flow so as to calculate firm's equity valuation.

Managers acting to “inform” will eliminate income-decreasing transitory components when estimating non-GAAP earnings because excluding these items results in non-GAAP earnings that are more persistent than GAAP earnings. However, managers acting opportunistically will also remove income-decreasing transitory items because excluding these items results in non-GAAP earnings that exceed GAAP earnings.

As mentioned above, managers, on a regular basis, highlight the transitory items of GAAP earnings in their preliminary earnings announcements, and often report non-GAAP earnings excluding these transitory items. Specifically, because the greater part of transitory components is income-decreasing, both opportunism and information hypotheses anticipate the same disclosure choices. Under the information hypothesis, this is to provide a more accurate measurement of core operating earnings, while under the opportunism hypothesis, it is to present greater earnings; both encourage managers to exclude income-decreasing transitory components when estimating non-GAAP earnings.

Because both hypotheses affect managers' non-GAAP reporting, it is difficult to identify which motivation is more pervasive. Answering this concern is specifically significant because, though there was a temporary decrease in the disclosure of non-GAAP earnings after Regulation G, the prevalence of non-GAAP reporting has been steadily increasing and is now at historic peaks (Brown et al., 2012).

As mentioned earlier, prior research has explored these competing motivations, providing evidence consistent with both descriptions. Consistent with the information hypothesis, non-GAAP earnings are more informative to investors relative to GAAP financial metrics, when GAAP earnings are more subjective (e.g., Bradshaw and Sloan, 2002; Bhattacharya et al., 2003; Brown and Sivakumar, 2003; Lougee and Marquardt, 2004; Choi et al., 2007).

Under the information hypothesis, non-GAAP financial metrics are also more predictive of future performance, consistent with these earnings numbers providing a better representation of “core” earnings (Brown and Sivakumar, 2003). Consistent with the opportunism hypothesis, exclusions of transitory losses from non-GAAP earnings are related to future operating performance, suggesting that these exclusions recur in subsequent periods of firm’s financial reporting (e.g., McVay, 2006; Kolev et al., 2008; Black and Christensen, 2009).

This study presents three theoretical hypotheses with regard to the exclusions from non-GAAP earnings following the Regulation G and C&DIs. The first hypothesis follows the assumptions of Kolev et al. (2008) for the quality of non-GAAP earnings exclusions in the alternative forms as follows:

H_{1a}: Regulation G enhances the quality of the total exclusions and their components (i.e., special items and other exclusions) from non-GAAP earnings.

H_{1b}: SEC’s issuance of new C&DIs enhances the quality of the total exclusions and their components (i.e., special items and other exclusions) from non-GAAP earnings.

Under the information hypothesis, if analysts anticipate and are able to identify all real non-GAAP exclusions in their expectations, positive non-GAAP exclusions should not be associated with a greater incidence of meeting or exceeding analysts' forecasts. While under the opportunism hypothesis, managers define non-GAAP earnings to meet or slightly exceed analysts' forecasts (Doyle et al., 2013). However, managers are expected to disclose less opportunistic non-GAAP earnings to meet or exceed analysts' forecasts since the quality of non-GAAP earnings exclusions improve (i.e., more transitory) after Regulation G and C&DIs. For example, the requirements of Regulation G for SEC registrants, such as reconciliation between GAAP earnings and non-GAAP earnings in their earnings announcement may help investors understand managers' opportunistic use of unexpected non-GAAP exclusions (e.g., the use of other exclusions). The second hypothesis follows the assumptions of Kyung (2014) for meeting or exceeding analysts' forecasts associated with positive non-GAAP exclusions in the alternative forms as follows:

H_{2a}: Firms using positive exclusions from non-GAAP earnings to increase non-GAAP earnings financial metrics are less likely to meet or slightly exceed analysts' forecasts following the Regulation G.

H_{2b}: Firms using positive exclusions from non-GAAP earnings to increase non-GAAP earnings financial metrics are less likely to meet or slightly exceed analysts' forecasts following the SEC's issuance of new C&DIs.

Doyle et al. (2013) examine the market response associated with meeting and exceeding analysts' forecasts using non-GAAP earnings exclusions. If market participants are able to detect opportunistic use of non-GAAP earnings exclusions to exceed earnings benchmarks, market participants will discount the earnings surprise when income-increasing

non-GAAP exclusions are used. Heflin and Hsu (2008) suggest that Regulation G reduces the association between returns and earnings surprise for firms with high exclusions. The reduction in the coefficient of earnings surprise (i.e., ERCs) is that market participants place less weight on post-Regulation G earnings when exclusions are present.

My third hypothesis focuses on the market reaction to earnings announcements before and after the regulatory and interpretive guidance changes. Both changes (Regulation G and C&DIs) can be argued to improve the quality of non-GAAP earnings announcements by improving the exclusion process. With a higher quality reporting process, market participants would have greater quality information for predicting future outcomes and prices. Accordingly, after one or two quarters under the new reporting regime, analysts and other market participants would be better able to anticipate (and impound in prices) the upcoming earnings announcement. If market participants can better anticipate a company's future, earnings announcements will contain less surprise on average.

The market response (ERCs) will change, but this change will be conditional upon the extent to which the market is able to incorporate the higher quality information into the expectation-forming process. Analysts' forecasts (i.e., a component of earnings surprise estimation) are a proxy for market expectations. Accordingly, we hypothesise that:

H_{3a}: *Earnings Response Coefficients (ERCs) for firms in the post-Regulation G period is lower than in the pre-Regulation G period.*

H_{3b}: *Earnings Response Coefficients (ERCs) for firms in the post-C&DIs period is lower than in the pre-C&DIs period.*

3. Sample and research design

As in previous literature (e.g., Bradshaw and Sloan, 2002; Doyle et al., 2003; Heflin and Hsu, 2008; Kolev et al., 2008; Kyung, 2014), this study employs IBES actual earnings per share (IBES item VALUE) to proxy for the non-GAAP earnings figures reported by managers in press releases. IBES uses the quarterly press release as its source for the actual earnings per share; and Bhattacharya et al. (2003) find that over 65 percent of their hand-collected non-GAAP earnings figures in the press releases perfectly match the IBES actual earnings numbers. Further, investors focus most on IBES derived exclusions, implying that it is most informative to determine the underlying reasons for these exclusions, and using IBES actual earnings maximises the statistical power of the analysis (Marques, 2006).

Using data from IBES Detail History File, IBES Unadjusted Summary Statistics, CRSP Daily Stock/Security File, and CRSP/Compustat Merged–Fundamentals Quarterly, the empirical tests employ the 48 quarters from the first calendar quarter of 2000 through the fourth calendar quarter of 2012 (i.e., this time span allows for equal periods [12 quarters] before and after the initial SEC Regulation G and C&DIs, respectively).¹⁰ This study excludes firm-quarter observations in 2008 due to the U.S. financial crisis. The final sample for H_{1a} and H_{1b} , H_{2a} and H_{2b} has 78,634 and 79,160 firm-quarter observations respectively with non-missing values for each of the dependents, exclusions and control variables needed to test the hypotheses. To test H_{3a} and H_{3b} , we use a sample of 13,810 observations.

¹⁰ I use two different IBES files: actual EPS as non-GAAP earnings from IBES Detail History File (VALUE item) and median value as analysts' forecasts from IBES Unadjusted Summary Statistics (MEDEST item). I also calculate 3_day_MAR from CRSP Daily Stock/Security File.

3.1 Non-GAAP and GAAP variable measurement

This study estimates a variable, *Total_Exclusions* as *Non_GAAP_Earnings* (i.e., IBES actual earnings per share [IBES item VALUE]) less *GAAP_Earnings* (i.e., earnings per share before extraordinary items from CRSP/Compustat [EPSPXQ]). Following Doyle et al. (2003; 2013) and Kolev et al. (2008), a variable, *Special_Items*, is determined as operating earnings per share from Quarterly CRSP/Compustat data (OPEPSQ) less *GAAP_Earnings* per share. Then *Other_Exclusions* are determined as *Total_Exclusions* less *Special_Items*. A positive value of *Total_Exclusions*, *Special_Items*, and/or *Other_Exclusions* indicates an income-decreasing expense was excluded from non-GAAP Earnings. *POST* is a dummy variable that equals one if the observation falls between *q1* 2003 and *q4* 2005 (inclusive) for Regulation G sample, as well as between *q1* 2010 and *q4* 2012 (inclusive) for C&DIs, and zero otherwise respectively.

3.1.1 Selection of dependent variables

The dependent variable of H_{1a} and H_{1b} is *SUM_FutOpEarn*, determined as operating earnings per share from Quarterly CRSP/Compustat data (OPEPSQ) summed over quarters *q+1* through quarter *q+4*. Kolev et al. (2008), Frankel et al. (2011), Curtis et al. (2014), and Kyung (2014) propose that this dependent variable is well suited for exploring the research questions since operating earnings per share as determined by Quarterly CRSP/Compustat data remove transitory and non-recurring special items but contain recurring components that might appear in firms' other exclusions from non-GAAP earnings. As such, it most approximates the notion of more persistent and permanent earnings. For H_{2a} and H_{2b} , the dependent variable is *MEF* (Meet or Exceed Analysts' Forecasts), which is a dummy variable equal to one if the current quarter *q* of earnings surprise (i.e., *Non_GAAP_Earnings* less

median value of IBES actual earnings [IBES item MEDEST] as earnings benchmarks) is greater than or equal to zero, and zero otherwise. To test H_{3a} and H_{3b} , the dependent variable, *3_day_MAR* (Market-Adjusted Return) represents the sum of difference between firm's value-weighted return, inclusive of dividends and other distributions, from one day before to one day after the IBES earnings announcement date, less the return on the value-weighted S&P 500 as a market portfolio from CRSP Daily Stock/Security file. Following Doyle et al. (2003; 2013), all independent variables are decile-ranked and take value between zero and one (i.e., [decile less one]/nine).

3.1.2 Additional control variables

Following Kolev et al. (2008), Frankel et al. (2011), and Kyung (2014), this study includes five additional control variables in the regression analysis to control for potential correlated omitted variables, such as *Growth*, *Ln(Size)*, *Loss*, *Earnings_Volatility*, and *Book_to_Market_Assets*, each of which is anticipated to be correlated with both *Non_GAAP_Earnings* and *Future-Operating_Earnings*.

Those control variables are identified as follows, with Quarterly CRSP/Compustat and CRSP Daily Stock/Security data: *Growth* is the increment in sales revenue (CRSP/Compustat item SALEQ) over the same quarter in the prior year, scaled by ordinary shares outstanding. *Ln(Size)* is the firm's total assets at the end of quarter (CRSP/Compustat item ATQ). *Loss* is a dummy variable equal to one if *GAAP_Earnings* figure in quarter q is less than zero, and zero otherwise. *Earnings_Volatility* is the standard deviation of return on assets (ROA) [CRSP/Compustat item NIQ divided by CRSP/Compustat item ATQ] over the previous two years (i.e., eight preceding quarters). *Book_to_Market_Assets* is the book value of equity (CRSP/Compustat item CEQQ) divided by the book value of debt (CRSP/Compustat item

DLCQ plus CRSP/Compustat item DLTQ) plus market value of equity (CRSP/Compustat item PRCCQ multiplied by CRSP/Compustat item CSHOQ) at the end of quarter.

This research further employs the natural logarithm of $Ln(Size)$ (i.e., total assets) in the regression since this variable is significantly skewed. To control for scale efficacies in the regression analysis, following Kolev et al. (2008) and Frankel et al. (2011), we divide variables such as *SUM_FutOpEarn*, *GAAP_Earnings*, *Non_GAAP_Earnings*, *Total_Exclusions*, *Special_Items*, *Other_Exclusions*, and *Growth* by total assets per share; and winsorize the top and bottom of two percent of the distribution of all continuous variables to avoid undue influence by outliers.¹¹ Following Kolev et al. (2008) and Kyung (2014), we estimate ordinary least squares regression with standard errors adjusted for serial correlation and heteroscedasticity in the estimates.

3.2 Empirical regression models

We predict the enhancement in the quality of exclusions from non-GAAP earnings which is explicitly measured by regression analysis following the Regulation G and SEC's C&DIs periods. To test H_{1a} and H_{1b} , this study replicates the assumptions of Kolev et al. (2008) and Kyung (2014) for the quality of non-GAAP earnings exclusions in the Regulation G and SEC's new C&DIs periods. Following Doyle et al. (2003) and Kolev et al. (2008), this study defines high-quality exclusions to be those that are expected to have the least predictive power for future operating earnings; and estimates the following the cross-sectional pooled regression equations:

¹¹ Most previous papers are winsorized at the top and bottom of one percent, but I did at two percent due to the extreme values of exclusion variables and *Growth* control variable.

$$\begin{aligned}
SUM_FutOpEarn_{q+1 \text{ to } q+4} = & \beta_0 + \beta_1 Non_GAAP_Earnings_q + \beta_2 Total_Exclusions_q + \\
& \beta_3 POST + \beta_4 Total_Exclusions_q \times POST + \beta_5 Growth + \beta_6 Ln(Size) + \beta_7 Loss + \\
& \beta_8 Earnings_Volatility + \beta_9 Book_to_Market_Assets + u_{q+1 \text{ to } q+4}
\end{aligned} \tag{1}$$

Variables included in this model are as follows:

<i>SUM_FutOpEarn:</i>	operating earnings per share from CRSP/Compustat (OPEPSQ) summed over quarters from $q+1$ through $q+4$;
<i>GAAP_Earnings:</i>	basic earnings per share before extraordinary items from CRSP/Compustat (EPSPXQ);
<i>Non_GAAP_Earnings:</i>	IBES reported actual basic earnings per share (IBES item VALUE);
<i>Total_Exclusions:</i>	<i>Non_GAAP_Earnings</i> less <i>GAAP_Earnings</i> ;
<i>POST:</i>	a dummy variable that is equal to one if the firm-quarter observation occurs between 2003 $q1$ and 2005 $q4$ (inclusive) as well as 2010 $q1$ and 2012 $q4$ (inclusive), and zero otherwise;
<i>Special_Items:</i>	operating income (CRSP/Compustat item OPEPSQ) less <i>GAAP_Earnings</i> from CRSP/Compustat;
<i>Other_Exclusions:</i>	<i>Total_Exclusions</i> less <i>Special_Items</i> ; a positive value of <i>Total_Exclusions</i> , <i>Special_Items</i> , and/or <i>Other_Exclusions</i> indicates an income-decreasing expense was excluded from non-GAAP earnings;
<i>Growth:</i>	incremental in sales revenue (CRSP/Compustat item SALEQ) over the same quarter in the prior year, on a per share basis;
<i>Ln(Size):</i>	natural logarithm of total assets (CRSP/Compustat item ATQ) corresponding to quarter q ;
<i>Loss:</i>	a dummy variable equal to one if <i>GAAP_Earnings</i> for the quarter is less than zero, and zero otherwise;
<i>Earnings_Volatility:</i>	standard deviation of return on assets (ROA) over preceding eight quarters (CRSP/Compustat item NIQ divided by CRSP/Compustat item ATQ);
<i>Book_to_Market_Assets:</i>	book value of equity (CRSP/Compustat item CEQQ) divided by the book value of debt (CRSP/Compustat item DLCQ plus CRSP/Compustat item DLTQ) plus market value of equity (CRSP/Compustat item PRCCQ multiplied by CRSP/Compustat item CSHOQ);

It is not the direction but the significance of the β_2 and β_4 coefficients that matters. If the exclusion is good quality (i.e., mostly transitory items), then β_2 would be expected to have an insignificant coefficient (i.e., almost zero value). Alternatively, if the exclusion is bad quality, then we expect that the absolute value of β_2 is significantly non-zero. Further, if the exclusion is bad quality, but made the improvement with the Regulation G and C&DIs, then we expect that absolute value of β_2 and β_4 are significantly non-zero and are opposite in

direction to each other; the absolute magnitude of β_4 is less than absolute magnitude of β_2 so that it brings it closer to zero.

For example, in equation (1), if the coefficient on *Total_Exclusions* (β_2) is negative and statistically significant to the *SUM_FutOpEarn* in both pre-event periods, the exclusions include recurring items, which means low quality of exclusions; and non-GAAP earnings are less permanent earnings (i.e., less informative). Then if the coefficient on the interaction variable between *Total_Exclusions* and *POST* (β_4) is positive and significant, the incremental effect between β_2 and β_4 is still negative but closer to zero, which indicates that the quality of exclusions is enhanced after introducing SEC new events.

$$\begin{aligned} \text{SUM_FutOpEarn}_{q+1 \text{ to } q+4} = & \beta_0 + \beta_1 \text{Non_GAAP_Earnings}_q + \beta_2 \text{Special_Items}_q + \\ & \beta_3 \text{Other_Exclusions}_q + \beta_4 \text{POST} + \beta_5 \text{Special_Items}_q \times \text{POST} + \beta_6 \text{Other_Exclusions}_q \\ & \times \text{POST} + \beta_7 \text{Growth} + \beta_8 \text{Ln(Size)} + \beta_9 \text{Loss} + \beta_{10} \text{Earnings_Volatility} + \\ & \beta_{11} \text{Book_to_Market_Assets} + u_{q+1 \text{ to } q+4} \end{aligned} \quad (2)$$

To test H_{2a} and H_{2b} , we use a probit regression that helps to control for other firm characteristics, to test whether positive exclusions are used to meet or slightly exceed analysts' forecasts:

$$\begin{aligned} \text{MEF}_q = & \beta_0 + \beta_1 \text{Positive_Total_Exclusions}_q + \beta_2 \text{POST} + \beta_3 \text{Positive_Total_Exclusions}_q \times \\ & \text{POST} + \beta_4 \text{Growth} + \beta_5 \text{Ln(Size)} + \beta_6 \text{Loss} + \beta_7 \text{Earnings_Volatility} + \\ & \beta_8 \text{Book_to_Market_Assets} + u_q \end{aligned} \quad (3)$$

$$\begin{aligned} \text{MEF}_q = & \beta_0 + \beta_1 \text{Positive_Special_Items}_q + \beta_2 \text{Positive_Other_Exclusions}_q + \beta_3 \text{POST} + \\ & \beta_4 \text{Positive_Special_Items}_q \times \text{POST} + \beta_5 \text{Positive_Other_Exclusions}_q \times \text{POST} + \\ & \beta_6 \text{Growth} + \beta_7 \text{Ln(Size)} + \beta_8 \text{Loss} + \beta_9 \text{Earnings_Volatility} + \\ & \beta_{10} \text{Book_to_Market_Assets} + u_q \end{aligned} \quad (4)$$

Variables included in this model are as follows:

MEF (Meet or Exceed Analysts' Forecasts): a dummy dependent variable equal to one if the current quarter q of earnings surprise (i.e., *Non_GAAP_Earnings* less median IBES actual earnings (IBES item MEDEST) as earnings benchmarks) is greater than or equal to zero, and zero otherwise;

Positive_Total_Exclusions: a dummy variable equal to one if *Total_Exclusions* are greater than zero, and zero otherwise;

Positive_Other_Exclusions: a dummy variable equal to one if *Other_Exclusions* are greater than zero, and zero otherwise;

Positive_Special_Items: a dummy variable equal to one if *Special_Items* are greater than zero, and zero otherwise.

In equation (3), if the coefficient on the *Positive_Total_Exclusions* variable (β_1) is positive and statistically significant to the current quarter q of *MEF* (Meet or Exceed Analysts' Forecasts), this indicates that firms with the use of positive exclusions from non-GAAP earnings tend to meet or exceed more often in the pre-event periods.

H_{1a} , H_{1b} , H_{2a} , and H_{2b} essentially replicate Kolev et al. (2008) and Kyung (2014) to verify their results and my sample selection proves. H_{3a} and H_{3b} then extends the investigation – beyond consideration of how the non-GAAP announcement information maps into future earnings and analyst accuracy – to the impact that the institutional changes have on price informativeness of earnings, through ERCs. In addition, the extent of the change in ERCs will depend on the level of exclusions, i.e., the extent to which profits are adjusted for the announcement. Thus we include the dummy variables of positive exclusions to examine the effect of firms with versus without using income-increasing exclusions as follows:

$$\begin{aligned}
3_day_MAR_q = & \beta_0 + \beta_1 Surprise_q + \beta_2 Positive_Total_Exclusions_q + \beta_3 POST + \beta_4 Surprise \\
& q \times POST + \beta_5 Growth + \beta_6 Ln(Size) + \beta_7 Loss + \beta_8 Earnings_Volatility + \\
& \beta_9 Book_to_Market_Assets + u_q
\end{aligned} \tag{5}$$

$$\begin{aligned}
3_day_MAR_q = & \beta_0 + \beta_1 Surprise_q + \beta_2 Positive_Special_Items_q + \\
& \beta_3 Positive_Other_Exclusions_q + \beta_4 POST + \beta_5 Surprise_q \times POST + \beta_6 Growth + \\
& \beta_7 \ln(Size) + \beta_8 Loss + \beta_9 Earnings_Volatility + \beta_{10} Book_to_Market_Assets \\
& + U_q
\end{aligned} \tag{6}$$

Variables included in this model are as follows:

3_day_MAR (Market-Adjusted Return): this dependent variable represents the sum of difference between firm's value-weighted return, inclusive of dividends and other distributions, from one day before to one day after the IBES earnings announcement date, less the return on the value-weighted S&P 500 as a market portfolio from CRSP Daily Stock/Security file;

Surprise: a firm's earnings surprise (*Non_GAAP_Earnings* less the consensus median earnings forecast [IBES item MEDEST]) divided by firm's market price (CRSP/Compustat item PRCCQ).

In equation (5), if the ERCs (β_1), the coefficient on *Surprise*, are positive and significant with *Positive_Total_Exclusions*, then the coefficient on the interaction variable (β_4) between *Surprise* and *POST* will be significantly reduced at the conventional levels; the sum of *Surprise* and its interaction variable is reduced the positive effect in the post-Regulation G and post-C&DIs.

4. Results

4.1 Descriptive statistics and correlations

Table 1 presents the descriptive statistics for main dependent and independent variables. All continuous variables are winsorized at the top and bottom of two percent level to control the effect of firm-quarter observations with extreme outliers. For the Regulation G sample (28,790 firm-quarter observations), the mean (median) *GAAP_Earnings* per share is 0.196 (0.130) and *Non_GAAP_Earnings* per share is 0.240 (0.195). This indicates that *Non_GAAP_Earnings*, on average, exceed *GAAP_Earnings* in the before (after) Regulation G

periods. The mean of *Total_Exclusions*, *Special_Items*, and *Other_Exclusions* is 0.060, 0.025, and 0.032, respectively.¹²

For the C&DIs sample (49,844 firm-quarter observations), *Non_GAAP_Earnings* per share is higher mean (0.308) and median (0.240) than Regulation G sample. The mean of *Total_Exclusions* is increased to 0.127. This is a different result of Kyung (2014) who suggests that SEC's new issuance of C&DIs reduced the differences between *GAAP_Earnings* and *Non_GAAP_Earnings* per share. *Special_Items* are similar to the mean value in both SEC events (0.025 and 0.026, respectively) but *Other_Exclusions* are larger in the C&DIs period (0.093), compared with 0.032 in the Regulation G period.¹³ *SUM_FutOpEarn* are increased from 0.861 to 0.883 over time.

Mean (median) *Growth* is -0.301 (0.000) for the Regulation G period and -0.281 (0.000) for the C&DIs period. This result is quite different with Kolev et al. (2008) and Kyung (2014).¹⁴ Finally, *Earnings_Volatility* is slightly higher in the Regulation G sample rather than in the C&DIs sample. Lougee and Marquardt (2004) indicate that firms with high earnings volatility (e.g., IT technology and pharmaceutical firms with high R&D) are more likely to associate with the disclosure of non-GAAP earnings.

Table 2 presents a pairwise correlation matrix with main dependent and independent variables. *Total_Exclusions* are negatively correlated with *GAAP_Earnings* for Regulation G ($\rho = -0.900$), and C&DIs ($\rho = -0.741$), which is evidence that the disclosure of

¹² The mean of special items as in Kolev et al. (2008) is exactly the same figure of this study (0.025) in the Regulation G period.

¹³ Kyung (2014) indicates the mean of special items as 0.016, which is smaller than that of this study (0.026) for the C&DIs period.

¹⁴ Kolev et al. (2008) find that the mean (median) sales growth is 0.387 (0.160) for the Regulation G period and Kyung (2014) finds that the mean (median) of the same control variable is 0.344 (0.177) for the C&DIs period.

non-GAAP earnings appears when firm's operating earnings are in poor performance. *SUM_FutOpEarn* are positively correlated with *GAAP_Earnings* for Regulation G ($\rho = 0.976$) and C&DIs ($\rho = 0.923$), and are slightly positively correlated with *Non_GAAP_Earnings* for Regulation G ($\rho = 0.079$) and C&DIs ($\rho = 0.067$), which is inconsistent with prior research (e.g., Bradshaw and Sloan, 2002; Bhattacharya et al., 2003; Frankel and Roychowdhury, 2004) that *Non_GAAP_Earnings* are more permanent and relevant than *GAAP_Earnings* in a firm's valuation role.

Further, *Total_Exclusions* and *SUM_FutOpEarn* are negatively correlated for Regulation G ($\rho = -0.897$) and C&DIs ($\rho = -0.716$), consistent with results of Kolev et al. (2008) that non-GAAP earnings may eliminate income-decreasing expenses associated with *SUM_FutOpEarn*. Particularly, *Special_Items* are negatively correlated with *GAAP_Earnings* and *Non_GAAP_Earnings* for both SEC events. *MEF* is positively correlated with *Non_GAAP_Earnings* and *Total_Exclusions* ($\rho = 0.204$ and $\rho = 0.133$, respectively), but is slightly negatively correlated with *SUM_FutOpEarn* ($\rho = -0.076$) and *GAAP_Earnings* ($\rho = -0.079$) for the Regulation G period. This suggests that meeting or exceeding analysts' forecasts is more associated with *Non_GAAP_Earnings* than *GAAP_Earnings*. Similar results for *MEF* correlation with above variables appear in the C&DIs sample. Finally *Surprise* is slightly positively correlated with *3_day_MAR* in both SEC events.

4.2 Results of H_{1a} and H_{1b}

Recall that equations (1) and (2) in section 3.2 define the models to be used for testing H_{1a} and H_{1b} :

$$\begin{aligned} \text{SUM_FutOpEarn}_{q+1 \text{ to } q+4} = & \beta_0 + \beta_1 \text{Non_GAAP_Earnings}_q + \beta_2 \text{Total_Exclusions}_q + \beta_3 \text{POST} + \\ & \beta_4 \text{Total_Exclusions}_q \times \text{POST} + \beta_5 \text{Growth} + \beta_6 \ln(\text{Size}) + \beta_7 \text{Loss} + \beta_8 \text{Earnings_Volatility} + \\ & \beta_9 \text{Book_to_Market_Assets} + u_{q+1 \text{ to } q+4} \end{aligned} \quad (1)$$

$$\begin{aligned}
SUM_FutOpEarn_{q+1 \text{ to } q+4} = & \beta_0 + \beta_1 Non_GAAP_Earnings_q + \beta_2 Special_Items_q + \\
& \beta_3 Other_Exclusions_q + \beta_4 POST + \beta_5 Special_Items_q \times POST + \beta_6 Other_Exclusions_q \times POST + \\
& \beta_7 Growth + \beta_8 \ln(Size) + \beta_9 Loss + \beta_{10} Earnings_Volatility + \beta_{11} Book_to_Market_Assets + u_q \\
& + 1 \text{ to } q+4
\end{aligned}
\tag{2}$$

Table 3 presents the results for H_{1a} and H_{1b} : Regulation G and the SEC's issuance of C&DIs enhance the quality of the *Total_Exclusions* and their components (i.e., *Special_Items* and *Other_Exclusions*) from non-GAAP earnings. We estimate cross-sectional pooled ordinary least squares regression with standard errors adjusted for serial correlation and heteroscedasticity in the estimates. We find that the coefficient on *POST* in the C&DIs sample is more positive and significant than that in the Regulation G period, suggesting that SEC staff interpretations allow firms to disclose their non-GAAP earnings more frequently.¹⁵ *Total_Exclusions* are negatively related with *SUM_FutOpEarn* for both Regulation G (-1.275) and C&DIs (-1.096). This suggests that non-GAAP exclusions are not perfectly transitory items (i.e., recurring items) during the both pre-SEC events.

Further, the interaction variable between *Total_Exclusions* and *POST* tests the disclosure of non-GAAP earnings has enhanced the quality of non-GAAP exclusions following the Regulation G and C&DIs. The coefficient on this interaction is positive (0.244) and significant ($p = 0.000$) for the Regulation G period, and 0.124 ($p = 0.000$) for the C&DIs period; the effect of this interaction on the effect non-GAAP exclusions is to make latter less negative (i.e., $-1.275 + 0.244 = -1.031$ and $-1.096 + 0.124 = -0.972$, respectively). This indicates that the quality of exclusions from non-GAAP earnings is significantly improved in each post-period (i.e. more transitory items excluded). Thus, this result is consistent with H_{1a}

¹⁵ Kyung (2014) also finds that firms more often disclose non-GAAP earnings following the new staff interpretations, suggesting that non-binding SEC's new guidance affects firm's voluntary disclosure practice.

and H_{1b} , which both posit that the quality of non-GAAP earnings exclusions has been enhanced after SEC regulatory and interpretive guidance changes.

H_{1a} and H_{1b} also examine whether Regulation G and C&DIs affect the quality of exclusions components (i.e., *Special_Items* and *Other_Exclusions*). *Special_Items* are negative (-2.094 and -3.474, respectively) and significant at the one percent level in each pre-period; then the interaction between *Special_Items* and *POST* is positive (6.013 and 9.293) and significant in later time of both periods. Thus, the sum of *Special_Items* and this interaction term becomes positive (i.e., $-2.094 + 6.013 = 3.919$ and $-3.474 + 9.293 = 5.819$, respectively) in the later time of both periods. This suggests that the quality of *Special_Items* enhances after SEC regulatory and interpretive guidance changes.¹⁶ Doyle et al. (2003; 2013) argue that *Other_Exclusions* are considered as the low-quality exclusions because those are significantly predictive for *SUM_FutOpEarn*, determined by managers' own voluntary discretions, and used opportunistically to mislead investors before the SEC intervention. Consistent with the prior research (e.g., Doyle et al., 2003; Kolev et al., 2008; Kyung, 2014), the interaction variables between *Other_Exclusions* and *POST* are positive (0.167 and 0.062) and significant in both SEC regulatory and interpretive guidance changes. The quality of *Other_Exclusions* has improved following the Regulation G and C&DIs (i.e., more transitory items in the *Other_Exclusions* component). These results are consistent with H_{1a} and H_{1b} as Kolev et al. (2008) find *Other_Exclusions* are more transitory after Regulation G.

¹⁶ In contrast, Kolev et al. (2008) finds that the coefficient on special items is significantly positive and the estimated coefficient on the interaction between special items and *POST* is negative and significant, suggesting that special items have become of lower quality over Regulation G period.

4.3 Results of H_{2a} and H_{2b}

Recall that equations (3) and (4) in section 3.2 define the models to be used for testing

H_{2a} and H_{2b} :

$$MEF_q = \beta_0 + \beta_1 Positive_Total_Exclusions_q + \beta_2 POST + \beta_3 Positive_Total_Exclusions_q \times POST + \beta_4 Growth + \beta_5 \ln(Size) + \beta_6 Loss + \beta_7 Earnings_Volatility + \beta_8 Book_to_Market_Assets + u_q \quad (3)$$

$$MEF_q = \beta_0 + \beta_1 Positive_Special_Items_q + \beta_2 Positive_Other_Exclusions_q + \beta_3 POST + \beta_4 Positive_Special_Items_q \times POST + \beta_5 Positive_Other_Exclusions_q \times POST + \beta_6 Growth + \beta_7 \ln(Size) + \beta_8 Loss + \beta_9 Earnings_Volatility + \beta_{10} Book_to_Market_Assets + u_q \quad (4)$$

Table 4 presents the results for H_{2a} and H_{2b} : Firms using positive exclusions from non-GAAP earnings to increase non-GAAP earnings financial metrics are less likely to meet or slightly exceed analysts' forecasts following the Regulation G and SEC's issuance of C&DIs. We use a probit regression to examine the effect of non-GAAP exclusions on the probability to exceed consensus forecasts. Standard errors are adjusted for serial correlation and heteroscedasticity in the estimates. If managers opportunistically report non-GAAP earnings to meet or slightly exceed analysts' forecasts, we expect positive relation between positive exclusions and *MEF* dependent variable (e.g., Doyle et al., 2013). The main independent dummy variable of *Positive_Total_Exclusions* is equal to one if IBES actual earnings per share (*Non_GAAP_Earnings*) exceeds *GAAP-Earnings* per share, and zero otherwise (e.g., Bradshaw and Sloan, 2002; Brown and Sivakumar, 2003; Doyle et al., 2003; Heflin and Hsu, 2008; Doyle et al., 2013; Kyung, 2014). We find the evidence that the coefficient on this variable is positive (0.430 and 0.525, respectively) and statistically significant in the pre-period of both SEC events.

The interaction variable between *Positive_Total_Exclusions* and *POST* is negative (-0.079 and -0.067, respectively) and statistically significant at one percent level in both SEC

events. The net effect of *Positive_Total_Exclusions* and this interaction variable is still positive (i.e., $0.430 + (-0.079) = 0.351$ and $0.525 + (-0.067) = 0.458$, respectively) and significant but reduces the positive effect in both post-periods. This result sheds light on H_{2a} and H_{2b} that firms using positive non-GAAP earnings exclusions particularly to increase non-GAAP earnings metrics are less likely to meet or slightly exceed analysts' forecasts following the Regulation G and C&DIs. Further, other dummy independent variables, *Positive_Special_Items* and *Positive_Other_Exclusions* are positive (0.092 and 0.458, respectively) and significant in the pre-Regulation G period; negative (-0.007) and insignificant on *Positive_Special_Items* in the pre-C&DIs period. The interaction variable between *Positive_Special_Items* and *POST* is statistically significant and negative (-0.091) for the Regulation G period, but is positive (0.092) and significant at the one percent level for the C&DIs period.¹⁷ *Positive_Other_Exclusions* interacted with *POST* are both negative (-0.111 and -0.067, respectively) and significant in both SEC periods. Thus, the sum of *Positive_Other_Exclusions* and this interaction variable becomes less positive (i.e., $0.458 + (-0.111) = 0.347$ and $0.537 + (-0.067) = 0.470$, respectively) in both post-periods. This is consistent with H_{2a} and H_{2b} , that *Other_Exclusions* are less used for exceeding analysts' forecasts in both later time periods.

4.4 Results of H_{3a} and H_{3b}

Recall that equations (5) and (6) in section 3.2 define the models to be used for testing H_{3a} and H_{3b} :

$$3_day_MAR_q = \beta_0 + \beta_1 Surprise_q + \beta_2 Positive_Total_Exclusions_q + \beta_3 POST + \beta_4 Surprise_q \times POST + \beta_5 Growth + \beta_6 Ln(Size) + \beta_7 Loss + \beta_8 Earnings_Volatility + \beta_9 Book_to_Market_Assets + U_q \quad (5)$$

¹⁷ In contrast, Kyung (2014) finds an inconclusive result that the coefficient of positive special items is positive (0.059) and significant but its interaction variable (positive special items \times POST) is insignificantly negative (-0.025) in the C&DIs period.

$$3_day_MAR_q = \beta_0 + \beta_1 Surprise_q + \beta_2 Positive_Special_Items_q + \beta_3 Positive_Other_Exclusions_q + \beta_4 POST + \beta_5 Surprise_q \times POST + \beta_6 Growth + \beta_7 Ln(Size) + \beta_8 Loss + \beta_9 Earnings_Volatility + \beta_{10} Book_to_Market_Assets + u_q \quad (6)$$

Table 5 presents the results for H_{3a} and H_{3b} : earnings response coefficients (ERCs) for firms in the post-Regulation G (C&DI) period are lower than in the pre-Regulation G period and in the pre-C&DIs period. The dependent variable, 3_day_MAR (Market-Adjusted Return), is defined as the sum of difference between firm's value-weighted return, inclusive of dividends and other distributions, from one day before to one day after the IBES earnings announcement date, less the return on the value-weighted S&P 500 as a market portfolio from CRSP Daily Stock/Security file. Following Doyle et al. (2003; 2013), all independent variables are decile-ranked and take value between zero and one (i.e., [decile less one]/nine). We estimate the cross-sectional pooled ordinary least squares regression with standard errors adjusted for serial correlation and heteroscedasticity in the estimates. We estimate the market response (ERCs) to earnings announcements around the both SEC regulatory and interpretive guidance changes. We also include the dummy variables of positive exclusions to examine the effect of firms with versus without using income-increasing exclusions.

In the C&DIs period, as previous research (e.g., Doyle et al., 2003; Heflin and Hsu, 2008; Doyle et al., 2013), *Positive_Total_Exclusions* are negatively associated with dependent variable, 3_day_MAR , and the ERCs (the coefficient on *Surprise*) is positive (0.0011) and significant ($p = 0.000$), however, interaction variable between *Surprise* and *POST* is significantly negative (-0.0013) at the one percent level.¹⁸ The incremental effect of the coefficients on the *Surprise* and its interaction variables equals -0.0002 [i.e., 0.0011+ (-

¹⁸ Firms with positive non-GAAP exclusions may have a more negative effect on ERCs in the post-C&DIs period.

0.0013)] and significant at the one percent level. This suggests that investors now negatively value the ERCs following the SEC's new issuance of staff interpretations. This result is consistent with H_{3b} . However, the effects of *Positive_Special_Items* and *Positive_Other_Exclusions* are insignificantly related with the dependent variable, *3_day_MAR* in the C&DIs period.¹⁹

In contrast, for the Regulation G sample, *Positive_Total_Exclusions* is also negatively (-0.0003) and significantly related with *3_day_MAR*. The coefficient of *Surprise* (ERCs) is negative (-0.0004) and significant ($p = 0.001$), however, interaction variable between *Surprise* and *POST* is positive (0.0009) and significant at the one percent level. The sum of the coefficient of these two variables is positive (0.0005), [i.e., $-0.0004 + 0.0009$] and significant, indicating that Regulation G increases the earnings surprise (ERCs). This result is not consistent with H_{3a} .²⁰ Further, there are similar results from the use of *Positive_Special_Items* and *Positive_Other_Exclusions* (i.e., both positive exclusions are negative and significant) in which the interaction variable between *Surprise* and *POST* are positive (0.0009) and significant at the one percent level in the SEC regulatory change. This unexpected result may be caused by the different size of firm-quarter observations and time periods used in H_{3a} and H_{3b} test compared with other prior research (e.g., Doyle et al., 2003; Marques, 2006; Yi, 2007; Heflin and Hsu, 2008, Doyle et al., 2013). My sample for H_{3a} and H_{3b} is collected from merging four different files among IBES Detail History and IBES Unadjusted Summary Statistics files, CRSP Daily Stock/Security File, and CRSP/Compustat

¹⁹ In contrast, Kyung (2014) finds that both positive special items and positive other exclusions are significant and negative coefficients.

²⁰ These results are similar to those in Yi (2007) who finds that the Regulation G increases ERCs to non-GAAP earnings with small sample of 2,138 firm-quarters, but Heflin and Hsu (2008) find different results (sample size of 41,611) that the non-GAAP regulations reduce the coefficient on surprise (ERCs) because the investors place less weight on surprise in the post-Regulation G period.

Merged–Fundamentals Quarterly. Particularly during the merging these files, we considerably drop the missing or unmatching accounting data and have only a sample size of 13,810 in comparison to the sample (78,634 and 79,160) of H_{1a} and H_{1b} , H_{2a} and H_{2b} . Thus, we also undertake robustness tests for the validity of this sample (H_{3a} and H_{3b}) and other replication part of hypotheses (H_{1a} , H_{1b} , H_{2a} , and H_{2b}) with non-zero exclusions subsamples, which are discussed in the next section.

4.5 Robustness tests

As the results of this study are a little different to some extent from prior research (e.g., Doyle et al., 2003; Heflin and Hsu, 2008; Kolev et al., 2008; Doyle et al., 2013; Kyung, 2014), we include a number of non-zero exclusions subsamples (see Figure 2 below) for the robustness tests. By doing so, we restrict my samples to firms whose exclusions were non-zero, because we are interested in testing the theoretical hypotheses for firms with real non-GAAP exclusions during the SEC events. If firm behavior around exclusions is expected to change, then it makes sense to consider only the firms likely to be affected by the regulatory and interpretive guidance changes. Each firm-quarter observations are selected by pre- and post-period of Regulation G and C&DIs from the full samples. Figure 2 summarises the robustness tests – the results are tabulated in the appendix. We discuss selected results below.

Figure 2 Subsample results table

Subsamples	Sample Size			Regulation G			C&DIs		
	H_{1a}	H_{1b}	H_{3a}	H_{1a}	H_{2a}	H_{3a}	H_{1b}	H_{2b}	H_{3b}
	H_{2a}	H_{2b}	H_{3b}						
Top 50 percent of non-zero exclusions (Tables A1-A3)	39,205	6,435		☑	×	✓	☑	✓	☑
Top and bottom of 25 percent of non-zero exclusions (Tables A4-A6)	38,767	6,815		☑	✓	✓	☑	×	☑
Top 20 percent of non-zero exclusions (Tables A7-A9)	15,504	2,726		✓	✓	☑	✓	×	☑
Positive exclusions (Tables A10-A12)	45,654	6,160		☑	✓	✓	☑	☑	☑
Negative exclusions (Tables A13-A15)	33,286	7,651		×	×	×	✓	×	✓
Top 20 percent of positive exclusions (Tables A16-A18)	9,010	1,211		✓	×	×	✓	✓	✓
Top 20 percent of Negative exclusions (Tables A19-A21)	6,769	1,525		×	×	×	✓	✓	×
Top and bottom 20 percent of positive special items (Tables A22-A24)	8,115	1,265		☑	×	×	☑	×	×
Top and bottom 20 percent of positive other exclusions (Tables A25-A27)	17,702	2,440		☑	✓	✓	☑	✓	✓

Note: ☑ indicates strongly supporting the relevant hypothesis; ✓ indicates partially supporting for the relevant hypothesis; × indicates not supporting the relevant hypothesis. Strong support means that coefficients on both the exclusions variable(s) and the interaction term(s) are significant and in the right direction. Partial support means that the consistent result obtains in only one of these two circumstances – the exclusion(s) or the interaction(s).

Row 1 in Figure 2 describes the tests for the hypotheses in samples consisting of the top 50 percent (by size) of non-zero exclusions. Coefficients on exclusions and interactions are significant and in the right direction: both the coefficients on the exclusion variable and on the interaction variable between non-GAAP exclusions and *POST* are statistically significant at the one percent level in both SEC regulatory and interpretive guidance changes. This result is consistent with H_{1a} and H_{1b} .

Table A2 reports an insignificant coefficient on the interaction variable between positive non-GAAP exclusions and *POST*. This result is not consistent with H_{2a} and H_{2b} . For H_{3a} and H_{3b} , the results in Table A3 suggest that the interaction variable (*Surprise* \times *POST*) is negative and significant at the one percent level during the C&DIs period (i.e., this is consistent with H_{3b}), but the same interaction variable for the Regulation G period is opposite in direction. This suggests that Regulation G increases the investors' response (ERCs) in the market during the post-Regulation G period. This result is not consistent with H_{3a} . Further, this result differs from those in Heflin and Hsu (2008), who conclude the Regulation G reduces the association between returns and earnings surprise.

It can be argued that, if the regulators changes have an effect, the effect is likely to be more pronounced the larger the exclusions. The subsample reported in row 2 of figure 2 consists of the extreme quartiles: top and bottom of 25 percent of non-zero exclusions. The picture here is similar to that in the top 50 percent. Table A4 reports significant coefficients for both SEC events, consistent with H_{1a} and H_{1b} .

For H_{2a} and H_{2b} , Table A5 reports a statistically significant and positive on the interaction variable between exclusions and *POST* in the Regulation G period, partially consistent with H_{2a} but insignificant during the C&DIs period, not consistent with H_{2b} . Lastly, Table A6 indicates a significant and negative coefficient on interaction variable between *Surprise* and *POST* in the C&DIs period, consistent with H_{3b} but, for the Regulation G period, the coefficient on the same interaction variable is significant and positive, not consistent with H_{3a} .

As most of exclusions are positive, the row 1 results arbitrarily select only those positive exclusions which are above the median of all exclusions. In contrast, in Tables A10-A12 we select all positive exclusions. This result is one of the most consistent results with my hypotheses: strong or partial support is found for all three hypotheses in both SEC events.

Table A10 indicates a significant and positive coefficient on interaction variable between exclusions and *POST* in both SEC events; Table A11 reports a significant and negative coefficient on the interaction variable between *Positive_Total_Exclusions* and *POST* in the C&DIs period. Table A12 suggests that Regulation G has increased the ERCs to non-

GAAP exclusions as in Yi (2007) but ERCs are reduced during the post-C&DIs because investors and shareholders place less weight on earnings forecasts errors (*Surprise*).

We have undertaken my tests using regression analysis. Regression techniques assume a test for a linear relationship between variables. If the relationship is not linear (e.g., curvilinear), then fitting a straight line across the range of data may not detect a relationship that exists. Generally, however, no matter whether the relationship is linear or curvilinear, if a relationship does in fact exist, then the value of the dependent variable will be higher for one extreme of the independent variable than for the other. With sufficient data, we can test this directly by fitting a regression only to the extremes. This is what is reported in row 9, where only data from the top and bottom quintiles of positive exclusions are included in the regression analysis. As visible in Figure 2, the results are generally consistent with the hypotheses. This suggests that one reason for weak results elsewhere may be that the relationship between exclusions and the dependent variables is due to nonlinear relationships between the independent and dependent variables.

For example, such as negative exclusions (row 5), top 20 percent of positive exclusions (row 6), top 20 percent of negative exclusions (row 7), top and bottom 20 percent of positive special items (row 8) indicate, in general, statistically insignificant and are not consistent with my theoretical hypotheses; some exclusion variables omitted due to the collinearity throughout the regression process; these subsamples have relatively small observations compared with the others.

In brief, we examined changes to the quality of non-GAAP exclusions, frequency of exceeding analysts' forecasts, and market response (ERCs) in response to SEC regulatory and interpretive guidance changes; most of large subsamples are consistent with my H_{1a} , H_{1b} , H_{3a} and H_{3b} . Overall, both Regulation G and C&DIs seem to have mitigated the opportunistic use of non-GAAP reporting in compliance with SEC's objective to enhance the quality of the exclusions from non-GAAP earnings.

5. Conclusions

In this research, we address various consequences of the non-GAAP disclosure resulting from the SEC regulatory and interpretive guidance changes (i.e., Regulation G and

C&DIs). Similarly to Kolev et al. (2008) and Kyung (2014), we find (i) that both Regulation G and C&DIs are associated with an increase in the quality of non-GAAP earnings exclusions and, (ii) a decline in the probability of meeting or slightly exceeding analysts' forecasts when firms exclude positive non-GAAP exclusions.

We also hypothesise that the market response, measured as earnings response coefficients (ERCs), will change, but this change will be conditional upon the extent to which the market is able to incorporate the higher quality information into the expectation-forming process. We find (iii) a reduction in the ERCs during the post-C&DIs period, but an increase in the post-Regulation G period.

A key limitation of my research is the use of IBES actual earnings figures as a proxy for non-GAAP earnings. This method provides me with less accurate information about the incidence of disclosure of non-GAAP financial measures, as it has been established there is a significant difference between IBES actual earnings and the earnings figures reported by firms in the press releases (Bhattacharya et al., 2003).

Another limitation of the replication part of this study uses future operating earnings as a measure for current disclosure relevance. However, this is only a valid approach if financial information users fixate on earnings, with non-GAAP earnings merely being considered as "true earnings" with a measurement error. Fixation means that investors fixate upon earnings and fail to attend separately to its components, whether these are non-GAAP earnings and exclusions, or cash flows and accruals. If one of the components (non-GAAP earnings or cash flow) is a more positive forecaster of future operating earnings than the other (accruals or exclusions), investors who neglect this distinction become overly optimistic about the future prospects of firms with high accruals or exclusions and overly pessimistic about the future prospect of firms with low accruals or exclusions. As a result, the former become overvalued, and subsequently earn low abnormal returns, while the latter become undervalued and are followed by high abnormal returns. The extension in this paper, using ERCs (which reflect a real market-formed consensus between investors), can examine these phenomena while addressing the fixation issue.

This study has addressed the usefulness of non-GAAP earnings in terms of how such earnings, in the presence of exclusions, map into future earnings. Future research may

usefully address the degree to which current disclosures they are informative about future cash flows (e.g., Arthur et al., 2010).

References

- Arthur, N., Cheng, M., Czerkowski, R. M. J., March 2010. Cash Flow Disaggregation and the Prediction of Future Earnings. *Accounting & Finance*, Vol. 50, No. 1, 1-30.
- Bhattacharya, N., Black, E. L., Christensen, T. E., Larson, C., 2003. Assessing the relative informativeness and permanence of non-GAAP earnings and GAAP operating earnings. *Journal of Accounting and Economics* 36 (13), 285–319.
- Bhattacharya, N., Black, E., Christensen, T., Mergenthaler, R., 2004. Empirical evidence on recent trends in pro-forma reporting. *Accounting Horizons* 18, 27–43.
- Black, D., Christensen, T., 2009. Managers' use of 'pro-forma' adjustments to meet strategic earnings benchmarks. *Journal of Business Finance and Accounting* 36, 297-326.
- Bowen, R., Davis, A., Matsumoto, D., 2005. Emphasis on pro-forma versus GAAP earnings in quarterly press releases: Determinants, SEC intervention, and market reactions. *The Accounting Review* 80, 1011–1038.
- Bradshaw, M., Sloan, R., 2002. GAAP versus the Street, An empirical assessment of two alternative definitions of earnings. *Journal of Accounting Research* 40, 41-65.
- Brown, L., Sivakumar, K., 2003. Comparing the value relevance of two operating income measures. *Review of Accounting Studies* 8, 561-572.
- Brown, N., Christensen, T., Elliott, W., 2010. The timing of quarterly 'pro-forma' earnings announcements. Working paper, Georgia State University.
- Brown, N., Christensen, T., Elliott, W., Mergenthaler, R., 2012. Investor sentiment and pro-forma earnings disclosures. *Journal of Accounting Research* 50, 1–40.

- Choi, Y. S., Lin, S., Walker, M., Young, S., 2007. Disagreement over the persistence of earnings components: Evidence on the properties of management-specific adjustments to GAAP earnings. *Review of Accounting Studies* 12, 595–622.
- Curtis, A., McVay, S., Whipple, B., 2014. The disclosure of non-GAAP earnings information in the presence of transitory gains. *The Accounting Review*, Vol. 89, No. 3, 933–958.
- Doyle, J., Jennings, J., Soliman, M., 2013. Do managers define non-GAAP earnings to meet or beat analyst forecasts? *Journal of Accounting and Economics* 56, 40–56.
- Doyle, J., Lundholm, R., Soliman, M., 2003. The predictive value of expenses excluded from pro-forma earnings. *Review of Accounting Studies* 8, 145–174.
- Doyle, J., Soliman, M., 2005. Do managers define street earnings to meet or beat analyst forecasts? Working Paper, Utah State University and Stanford University.
- Doyle, J., Soliman, M., 2009. Do managers define ‘street’ earnings to meet or beat analyst forecasts? Working paper, Utah State University.
- Fairfield, P. M., Kitching, K. A., Tang, V. W., 2009. Are special items informative about future profit margins? *Review of Accounting Studies* 2-3, 204–236.
- Frankel, R., McVay, S., Soliman, M., 2011. Non-GAAP earnings and board independence. *Review of Accounting Studies* 16 (4), 719–744.
- Frankel, R., Roychowdhury, S., 2004. Testing explanations for the difference between I/B/E/S and GAAP Earnings. Working Paper, Massachusetts Institute of Technology.
- Frankel, R., Roychowdhury, S., 2009. Are all special items equally special? The predictive role of conservatism. Working paper, Massachusetts Institute of Technology.

Frederickson, J., Miller, J., 2004. Non-GAAP earnings disclosures: Do analysts and nonprofessional investors really differ? *The Accounting Review* 79, 667–686.

Gu, Z., Chen, T., 2004. Analysts' treatment of nonrecurring items in street earnings. *Journal of Accounting and Economics* 38 (1-3), 129–170.

Heflin, F., Hsu, C., 2008. The impact of the SEC's regulation of non-GAAP disclosures. *Journal of Accounting & Economics* 46, 349–365.

Kolev, K., Marquardt, C., McVay, S., 2008. SEC scrutiny and the evolution of non-GAAP reporting. *The Accounting Review* 83, 157–184.

Kyung, H., 2014. Does SEC Interpretive Guidance Affect Firm Behavior? Evidence from non-GAAP Earnings Disclosure. Working Paper, Zicklin School of Business, Baruch College.

Lougee, B., Marquardt, C., 2004. Earnings quality and strategic disclosure, An empirical examination of pro-forma earnings. *The Accounting Review* 79, 769-795.

Marques, A., 2006. SEC interventions and the frequency and usefulness of non-GAAP financial measures. *Review of Accounting Studies* 11, 549–574.

McVay, S., 2006. Earnings management using classification shifting: An examination of core earnings and special items. *The Accounting Review* 81 (3), 501–531.

Yi, H., 2007. Has Regulation G improved the information quality of non-GAAP earnings disclosures? Working Paper, University of Oklahoma.

<http://www.sarbanes-oxley-act.biz/SarbanesOxleySection401.htm>

<http://www.sec.gov/answers/form8k.htm>

<https://www.sec.gov/divisions/corpfin/cfguidance.shtml>

Tables

Table 1
Descriptive Statistics for Regulation G and C&DIs

Variables	Regulation G				C&DIs			
	N	Mean	Median	Std. Dev.	N	Mean	Median	Std. Dev.
<i>SUM_FutOpEarn</i>	28,790	0.861	0.600	1.684	49,844	0.883	0.630	1.703
<i>GAAP_Earnings</i>	28,790	0.196	0.130	0.497	49,844	0.196	0.140	0.507
<i>Non_GAAP_Earnings</i>	28,790	0.240	0.195	0.485	49,844	0.308	0.240	0.524
<i>Total_Exclusions</i>	28,790	0.060	0.060	0.857	49,844	0.127	0.100	0.869
<i>Special_Items</i>	28,790	0.025	0.000	0.146	49,844	0.026	0.000	0.146
<i>Other_Exclusions</i>	28,790	0.032	0.050	0.770	49,844	0.093	0.090	0.791
<i>Growth</i>	28,790	-0.301	0.000	5.260	49,844	-0.281	0.000	5.318
<i>Ln(Size)</i>	28,790	6.114	6.127	2.254	49,844	6.207	6.238	2.155
<i>Loss</i>	28,790	0.313	0.000	0.464	49,844	0.307	0.000	0.461
<i>Earnings_Volatility</i>	28,790	0.131	0.012	0.425	49,844	0.122	0.012	0.423
<i>Book_to_Market_Assets</i>	28,790	0.470	0.387	0.361	49,844	0.454	0.379	0.348
<i>MEF</i>	28,790	0.401	0.000	0.490	49,844	0.488	0.000	0.500
<i>3_day_MAR</i>	5,815	0.0012	0.0014	0.002	7,996	0.0006	0.0005	0.002
<i>Surprise</i>	5,815	-0.0003	0.0000	0.002	8,069	0.0000	0.0000	0.001

<https://www.sec.gov/divisions/corpfin/faqs/nongaapfaq.htm>

<https://www.sec.gov/divisions/corpfin/guidance/nongaapinterp.htm>

GAAP_Earnings: basic earnings per share before extraordinary items from CRSP/Compustat (EPSPXQ); *SUM_FutOpEarn*: operating earnings per share from CRSP/Compustat (OPEPSQ) summed over quarters from $q+1$ through $q+4$; *GAAP_Earnings*: basic earnings per share before extraordinary items from CRSP/Compustat (EPSPXQ); *Non_GAAP_Earnings*: IBES reported actual basic earnings per share (IBES item VALUE); *Total_Exclusions*: *Non_GAAP_Earnings* less *GAAP_Earnings*; *Special_Items*: operating income (CRSP/Compustat item OPEPSQ) less *GAAP_Earnings*; *Other_Exclusions*: *Total_Exclusions* less *Special_Items*; a positive value of *Total_Exclusions*, *Special_Items*, and/or *Other_Exclusions* indicates an income-decreasing expense was excluded from non-GAAP earnings; *Growth*: incremental in sales revenue (CRSP/Compustat item SALEQ) over the same quarter in the prior year, on a per share basis; *Ln(Size)*: natural logarithm of total assets (CRSP/Compustat item ATQ) corresponding to quarter q ; *Loss*: a dummy variable equal to one if *GAAP_Earnings* for the quarter is less than zero, and zero otherwise; *Earnings_Volatility*: standard deviation of return on assets (ROA) over preceding eight quarters (CRSP/Compustat item NIQ divided by CRSP/Compustat item ATQ); *Book_to_Market_Assets*: book value of equity (CRSP/Compustat item CEQQ) divided by the book value of debt (CRSP/Compustat item DLCQ plus CRSP/Compustat item DLTQ) plus market value of equity (CRSP/Compustat item PRCCQ multiplied by CRSP/Compustat item CSHOQ); *MEF* (Meet or Exceed Analysts' Forecasts): is a dummy dependent variable equal to one if the current quarter q of earnings surprise (i.e., *Non_GAAP_Earnings* less median IBES actual earnings (IBES item MEDEST) as earnings benchmarks) is greater than or equal to zero, and zero otherwise; *3_day_MAR* (Market-Adjusted Return): the sum of difference between firm's value-weighted return, inclusive of dividends and other distributions, from one day before to one day after the IBES earnings announcement date, less the return on the value-weighted market portfolio; *Surprise*: a firm's earnings surprise (*Non_GAAP_Earnings* less the consensus median earnings forecast [IBES item MEDEST]) divided

by firm's market price (CRSP/Compustat item PRCCQ). All continuous variables are winsorized at the top and bottom of two percent.

Table 2
Pairwise Correlations

Regulation G (C&DIs) correlations are presented above (below) the diagonal.

	SUM_Fut OpEarn	GAAP Earnings	Non- GAAP Earnings	Total Exclusions	Special Items	Other Exclusions	Growth	Ln(Size)	Loss	Earnings Volatility	Book-to- Market Asset	MEF
<i>SUM_FutOpEarn</i>		0.976***	0.079***	-0.897***	0.004	-0.897***	0.012***	0.455***	-0.233***	-0.038***	0.002	-0.076***
<i>GAAP_Earnings</i>	0.923***		0.080***	-0.900***	-0.128***	-0.895***	0.015***	0.434***	-0.263***	-0.036***	0.007***	-0.079***
<i>Non_GAAP_Earnings</i>	0.067***	0.064***		0.075***	-0.018***	0.075***	-0.008**	-0.031***	-0.010***	-0.008**	-0.012***	0.204***
<i>Total_Exclusions</i>	-0.716***	-0.741***	0.255***		0.006*	0.999***	0.003	-0.355***	0.115***	0.033***	-0.025***	0.133***
<i>Special_Items</i>	0.030***	-0.197***	-0.003	0.068***		-0.025***	-0.010***	0.052***	0.283***	-0.014***	0.008**	0.007*
<i>Other_Exclusions</i>	-0.722***	-0.721***	0.254***	0.995***	0.001		0.004	-0.357***	0.106***	0.033***	-0.026***	0.133***
<i>Growth</i>	0.046***	0.048***	-0.008***	-0.013***	-0.003	-0.012***		0.100***	-0.072***	0.002	-0.048***	0.015***
<i>Ln(Size)</i>	0.370***	0.340***	0.009***	-0.205***	0.032***	-0.208***	0.076***		-0.377***	-0.023***	-0.184***	0.002
<i>Loss</i>	-0.334***	-0.369***	-0.057***	0.107***	0.216***	0.094***	-0.068***	-0.318***		-0.057***	0.107***	0.005
<i>Earnings_Volatility</i>	0.022***	0.014***	-0.023***	0.003	0.025***	0.002	0.003	0.009***	0.009***		0.003	-0.061***
<i>Book_to_Market_Assets</i>	-0.058***	-0.052***	-0.006**	-0.005*	0.014***	-0.006***	-0.045***	-0.147***	0.073***	0.008***		-0.036***
<i>MEF</i>	-0.045***	-0.044***	0.194***	0.119***	0.008***	0.119***	0.007***	0.015***	-0.002	-0.011***	-0.005**	

There are a maximum of 28,790 firm-quarters for each variable for Regulation G sample and 49,844 firm-quarters for C&DIs. See Table 1 for additional information. All continuous variables are winsorized at the top and bottom of two percent. *, **, and *** represent significance levels at 10%, 5%, and 1%, respectively (two-tailed test).

Table 3**Future operating earnings on Exclusions and Control Variables (H_{1a} and H_{1b})****Dependent Variable: $SUM_FutOpEarn$**

Independent Variables	(H_{1a})		(H_{1b})	
	Regulation G		C&DIs	
	Coefficient (t-statistic)	Coefficient (t-statistic)	Coefficient (t-statistic)	Coefficient (t-statistic)
<i>Intercept</i>	0.001*** (11.76)	0.001*** (11.97)	0.001*** (23.96)	0.001*** (25.71)
<i>Non_GAAP_Earnings</i>	0.756*** (22.43)	0.886*** (26.54)	0.619*** (20.09)	0.729*** (22.65)
<i>Total_Exclusions</i>	-1.275*** (-37.13)		-1.096*** (-31.05)	
<i>Special_Items</i>		-2.094*** (-2.83)		-3.474*** (-6.08)
<i>Other_Exclusions</i>		-1.443*** (-42.24)		-1.251*** (-33.24)
<i>POST</i>	0.000*** (10.01)	0.000*** (7.51)	0.000*** (2.78)	0.000 (-1.34)
<i>Total_Exclusions</i> × <i>POST</i>	0.244*** (7.73)		0.124*** (4.68)	
<i>Special_Items</i> × <i>POST</i>		6.013*** (5.87)		9.293*** (11.36)
<i>Other_Exclusions</i> × <i>POST</i>		0.167*** (5.35)		0.062** (2.29)
<i>Growth</i>	0.000*** (-3.12)	0.000*** (-2.97)	0.000*** (-3.31)	0.000*** (-3.11)
<i>Ln(Size)</i>	0.000*** (-10.41)	0.000*** (-10.04)	0.000*** (-20.39)	0.000*** (-21.72)
<i>Loss</i>	-0.001*** (-35.41)	-0.001*** (-33.03)	-0.001*** (-48.47)	-0.001*** (-47.60)
<i>Earnings_Volatility</i>	0.000*** (-3.61)	0.000*** (-4.12)	0.000*** (-3.64)	0.000*** (-4.46)
<i>Book_to_Market_Assets</i>	0.000** (1.95)	0.000 (1.19)	0.000 (0.22)	0.000 (0.26)
<i>Adjusted-R²</i>	0.4426	0.5095	0.3617	0.4138
<i>Number of Firm-Quarters</i>	28,790	28,790	49,844	49,844

POST: a dummy variable that equals one if the observation falls between *q1* 2003 and *q4* 2005 (inclusive) for Regulation G sample, as well as between *q1* 2010 and *q4* 2012 (inclusive) for C&DIs, and zero otherwise. See Table 1 for additional information. All continuous variables are winsorized at the top and bottom of two percent. Standard errors are corrected for serial correlation and heteroscedasticity. *, **, and *** represent significance levels at 10%, 5%, and 1%, respectively (two-tailed test). *Note*: the quality of exclusions in H_{1a} and H_{1b} is explicitly measured by positive or negative values of correlation analyses and linear regression coefficients among variables compared with pre- and post-Regulation G and C&DIs.

Table 4

Probit regressions of meet or exceed analysts' forecasts on exclusion variables (H_{2a} and H_{2b})
Dependent Variable: MEF

Independent Variables	(H_{2a})		(H_{2b})	
	Regulation G		C&DIs	
	Coefficient (z-statistic)	Coefficient (z-statistic)	Coefficient (z-statistic)	Coefficient (z-statistic)
<i>Intercept</i>	-0.491*** (-15.41)	-0.526*** (-16.29)	-0.282*** (-11.39)	-0.297*** (-11.86)
<i>Positive_Total_Exclusions</i>	0.430*** (17.56)		0.525*** (28.63)	
<i>Positive_Special_Items</i>		0.092*** (3.55)		-0.007 (-0.34)
<i>Positive_Other_Exclusions</i>		0.458*** (19.16)		0.537*** (29.62)
<i>POST</i>	-0.011 (-0.50)	0.026 (1.09)	-0.006 (-0.33)	-0.027 (-1.44)
<i>Positive_Total_Exclusions</i> \times <i>POST</i>	-0.079*** (-2.62)		-0.067*** (-2.91)	
<i>Positive_Special_Items</i> \times <i>POST</i>		-0.091*** (-2.66)		0.092*** (3.58)
<i>Positive_Other_Exclusions</i> \times <i>POST</i>		-0.111*** (-3.67)		-0.067*** (-2.93)
<i>Growth</i>	0.003 (0.87)	0.003 (0.82)	0.004 (1.55)	0.004* (1.66)
<i>Ln(Size)</i>	0.018*** (4.99)	0.017*** (4.81)	0.014*** (5.10)	0.015*** (5.42)
<i>Loss</i>	-0.141*** (-7.29)	-0.135*** (-7.01)	-0.204*** (-14.48)	-0.193*** (-13.61)
<i>Earnings_Volatility</i>	-0.022** (-2.03)	-0.024** (-2.21)	-0.018** (-2.50)	-0.020*** (-2.65)
<i>Book_to_Market_Assets</i>	-0.080*** (-4.12)	-0.077*** (-3.96)	-0.110*** (-6.87)	-0.109*** (-6.79)
<i>Pseudo R</i> ²	0.013	0.015	0.020	0.022
Number of Firm-Quarters	29,165	29,165	49,995	49,995

Positive_Total_Exclusions: a dummy variable equal to one if *Total_Exclusions* are greater than zero, and zero otherwise; *Positive_Special_Items*: a dummy variable equal to one if *Special_Items* are greater than zero, and zero otherwise; *Positive_Other_Exclusions*: a dummy variable equal to one if *Other_Exclusions* are greater than zero, and zero otherwise. See Table 1 for additional information. All continuous variables are winsorized at the top and bottom of two percent. Standard errors are corrected for serial correlation and heteroscedasticity. *, **, and *** represent significance levels at 10%, 5%, and 1%, respectively (two-tailed test).

Table 5**Market reaction to earnings announcement (H_{3a} and H_{3b})****Dependent Variable: 3_day_MAR**

Independent Variables	(H_{3a})		(H_{3b})	
	Regulation G		C&DIs	
	Coefficient (t-statistic)	Coefficient (t-statistic)	Coefficient (t-statistic)	Coefficient (t-statistic)
<i>Intercept</i>	-0.0004*** (-3.92)	-0.0004*** (-3.95)	0.0020*** (17.22)	0.0020*** (16.85)
<i>Surprise</i>	-0.0004*** (-3.27)	-0.0004*** (-3.25)	0.0011*** (8.40)	0.0011*** (8.14)
<i>Positive_Total_Exclusions</i>	-0.0003*** (-5.05)		-0.0002*** (-2.84)	
<i>Positive_Special_Items</i>		0.0000** (-1.96)		0.0001 (1.52)
<i>Positive_Other_Exclusions</i>		-0.0002*** (-4.46)		-0.0001 (-0.87)
<i>POST</i>	0.0020*** (20.63)	0.0020*** (20.60)	-0.0012*** (-9.97)	-0.0012*** (-9.72)
<i>Surprise × POST</i>	0.0009*** (5.44)	0.0009*** (5.47)	-0.0013*** (-7.28)	-0.0014*** (-7.48)
<i>Growth</i>	0.0001 (1.52)	0.0001 (1.52)	0.0004*** (5.79)	0.0004*** (5.84)
<i>Ln(Size)</i>	-0.0002** (-2.33)	-0.0001** (-1.95)	-0.0006*** (-5.88)	-0.0006*** (-5.87)
<i>Loss</i>	0.0002*** (3.65)	0.0002*** (3.59)	-0.0002*** (-2.99)	-0.0003*** (-4.11)
<i>Earnings_Volatility</i>	-0.0002*** (-3.34)	-0.0002*** (-3.34)	0.0004*** (4.77)	0.0004*** (5.11)
<i>Book_to_Market_Assets</i>	0.0001 (1.10)	0.0001 (1.02)	-0.0009*** (-10.88)	-0.0009*** (-11.27)
<i>Adjusted-R^2</i>	0.3538	0.3535	0.1731	0.1726
<i>Number of Firm-Quarters</i>	5,814	5,814	7,996	7,996

3_day_MAR (Market-Adjusted Return): the sum of difference between firm's value-weighted return, inclusive of dividends and other distributions, from one day before to one day after the IBES earnings announcement date, less the return on the value-weighted market portfolio; *Surprise*: a firm's earnings surprise divided by firm's market price. See Table 1 and 4 for additional information. *Note*: this hypothesis is measured by earnings response coefficients (ERCs) as returns on earnings surprise. All continuous variables are winsorized at the top and bottom of two percent. Standard errors are corrected for serial correlation and heteroscedasticity. *, **, and *** represent significance levels at 10%, 5%, and 1%, respectively (two-tailed test).

Appendix

Table A1

Upper half percent of non-zero exclusions

SUM_FutOpEarn (Dependent) on Exclusions and Control Variables (H_{1a} and H_{1b})

Independent Variables	(H_{1a})		(H_{1b})	
	Regulation G		C&DIs	
	Coefficient (t-statistic)	Coefficient (t-statistic)	Coefficient (t-statistic)	Coefficient (t-statistic)
<i>Intercept</i>	0.000* (1.67)	0.000*** (4.51)	0.001*** (8.63)	0.001*** (10.86)
<i>Non_GAAP_Earnings</i>	0.255*** (8.08)	0.391*** (9.98)	0.291*** (9.49)	0.389*** (11.32)
<i>Total_Exclusions</i>	-1.331*** (-34.71)		-1.328*** (-42.57)	
<i>Special_Items</i>		-1.339 (-0.82)		-6.216*** (-5.09)
<i>Other_Exclusions</i>		-1.581*** (-33.51)		-1.485*** (-39.35)
<i>POST</i>	0.000*** (3.12)	0.000 (0.94)	0.000*** (-2.74)	0.000*** (-5.46)
<i>Total_Exclusions</i> × <i>POST</i>	0.105*** (3.45)		0.069** (2.55)	
<i>Special_Items</i> × <i>POST</i>		6.894*** (3.53)		13.025*** (9.15)
<i>Other_Exclusions</i> × <i>POST</i>		0.212*** (6.86)		0.073*** (2.61)
<i>Growth</i>	0.000*** (-4.78)	0.000*** (-4.24)	0.000*** (-3.25)	0.000*** (-3.18)
<i>Ln(Size)</i>	0.000* (-1.65)	0.000*** (-4.14)	0.000*** (-6.88)	0.000*** (-8.79)
<i>Loss</i>	-0.001*** (-19.14)	-0.001*** (-20.68)	0.000*** (-20.19)	0.000*** (-21.98)
<i>Earnings_Volatility</i>	0.000*** (-3.93)	0.000*** (-4.14)	0.000 (-0.24)	0.000 (-0.67)
<i>Book_to_Market_Assets</i>	0.000*** (6.09)	0.000*** (5.51)	0.000** (2.47)	0.000** (2.43)
<i>Adjusted-R²</i>	0.7265	0.7501	0.7152	0.7259
Number of Firm-Quarters	14,381	14,381	24,342	24,342

POST: a dummy variable that equals one if the observation falls between *q1* 2003 and *q4* 2005 (inclusive) for Regulation G sample, as well as between *q1* 2010 and *q4* 2012 (inclusive) for C&DIs, and zero otherwise. See Table 1 for additional information. All continuous variables are winsorized at the top and bottom of two percent. Standard errors are corrected for serial correlation and heteroscedasticity. *, **, and *** represent significance levels at 10%, 5%, and 1%, respectively (two-tailed test).

Table A2*Upper half percent of non-zero exclusions***Probit regressions of meet or exceed analysts' forecasts on exclusion variables (H_{2a} and H_{2b})****Dependent Variable: MEF**

Independent Variables	(H_{2a})		(H_{2b})	
	Regulation G		C&DIs	
	Coefficient (z-statistic)	Coefficient (z-statistic)	Coefficient (z-statistic)	Coefficient (z-statistic)
<i>Intercept</i>	-0.486*** (-10.48)	-0.541*** (-11.47)	-0.312*** (-9.04)	-0.345*** (-9.88)
<i>Positive_Total_Exclusions</i>	0.206*** (6.05)		0.319*** (12.55)	
<i>Positive_Special_Items</i>		0.195*** (5.34)		0.111*** (4.00)
<i>Positive_Other_Exclusions</i>		0.334*** (5.68)		0.391*** (7.47)
<i>POST</i>	-0.075*** (-2.57)	-0.043 (-1.39)	-0.049** (-2.18)	-0.032 (-1.33)
<i>Positive_Total_Exclusions</i> × <i>POST</i>	0.111** (2.55)		0.024 (0.75)	
<i>Positive_Special_Items</i> × <i>POST</i>		-0.197*** (-4.09)		-0.118*** (-3.25)
<i>Positive_Other_Exclusions</i> × <i>POST</i>		0.169*** (3.85)		0.059* (1.81)
<i>Growth</i>	-0.003 (-0.68)	-0.003 (-0.67)	0.002 (0.72)	0.003 (0.81)
<i>Ln(Size)</i>	0.016*** (3.09)	0.017*** (3.29)	0.008** (2.02)	0.009** (2.19)
<i>Loss</i>	(omitted)	-0.133** (-2.41)	(omitted)	-0.068 (-1.37)
<i>Earnings_Volatility</i>	-0.018 (-1.24)	-0.022 (-1.51)	0.013 (1.37)	0.013 (1.36)
<i>Book_to_Market_Assets</i>	-0.250*** (-8.65)	-0.251*** (-8.66)	-0.079*** (-3.80)	-0.083*** (-4.00)
<i>Pseudo R²</i>	0.0107	0.0149	0.0116	0.0141
Number of Firm-Quarters	14,463	14,463	24,742	24,742

Positive_Total_Exclusions: a dummy variable equal to one if *Total_Exclusions* are greater than zero, and zero otherwise; *Positive_Special_Items*: a dummy variable equal to one if *Special_Items* are greater than zero, and zero otherwise; *Positive_Other_Exclusions*: a dummy variable equal to one if *Other_Exclusions* are greater than zero, and zero otherwise. See Table 1 for additional information. All continuous variables are winsorized at the top and bottom of two percent. Standard errors are corrected for serial correlation and heteroscedasticity. *, **, and *** represent significance levels at 10%, 5%, and 1%, respectively (two-tailed test).

Table A3*Upper half percent of non-zero exclusions***Market reaction to earnings announcement (H_{3a} and H_{3b})****Dependent Variable: 3_day_MAR**

Independent Variables	(H_{3a})		(H_{3b})	
	Regulation G		C&DIs	
	Coefficient (t-statistic)	Coefficient (t-statistic)	Coefficient (t-statistic)	Coefficient (t-statistic)
<i>Intercept</i>	-0.0006*** (-3.46)	-0.0006*** (-3.26)	0.0017*** (10.74)	0.0016*** (10.05)
<i>Surprise</i>	0.0001 (0.44)	0.0001 (0.49)	0.0015*** (8.09)	0.0016*** (8.43)
<i>Positive_Total_Exclusions</i>	-0.0002 (-1.51)		-0.0004*** (-4.70)	
<i>Positive_Special_Items</i>		-0.0002*** (-3.14)		0.0001 (0.69)
<i>Positive_Other_Exclusions</i>		-0.0001 (-0.23)		0.0022*** (8.23)
<i>POST</i>	0.0025*** (14.83)	0.0025*** (14.89)	-0.0004** (-2.47)	-0.0003* (-1.75)
<i>Surprise × POST</i>	0.0005 (1.55)	0.0005* (1.71)	-0.0021*** (-8.10)	-0.0023*** (-8.73)
<i>Growth</i>	-0.0002* (-1.95)	-0.0002* (-1.89)	0.0003*** (3.36)	0.0004*** (3.75)
<i>Ln(Size)</i>	-0.0004*** (-3.10)	-0.0004*** (-3.12)	-0.0007*** (-4.77)	-0.0005*** (-3.35)
<i>Loss</i>	(omitted)	0.0000 (-0.15)	(omitted)	-0.0024*** (-9.23)
<i>Earnings_Volatility</i>	-0.0002 (-1.60)	-0.0002* (-1.75)	0.0002 (1.38)	0.0000 (-0.10)
<i>Book_to_Market_Assets</i>	0.0002* (1.86)	0.0002 (1.57)	-0.0008*** (-7.63)	-0.0008*** (-7.79)
<i>Adjusted-R²</i>	0.4117	0.4140	0.1347	0.1502
<i>Number of Firm-Quarters</i>	2,854	2,854	3,851	3,851

3_day_MAR (Market-Adjusted Return): the sum of difference between firm's value-weighted return, inclusive of dividends and other distributions, from one day before to one day after the IBES earnings announcement date, less the return on the value-weighted market portfolio; *Surprise*: a firm's earnings surprise divided by firm's market price. See Table 1 and 4 for additional information. *Note*: this hypothesis is measured by earnings response coefficients (ERCs) as returns on earnings surprise. All continuous variables are winsorized at the top and bottom of two percent. Standard errors are corrected for serial correlation and heteroscedasticity. *, **, and *** represent significance levels at 10%, 5%, and 1%, respectively (two-tailed test).

Table A4*Top and bottom of 25 percent of non-zero exclusions***Future Operating Earnings on Exclusions and Control Variables (H_{1a} and H_{1b})****Dependent Variable: $SUM_FutOpEarn$**

Independent Variables	(H_{1a})		(H_{1b})	
	Regulation G		C&DIs	
	Coefficient (t-statistic)	Coefficient (t-statistic)	Coefficient (t-statistic)	Coefficient (t-statistic)
<i>Intercept</i>	0.000 (1.24)	0.000*** (4.14)	0.000*** (8.97)	0.001*** (8.67)
<i>Non_GAAP_Earnings</i>	0.751*** (11.12)	0.976*** (12.11)	0.958*** (16.54)	1.113*** (16.40)
<i>Total_Exclusions</i>	-1.53*** (-26.23)		-1.509*** (-35.48)	
<i>Special_Items</i>		-0.667 (-0.39)		-6.547*** (-5.37)
<i>Other_Exclusions</i>		-1.988*** (-24.02)		-1.758*** (-30.58)
<i>POST</i>	0.000 (1.61)	0.000 (-0.51)	0.000*** (-5.06)	0.000*** (-6.24)
<i>Total_Exclusions</i> × <i>POST</i>	0.312*** (3.82)		0.320*** (4.67)	
<i>Special_Items</i> × <i>POST</i>		4.654** (2.12)		9.686*** (6.29)
<i>Other_Exclusions</i> × <i>POST</i>		0.568*** (6.46)		0.372*** (5.29)
<i>Growth</i>	0.000*** (-3.44)	0.000*** (-2.83)	0.000** (-2.38)	0.000*** (-2.62)
<i>Ln(Size)</i>	0.000 (-0.32)	0.000*** (-2.98)	0.000*** (-7.08)	0.000*** (-7.41)
<i>Loss</i>	-0.001*** (-22.70)	-0.001*** (-20.68)	-0.001*** (-21.90)	-0.001*** (-20.19)
<i>Earnings_Volatility</i>	0.000* (-1.76)	0.000** (-2.22)	0.000 (1.50)	0.000*** (2.57)
<i>Book_to_Market_Assets</i>	0.000*** (3.66)	0.000*** (3.30)	0.000*** (3.00)	0.000*** (5.30)
<i>Adjusted-R²</i>	0.5281	0.6158	0.6148	0.6315
Number of Firm- Quarters	14,385	14,385	24,382	24,382

POST: a dummy variable that equals one if the observation falls between *q1* 2003 and *q4* 2005 (inclusive) for Regulation G sample, as well as between *q1* 2010 and *q4* 2012 (inclusive) for C&DIs, and zero otherwise. See Table 1 for additional information. All continuous variables are winsorized at the top and bottom of two percent. Standard errors are corrected for serial correlation and heteroscedasticity. *, **, and *** represent significance levels at 10%, 5%, and 1%, respectively (two-tailed test).

Table A5*Top and bottom of 25 percent of non-zero exclusions***Probit regressions of meet or exceed analysts' forecasts on exclusion variables (H_{2a} and H_{2b})****Dependent Variable: MEF**

Independent Variables	(H_{2a}) Regulation G		(H_{2b}) C&DIs	
	Coefficient (z-statistic)	Coefficient (z-statistic)	Coefficient (z-statistic)	Coefficient (z-statistic)
<i>Intercept</i>	-0.580*** (-11.96)	-0.579*** (-11.80)	-0.279*** (-7.64)	-0.324*** (-8.72)
<i>Positive_Total_Exclusions</i>	0.203*** (6.16)		0.269*** (10.62)	
<i>Positive_Special_Items</i>		0.213*** (5.74)		0.035 (1.23)
<i>Positive_Other_Exclusions</i>		0.173*** (5.30)		0.294*** (11.67)
<i>POST</i>	-0.022 (-0.75)	-0.032 (-0.98)	-0.078*** (-3.41)	-0.042* (-1.68)
<i>Positive_Total_Exclusions</i> × <i>POST</i>	0.155*** (3.60)		0.001 (0.04)	
<i>Positive_Special_Items</i> × <i>POST</i>		-0.100** (-2.06)		-0.108*** (-2.91)
<i>Positive_Other_Exclusions</i> × <i>POST</i>		0.231*** (5.35)		-0.018 (-0.54)
<i>Growth</i>	-0.010** (-2.12)	-0.010** (-2.16)	0.002 (0.52)	0.002 (0.73)
<i>Ln(Size)</i>	0.030*** (5.73)	0.025*** (4.64)	0.020*** (4.80)	0.023*** (5.56)
<i>Loss</i>	-0.281*** (-9.56)	-0.302*** (-10.22)	-0.259*** (-11.94)	-0.238*** (-10.90)
<i>Earnings_Volatility</i>	-0.033*** (-2.56)	-0.034*** (-2.62)	0.000 (-0.05)	0.001 (-0.10)
<i>Book_to_Market_Assets</i>	-0.013 (-0.45)	-0.009 (-0.30)	-0.061*** (-2.78)	-0.068*** (-3.08)
<i>Pseudo R</i> ²	0.0137	0.0174	0.0104	0.0117
Number of Firm-Quarters	14,454	14,454	24,739	24,739

Positive_Total_Exclusions: a dummy variable equal to one if *Total_Exclusions* are greater than zero, and zero otherwise; *Positive_Special_Items*: a dummy variable equal to one if *Special_Items* are greater than zero, and zero otherwise; *Positive_Other_Exclusions*: a dummy variable equal to one if *Other_Exclusions* are greater than zero, and zero otherwise. See Table 1 for additional information. All continuous variables are winsorized at the top and bottom of two percent. Standard errors are corrected for serial correlation and heteroscedasticity. *, **, and *** represent significance levels at 10%, 5%, and 1%, respectively (two-tailed test).

Table A6*Top and bottom of 25 percent of non-zero exclusions***Market reaction to earnings announcement (H_{3a} and H_{3b})****Dependent Variable: 3_day_MAR**

Independent Variables	(H_{3a})		(H_{3b})	
	Regulation G		C&DIs	
	Coefficient (t-statistic)	Coefficient (t-statistic)	Coefficient (t-statistic)	Coefficient (t-statistic)
<i>Intercept</i>	-0.0006*** (-3.76)	-0.0007*** (-3.97)	0.0020*** (15.32)	0.0020*** (14.76)
<i>Surprise</i>	-0.0002 (-0.86)	-0.0002 (-0.74)	0.0004** (2.36)	0.0003* (1.85)
<i>Positive_Total_Exclusions</i>	-0.0002*** (-2.93)		-0.0002** (-2.15)	
<i>Positive_Special_Items</i>		-0.0003*** (-3.80)		0.0000 (0.57)
<i>Positive_Other_Exclusions</i>		-0.0001* (-1.77)		0.0001 (0.98)
<i>POST</i>	0.0020*** (13.42)	0.0020*** (13.34)	-0.0015*** (-9.40)	-0.0014*** (-9.13)
<i>Surprise × POST</i>	0.0012*** (4.34)	0.0012*** (4.47)	-0.0007*** (-2.95)	-0.0007*** (-2.92)
<i>Growth</i>	-0.0001 (-0.66)	-0.0001 (-0.58)	0.0003*** (3.22)	0.0004*** (3.35)
<i>Ln(Size)</i>	-0.0002** (-2.14)	-0.0001 (-1.55)	0.0000 (-0.33)	0.0000 (-0.32)
<i>Loss</i>	0.0005*** (4.92)	0.0007*** (5.81)	-0.0001 (-0.69)	-0.0002* (-1.92)
<i>Earnings_Volatility</i>	0.0000 (-0.01)	0.0000 (0.03)	0.0005*** (4.14)	0.0005*** (4.39)
<i>Book_to_Market_Assets</i>	0.0000 (0.08)	0.0000 (0.03)	-0.0010*** (-9.20)	-0.0011*** (-9.51)
<i>Adjusted-R²</i>	0.3805	0.3827	0.1507	0.1500
Number of Firm-Quarters	2,855	2,855	3,960	3,960

3_day_MAR (Market-Adjusted Return): the sum of difference between firm's value-weighted return, inclusive of dividends and other distributions, from one day before to one day after the IBES earnings announcement date, less the return on the value-weighted market portfolio; *Surprise*: a firm's earnings surprise divided by firm's market price. See Table 1 and 4 for additional information. *Note*: this hypothesis is measured by earnings response coefficients (ERCs) as returns on earnings surprise. All continuous variables are winsorized at the top and bottom of two percent. Standard errors are corrected for serial correlation and heteroscedasticity. *, **, and *** represent significance levels at 10%, 5%, and 1%, respectively (two-tailed test).

Table A7*Top 20 percent of non-zero exclusions***Future Operating Earnings on Exclusions and Control Variables (H_{1a} and H_{1b})****Dependent Variable: $SUM_FutOpEarn$**

Independent Variables	(H_{1a})		(H_{1b})	
	Regulation G		C&DIs	
	Coefficient (t-statistic)	Coefficient (t-statistic)	Coefficient (t-statistic)	Coefficient (t-statistic)
<i>Intercept</i>	0.000* (-1.76)	0.000 (-1.37)	0.001*** (6.17)	0.001*** (6.12)
<i>Non_GAAP_Earnings</i>	0.020 (0.16)	0.131 (0.89)	0.152 (0.81)	0.535*** (2.74)
<i>Total_Exclusions</i>	-1.283*** (-19.14)		-1.389*** (-27.35)	
<i>Special_Items</i>		-7.773*** (-3.55)		-10.422*** (-6.77)
<i>Other_Exclusions</i>		-1.669*** (-13.48)		-1.692*** (-21.29)
<i>POST</i>	0.000 (0.22)	0.000 (-0.89)	0.000*** (-7.82)	0.000*** (-9.32)
<i>Total_Exclusions</i> × <i>POST</i>	0.001 (0.01)		0.106 (0.84)	
<i>Special_Items</i> × <i>POST</i>		13.807*** (5.07)		17.738*** (8.40)
<i>Other_Exclusions</i> × <i>POST</i>		0.199 (1.30)		0.091 (0.68)
<i>Growth</i>	0.000*** (-5.22)	0.000*** (-4.74)	0.000** (-2.11)	0.000** (-2.05)
<i>Ln(Size)</i>	0.000* (1.67)	0.000 (1.24)	0.000*** (-4.09)	0.000*** (-5.18)
<i>Loss</i>	-0.001*** (-13.33)	-0.001*** (-12.18)	-0.001*** (-15.82)	-0.001*** (-14.27)
<i>Earnings_Volatility</i>	0.000 (-1.31)	0.000* (-1.86)	0.000 (0.48)	0.000 (0.69)
<i>Book_to_Market_Assets</i>	0.001*** (6.04)	0.001*** (5.88)	0.000** (2.05)	0.000*** (5.62)
<i>Adjusted-R²</i>	0.6333	0.6661	0.7235	0.7442
Number of Firm- Quarters	5,751	5,751	9,753	9,753

POST: a dummy variable that equals one if the observation falls between *q1* 2003 and *q4* 2005 (inclusive) for Regulation G sample, as well as between *q1* 2010 and *q4* 2012 (inclusive) for C&DIs, and zero otherwise. See Table 1 for additional information. All continuous variables are winsorized at the top and bottom of two percent. Standard errors are corrected for serial correlation and heteroscedasticity. *, **, and *** represent significance levels at 10%, 5%, and 1%, respectively (two-tailed test). *Note*: the quality of exclusions in H_{1a} and H_{1b} is explicitly measured by positive or negative values of correlation analyses and linear regression coefficients among variables compared with pre- and post-Regulation G and C&DIs.

Table A8*Top 20 percent of non-zero exclusions***Probit regressions of meet or exceed analysts' forecasts on exclusion variables (H_{2a} and H_{2b})****Dependent Variable: *MEF***

Independent Variables	(H_{2a})		(H_{2b})	
	Regulation G		C&DIs	
	Coefficient (z-statistic)	Coefficient (z-statistic)	Coefficient (z-statistic)	Coefficient (z-statistic)
<i>Intercept</i>	-0.536*** (-6.87)	-0.559*** (-7.04)	-0.252*** (-4.63)	-0.293*** (-5.29)
<i>Positive_Total_Exclusions</i>	0.009 (0.15)		0.046 (1.12)	
<i>Positive_Special_Items</i>		0.167*** (2.94)		-0.109*** (2.56)
<i>Positive_Other_Exclusions</i>		0.229** (2.45)		0.169** (2.22)
<i>POST</i>	0.018 (0.43)	-0.015 (-0.32)	-0.047 (-1.50)	-0.004 (-0.13)
<i>Positive_Total_Exclusions</i> × <i>POST</i>	0.161** (2.15)		0.009 (0.16)	
<i>Positive_Special_Items</i> × <i>POST</i>		0.008 (0.11)		-0.186*** (-3.21)
<i>Positive_Other_Exclusions</i> × <i>POST</i>		0.281*** (3.65)		0.037 (0.66)
<i>Growth</i>	-0.007 (-1.06)	-0.008 (-1.15)	-0.001 (-0.12)	-0.001 (-0.11)
<i>Ln(Size)</i>	0.018** (2.13)	0.017** (2.07)	0.004 (0.69)	0.006 (0.88)
<i>Loss</i>	(omitted)	-0.273*** (-3.19)	(omitted)	-0.121* (-1.68)
<i>Earnings_Volatility</i>	-0.079*** (-3.08)	-0.082*** (-3.18)	0.007 (0.57)	0.008 (0.64)
<i>Book_to_Market_Assets</i>	-0.176*** (-3.71)	-0.179*** (-3.73)	-0.128*** (-3.45)	-0.128*** (-3.44)
<i>Pseudo R</i> ²	0.0058	0.0112	0.0013	0.0025
Number of Firm-Quarters	5,784	5,784	9,887	9,887

Positive_Total_Exclusions: a dummy variable equal to one if *Total_Exclusions* are greater than zero, and zero otherwise; *Positive_Special_Items*: a dummy variable equal to one if *Special_Items* are greater than zero, and zero otherwise; *Positive_Other_Exclusions*: a dummy variable equal to one if *Other_Exclusions* are greater than zero, and zero otherwise. See Table 1 for additional information. All continuous variables are winsorized at the top and bottom of two percent. Standard errors are corrected for serial correlation and heteroscedasticity. *, **, and *** represent significance levels at 10%, 5%, and 1%, respectively (two-tailed test).

Table A9*Top 20 percent of non-zero exclusions***Market reaction to earnings announcement (H_{3a} and H_{3b})****Dependent Variable: 3_day_MAR**

Independent Variables	(H_{3a})		(H_{3b})	
	Regulation G		C&DIs	
	Coefficient (t-statistic)	Coefficient (t-statistic)	Coefficient (t-statistic)	Coefficient (t-statistic)
<i>Intercept</i>	0.0083*** (6.88)	0.0114*** (8.07)	0.0023*** (12.93)	0.0020*** (11.71)
<i>Surprise</i>	0.0074*** (9.10)	0.0059*** (6.92)	0.0001 (0.54)	0.0003 (1.07)
<i>Positive_Total_Exclusions</i>	-0.0051*** (-5.45)		0.0001 (0.37)	
<i>Positive_Special_Items</i>		-0.0042*** (-5.61)		0.0004*** (2.99)
<i>Positive_Other_Exclusions</i>		-0.0012 (-0.90)		0.0026*** (7.19)
<i>POST</i>	0.0058*** (10.57)	0.0048*** (7.92)	-0.0003 (-1.35)	0.0001 (0.29)
<i>Surprise × POST</i>	-0.0060*** (-4.38)	-0.0029* (-1.94)	-0.0018*** (-5.21)	-0.0022*** (-6.19)
<i>Growth</i>	-0.0007*** (-2.78)	-0.0008*** (-2.97)	0.0006*** (3.40)	0.0007*** (4.12)
<i>Ln(Size)</i>	-0.0099*** (-9.34)	-0.0119*** (-8.71)	-0.0005** (-2.16)	-0.0004 (-1.55)
<i>Loss</i>	(omitted)	-0.0014*** (-2.99)	(omitted)	-0.0022*** (-6.19)
<i>Earnings_Volatility</i>	0.0002 (0.60)	0.0010*** (2.68)	-0.0002 (-1.30)	-0.0006*** (-3.11)
<i>Book_to_Market_Assets</i>	-0.0028*** (-4.59)	-0.0044*** (-6.16)	-0.0010*** (-5.81)	-0.0011*** (-6.08)
<i>Adjusted-R²</i>	0.5271	0.5438	0.1335	0.1694
Number of Firm-Quarters	1,141	1,141	1,585	1,585

3_day_MAR (Market-Adjusted Return): the sum of difference between firm's value-weighted return, inclusive of dividends and other distributions, from one day before to one day after the IBES earnings announcement date, less the return on the value-weighted market portfolio; *Surprise*: a firm's earnings surprise divided by firm's market price. See Table 1 and 4 for additional information. *Note*: this hypothesis is measured by earnings response coefficients (ERCs) as returns on earnings surprise. All continuous variables are winsorized at the top and bottom of two percent. Standard errors are corrected for serial correlation and heteroscedasticity. *, **, and *** represent significance levels at 10%, 5%, and 1%, respectively (two-tailed test).

Table A10*Positive exclusions***Future Operating Earnings on Exclusions and Control Variables (H_{1a} and H_{1b})****Dependent Variable: $SUM_FutOpEarn$**

Independent Variables	(H_{1a})		(H_{1b})	
	Regulation G		C&DIs	
	Coefficient (t-statistic)	Coefficient (t-statistic)	Coefficient (t-statistic)	Coefficient (t-statistic)
<i>Intercept</i>	0.001*** (6.96)	0.001*** (11.55)	0.001*** (17.65)	0.001*** (19.63)
<i>Non_GAAP_Earnings</i>	0.589*** (19.89)	0.732*** (22.90)	0.688*** (23.39)	0.777*** (23.85)
<i>Total_Exclusions</i>	-1.530*** (-41.02)		-1.498*** (-46.11)	
<i>Special_Items</i>		1.511 (1.05)		-3.730*** (-3.30)
<i>Other_Exclusions</i>		-1.795*** (-43.35)		-1.660*** (-43.08)
<i>POST</i>	0.000 (-0.56)	0.000*** (-3.45)	0.000 (-3.77)	0.000*** (-6.33)
<i>Total_Exclusions × POST</i>	0.348*** (11.53)		0.347*** (13.05)	
<i>Special_Items × POST</i>		3.604** (1.99)		9.279*** (6.90)
<i>Other_Exclusions × POST</i>		0.443*** (14.58)		0.377*** (13.55)
<i>Growth</i>	0.000*** (-3.33)	0.000*** (-3.22)	0.000** (-2.00)	0.000** (-2.04)
<i>Ln(Size)</i>	0.000*** (-2.69)	0.000*** (-6.14)	0.000*** (-10.11)	0.000*** (-12.26)
<i>Loss</i>	-0.001*** (-29.22)	-0.001*** (-30.12)	-0.001*** (-39.32)	-0.001*** (-38.08)
<i>Earnings_Volatility</i>	0.000 (-1.60)	0.000 (-1.27)	0.000*** (3.67)	0.000*** (3.54)
<i>Book_to_Market_Assets</i>	0.000 (1.43)	0.000 (0.60)	0.000*** (-6.80)	0.000*** (-6.33)
<i>Adjusted-R²</i>	0.6049	0.6376	0.5456	0.5490
<i>Number of Firm-Quarters</i>	16,537	16,537	29,117	29,117

POST: a dummy variable that equals one if the observation falls between *q1* 2003 and *q4* 2005 (inclusive) for Regulation G sample, as well as between *q1* 2010 and *q4* 2012 (inclusive) for C&DIs, and zero otherwise. See Table 1 for additional information. All continuous variables are winsorized at the top and bottom of two percent. Standard errors are corrected for serial correlation and heteroscedasticity. *, **, and *** represent significance levels at 10%, 5%, and 1%, respectively (two-tailed test). *Note*: the quality of exclusions in H_{1a} and H_{1b} is explicitly measured by positive or negative values of correlation analyses and linear regression coefficients among variables compared with pre- and post-Regulation G and C&DIs.

Table A11*Positive exclusions***Probit regressions of meet or exceed analysts' forecasts on exclusion variables (H_{2a} and H_{2b})****Dependent Variable: *MEF***

Independent Variables	(H_{2a})		(H_{2b})	
	Regulation G		C&DIs	
	Coefficient (z-statistic)	Coefficient (z-statistic)	Coefficient (z-statistic)	Coefficient (z-statistic)
<i>Intercept</i>	-0.238** (-1.95)	-0.345*** (-4.49)	-0.439*** (-4.38)	-0.184*** (-3.04)
<i>Positive_Total_Exclusions</i>	0.135 (1.13)		0.625*** (6.42)	
<i>Positive_Special_Items</i>		0.319*** (8.49)		0.098*** (3.61)
<i>Positive_Other_Exclusions</i>		0.205*** (3.07)		0.348*** (6.41)
<i>POST</i>	-0.163 (-1.01)	-0.163* (-1.77)	0.373*** (2.90)	-0.088 (-1.17)
<i>Positive_Total_Exclusions</i> × <i>POST</i>	0.292* (1.79)		-0.389*** (-3.00)	
<i>Positive_Special_Items</i> × <i>POST</i>		-0.305*** (-6.47)		-0.108*** (-3.11)
<i>Positive_Other_Exclusions</i> × <i>POST</i>		0.385*** (4.26)		0.106 (1.41)
<i>Growth</i>	-0.020*** (-4.18)	-0.020*** (-4.01)	-0.001 (-0.26)	0.000 (-0.10)
<i>Ln(Size)</i>	0.009** (1.95)	0.005 (1.08)	-0.004 (-1.02)	-0.002 (-0.58)
<i>Loss</i>	-0.188*** (-9.12)	-0.212*** (-9.99)	-0.088*** (-5.81)	-0.084*** (-5.51)
<i>Earnings_Volatility</i>	-0.066*** (-5.07)	-0.071*** (-5.40)	-0.022** (-2.38)	-0.024*** (-2.60)
<i>Book_to_Market_Assets</i>	-0.110*** (-4.79)	-0.109*** (-4.70)	-0.028* (-1.72)	-0.035** (-2.04)
<i>Pseudo R²</i>	0.0101	0.0172	0.0021	0.0040
Number of Firm-Quarters	16,146	16,146	29,864	29,864

Positive_Total_Exclusions: a dummy variable equal to one if *Total_Exclusions* are greater than zero, and zero otherwise; *Positive_Special_Items*: a dummy variable equal to one if *Special_Items* are greater than zero, and zero otherwise; *Positive_Other_Exclusions*: a dummy variable equal to one if *Other_Exclusions* are greater than zero, and zero otherwise. See Table 1 for additional information. All continuous variables are winsorized at the top and bottom of two percent. Standard errors are corrected for serial correlation and heteroscedasticity. *, **, and *** represent significance levels at 10%, 5%, and 1%, respectively (two-tailed test).

Table A12*Positive exclusions***Market reaction to earnings announcement (H_{3a} and H_{3b})****Dependent Variable: 3_day_MAR**

Independent Variables	(H_{3a})		(H_{3b})	
	Regulation G		C&DIs	
	Coefficient (t-statistic)	Coefficient (t-statistic)	Coefficient (t-statistic)	Coefficient (t-statistic)
<i>Intercept</i>	0.0004 (1.52)	0.0000 (0.19)	0.0016*** (5.87)	0.0014*** (6.43)
<i>Surprise</i>	-0.0011*** (-6.56)	-0.0010*** (-6.15)	0.0014*** (8.56)	0.0014*** (8.54)
<i>Positive_Total_Exclusions</i>	-0.0004* (-1.84)		-0.0003 (-1.38)	
<i>Positive_Special_Items</i>		-0.0005*** (-5.87)		0.0001 (0.75)
<i>Positive_Other_Exclusions</i>		0.0000 (-0.07)		-0.0001 (-0.68)
<i>POST</i>	0.0010*** (6.51)	0.0010*** (6.62)	-0.0010*** (-5.93)	-0.0010*** (-5.87)
<i>Surprise × POST</i>	0.0018*** (8.45)	0.0019*** (8.38)	-0.0014*** (-5.60)	-0.0014*** (-5.63)
<i>Growth</i>	0.0003*** (3.64)	0.0003*** (3.69)	0.0005*** (5.10)	0.0005*** (5.13)
<i>Ln(Size)</i>	-0.0001 (-0.57)	0.0002** (2.00)	-0.0004*** (-3.43)	-0.0004*** (-3.55)
<i>Loss</i>	0.0002** (2.43)	0.0003*** (4.26)	-0.0001 (-1.37)	-0.0001* (-1.66)
<i>Earnings_Volatility</i>	-0.0003* (-1.89)	-0.0004*** (-2.85)	0.0004*** (4.15)	0.0005*** (4.28)
<i>Book_to_Market_Assets</i>	0.0000 (-0.15)	0.0000 (0.02)	-0.0007*** (-7.37)	-0.0008*** (-7.39)
<i>Adjusted-R^2</i>	0.2721	0.2825	0.1755	0.1754
<i>Number of Firm-Quarters</i>	1,984	1,984	4,176	4,176

3_day_MAR (Market-Adjusted Return): the sum of difference between firm's value-weighted return, inclusive of dividends and other distributions, from one day before to one day after the IBES earnings announcement date, less the return on the value-weighted market portfolio; *Surprise*: a firm's earnings surprise divided by firm's market price. See Table 1 and 4 for additional information. *Note*: this hypothesis is measured by earnings response coefficients (ERCs) as returns on earnings surprise. All continuous variables are winsorized at the top and bottom of two percent. Standard errors are corrected for serial correlation and heteroscedasticity. *, **, and *** represent significance levels at 10%, 5%, and 1%, respectively (two-tailed test).

Table A13*Negative exclusions***Future Operating Earnings on Exclusions and Control Variables (H_{1a} and H_{1b})****Dependent Variable: $SUM_FutOpEarn$**

Independent Variables	(H_{1a})		(H_{1b})	
	Regulation G		C&DIs	
	Coefficient (t-statistic)	Coefficient (t-statistic)	Coefficient (t-statistic)	Coefficient (t-statistic)
<i>Intercept</i>	0.000*** (5.09)	0.000*** (5.93)	0.001*** (7.37)	0.001*** (8.20)
<i>Non_GAAP_Earnings</i>	0.593*** (5.82)	0.762*** (5.93)	0.647*** (6.52)	0.726*** (6.65)
<i>Total_Exclusions</i>	-0.884*** (-5.00)		-1.308*** (-9.45)	
<i>Special_Items</i>		2.670 (1.34)		1.310 (0.70)
<i>Other_Exclusions</i>		-1.658*** (-8.32)		-1.464*** (-10.50)
<i>POST</i>	0.000** (-2.24)	0.000** (2.35)	0.000*** (-5.70)	0.000* (-1.79)
<i>Total_Exclusions × POST</i>	-0.884*** (-4.45)		-0.742*** (-4.36)	
<i>Special_Items × POST</i>		-4.924 (-1.59)		-8.566*** (-2.60)
<i>Other_Exclusions × POST</i>		-0.230 (-1.14)		-0.417** (-2.26)
<i>Growth</i>	0.000*** (-2.51)	0.000*** (-2.60)	0.000 (-1.43)	0.000 (-1.44)
<i>Ln(Size)</i>	0.000*** (-5.81)	0.000*** (-3.46)	0.000*** (-6.87)	0.000*** (-8.08)
<i>Loss</i>	-0.002*** (-18.97)	-0.002*** (-18.23)	-0.002*** (-18.36)	-0.002*** (-18.08)
<i>Earnings_Volatility</i>	0.000** (-2.34)	0.000** (-2.24)	0.000*** (-3.21)	0.000 (-0.45)
<i>Book_to_Market_Assets</i>	0.000*** (4.45)	0.000*** (3.62)	0.000 (1.29)	0.000** (2.04)
<i>Adjusted-R²</i>	0.2465	0.3270	0.2796	0.2952
<i>Number of Firm-Quarters</i>	12,784	12,784	20,502	20,502

POST: a dummy variable that equals one if the observation falls between *q1* 2003 and *q4* 2005 (inclusive) for Regulation G sample, as well as between *q1* 2010 and *q4* 2012 (inclusive) for C&DIs, and zero otherwise. See Table 1 for additional information. All continuous variables are winsorized at the top and bottom of two percent. Standard errors are corrected for serial correlation and heteroscedasticity. *, **, and *** represent significance levels at 10%, 5%, and 1%, respectively (two-tailed test). *Note*: the quality of exclusions in H_{1a} and H_{1b} is explicitly measured by positive or negative values of correlation analyses and linear regression coefficients among variables compared with pre- and post-Regulation G and C&DIs.

Table A14*Negative exclusions***Probit regressions of meet or exceed analysts' forecasts on exclusion variables (H_{2a} and H_{2b})****Dependent Variable: *MEF***

Independent Variables	(H_{2a})		(H_{2b})	
	Regulation G		C&DIs	
	Coefficient (z-statistic)	Coefficient (z-statistic)	Coefficient (z-statistic)	Coefficient (z-statistic)
<i>Intercept</i>	-0.679*** (-14.28)	-0.681*** (-14.13)	-0.467*** (-11.99)	-0.477*** (-12.04)
<i>Positive_Total_Exclusions</i>	(omitted)		(omitted)	
<i>Positive_Special_Items</i>		0.042 (1.05)		0.024 (0.74)
<i>Positive_Other_Exclusions</i>		0.227*** (2.71)		0.394*** (5.63)
<i>POST</i>	-0.100*** (-4.41)	-0.104*** (-3.93)	-0.109*** (-6.08)	-0.101*** (-4.80)
<i>Positive_Total_Exclusions</i> × <i>POST</i>	(omitted)		(omitted)	
<i>Positive_Special_Items</i> × <i>POST</i>		0.032 (0.59)		0.015 (0.34)
<i>Positive_Other_Exclusions</i> × <i>POST</i>		-0.064 (-0.47)		-0.254*** (-2.48)
<i>Growth</i>	0.007 (1.53)	0.007 (1.55)	0.004 (1.09)	0.004 (1.21)
<i>Ln(Size)</i>	0.037*** (6.90)	0.035*** (6.39)	0.043*** (9.73)	0.042*** (9.33)
<i>Loss</i>	-0.207*** (-4.56)	-0.218*** (-4.73)	-0.417*** (-11.24)	-0.415*** (-11.12)
<i>Earnings_Volatility</i>	0.027* (1.71)	0.025 (1.57)	0.022** (2.16)	0.024** (2.37)
<i>Book_to_Market_Assets</i>	0.028 (0.87)	0.027 (0.81)	-0.052* (-1.72)	-0.062** (-2.07)
<i>Pseudo R²</i>	0.0069	0.0077	0.0138	0.0152
<i>Number of Firm-Quarters</i>	13,364	13,364	20,516	20,516

Positive_Total_Exclusions: a dummy variable equal to one if *Total_Exclusions* are greater than zero, and zero otherwise; *Positive_Special_Items*: a dummy variable equal to one if *Special_Items* are greater than zero, and zero otherwise; *Positive_Other_Exclusions*: a dummy variable equal to one if *Other_Exclusions* are greater than zero, and zero otherwise. See Table 1 for additional information. All continuous variables are winsorized at the top and bottom of two percent. Standard errors are corrected for serial correlation and heteroscedasticity. *, **, and *** represent significance levels at 10%, 5%, and 1%, respectively (two-tailed test).

Table A15*Negative exclusions***Market reaction to earnings announcement (H_{3a} and H_{3b})****Dependent Variable: 3_day_MAR**

Independent Variables	(H_{3a})		(H_{3b})	
	Regulation G		C&DIs	
	Coefficient (t-statistic)	Coefficient (t-statistic)	Coefficient (t-statistic)	Coefficient (t-statistic)
<i>Intercept</i>	-0.0008*** (-6.44)	-0.0008*** (-6.46)	0.0024*** (13.85)	0.0023*** (13.63)
<i>Surprise</i>	0.0002 (0.79)	0.0002 (0.84)	0.0008*** (3.77)	0.0007*** (3.34)
<i>Positive_Total_Exclusions</i>	(omitted)		(omitted)	
<i>Positive_Special_Items</i>		0.0001 (1.42)		0.0002* (1.76)
<i>Positive_Other_Exclusions</i>		-0.0004* (-1.92)		0.0014*** (5.41)
<i>POST</i>	0.0026*** (20.29)	0.0026*** (20.19)	-0.0014*** (-7.83)	-0.0012*** (-7.27)
<i>Surprise × POST</i>	0.0003 (1.07)	0.0002 (1.04)	-0.0014*** (-5.10)	-0.0015*** (-5.32)
<i>Growth</i>	-0.0001 (-1.56)	-0.0001* (-1.77)	0.0003*** (3.27)	0.0004*** (3.48)
<i>Ln(Size)</i>	-0.0002** (-2.42)	-0.0002*** (-2.79)	-0.0006*** (-3.76)	-0.0006*** (-3.37)
<i>Loss</i>	0.0004*** (4.15)	0.0004*** (3.30)	-0.0005*** (-2.60)	-0.0005** (-2.26)
<i>Earnings_Volatility</i>	-0.0001* (-1.83)	-0.0001* (-1.68)	0.0004*** (3.51)	0.0003*** (2.51)
<i>Book_to_Market_Assets</i>	0.0001 (1.41)	0.0002* (1.84)	-0.0010*** (-8.13)	-0.0011*** (-8.44)
<i>Adjusted-R²</i>	0.4102	0.4113	0.1784	0.1864
<i>Number of Firm-Quarters</i>	3,831	3,831	3,820	3,820

3_day_MAR (Market-Adjusted Return): the sum of difference between firm's value-weighted return, inclusive of dividends and other distributions, from one day before to one day after the IBES earnings announcement date, less the return on the value-weighted market portfolio; *Surprise*: a firm's earnings surprise divided by firm's market price. See Table 1 and 4 for additional information. *Note*: this hypothesis is measured by earnings response coefficients (ERCs) as returns on earnings surprise. All continuous variables are winsorized at the top and bottom of two percent. Standard errors are corrected for serial correlation and heteroscedasticity. *, **, and *** represent significance levels at 10%, 5%, and 1%, respectively (two-tailed test).

Table A16*Top 20 percent of positive exclusions***Future Operating Earnings on Exclusions and Control Variables (H_{1a} and H_{1b})****Dependent Variable: $SUM_FutOpEarn$**

Independent Variables	(H_{1a})		(H_{1b})	
	Regulation G		C&DIs	
	Coefficient (t-statistic)	Coefficient (t-statistic)	Coefficient (t-statistic)	Coefficient (t-statistic)
<i>Intercept</i>	-0.002*** (-13.30)	-0.003*** (-15.64)	-0.002*** (-22.43)	-0.002*** (-20.04)
<i>Non_GAAP_Earnings</i>	0.027 (1.06)	0.195*** (9.27)	0.076*** (3.57)	0.157*** (7.50)
<i>Total_Exclusions</i>	-0.812*** (-23.89)		-0.824*** (-36.42)	
<i>Special_Items</i>		2.573** (2.10)		3.004*** (3.40)
<i>Other_Exclusions</i>		-0.940*** (-26.95)		-0.937*** (-38.60)
<i>POST</i>	0.000*** (5.91)	0.000*** (3.76)	0.000*** (7.28)	0.000*** (7.77)
<i>Total_Exclusions</i> × <i>POST</i>	0.054 (0.96)		0.003 (0.07)	
<i>Special_Items</i> × <i>POST</i>		2.801** (2.40)		0.626 (0.72)
<i>Other_Exclusions</i> × <i>POST</i>		-0.317*** (-6.55)		-0.208*** (-5.06)
<i>Growth</i>	0.000*** (-4.52)	0.000*** (-4.54)	0.000*** (-5.97)	0.000*** (-6.04)
<i>Ln(Size)</i>	0.000*** (11.61)	0.000*** (13.96)	0.000*** (20.29)	0.000*** (18.18)
<i>Loss</i>	(omitted)	(omitted)	(omitted)	(omitted)
<i>Earnings_Volatility</i>	0.000*** (-7.44)	0.000*** (-5.56)	0.000** (-2.36)	0.000*** (-3.06)
<i>Book_to_Market_Assets</i>	0.001*** (7.22)	0.001*** (7.09)	0.000*** (7.81)	0.000*** (4.26)
<i>Adjusted-R²</i>	0.6003	0.7729	0.6609	0.7583
Number of Firm- Quarters	3,153	3,153	5,857	5,857

POST: a dummy variable that equals one if the observation falls between *q1* 2003 and *q4* 2005 (inclusive) for Regulation G sample, as well as between *q1* 2010 and *q4* 2012 (inclusive) for C&DIs, and zero otherwise. See Table 1 for additional information. All continuous variables are winsorized at the top and bottom of two percent. Standard errors are corrected for serial correlation and heteroscedasticity. *, **, and *** represent significance levels at 10%, 5%, and 1%, respectively (two-tailed test). *Note*: the quality of exclusions in H_{1a} and H_{1b} is explicitly measured by positive or negative values of correlation analyses and linear regression coefficients among variables compared with pre- and post-Regulation G and C&DIs.

Table A17*Top 20 percent of positive exclusions***Probit regressions of meet or exceed analysts' forecasts on exclusion variables (H_{2a} and H_{2b})****Dependent Variable: *MEF***

Independent Variables	(H_{2a})		(H_{2b})	
	Regulation G		C&DIs	
	Coefficient (z-statistic)	Coefficient (z-statistic)	Coefficient (z-statistic)	Coefficient (z-statistic)
<i>Intercept</i>	-0.420*** (-5.12)	-0.998*** (-6.32)	0.064 (1.21)	-0.079 (-0.65)
<i>Positive_Total_Exclusions</i>	(omitted)		(omitted)	
<i>Positive_Special_Items</i>		0.401*** (5.24)		0.168*** (3.27)
<i>Positive_Other_Exclusions</i>		0.419*** (3.37)		0.084 (0.79)
<i>POST</i>	0.146*** (3.02)	-0.576*** (-2.87)	-0.095*** (-2.80)	-0.798*** (-4.66)
<i>Positive_Total_Exclusions</i> × <i>POST</i>	(omitted)		(omitted)	
<i>Positive_Special_Items</i> × <i>POST</i>		0.068 (0.66)		-0.142** (-1.99)
<i>Positive_Other_Exclusions</i> × <i>POST</i>		0.718*** (3.77)		0.791*** (4.76)
<i>Growth</i>	-0.038*** (-3.05)	-0.038*** (-3.05)	-0.001 (-0.86)	-0.001 (-0.84)
<i>Ln(Size)</i>	0.033*** (2.90)	0.040*** (3.30)	-0.010 (-1.27)	-0.010 (-1.18)
<i>Loss</i>	(omitted)		(omitted)	
<i>Earnings_Volatility</i>	-0.093*** (-3.33)	-0.075*** (-2.68)	-0.071*** (-3.37)	-0.070*** (-3.25)
<i>Book_to_Market_Assets</i>	-0.420*** (-8.79)	-0.501*** (-8.84)	-0.162*** (-4.69)	-0.162*** (-4.66)
<i>Pseudo R</i> ²	0.0349	0.0644	0.0047	0.0131
Number of Firm-Quarters	3,153	3,153	5,857	5,857

Positive_Total_Exclusions: a dummy variable equal to one if *Total_Exclusions* are greater than zero, and zero otherwise; *Positive_Special_Items*: a dummy variable equal to one if *Special_Items* are greater than zero, and zero otherwise; *Positive_Other_Exclusions*: a dummy variable equal to one if *Other_Exclusions* are greater than zero, and zero otherwise. See Table 1 for additional information. All continuous variables are winsorized at the top and bottom of two percent. Standard errors are corrected for serial correlation and heteroscedasticity. *, **, and *** represent significance levels at 10%, 5%, and 1%, respectively (two-tailed test).

Table A18*Top 20 percent of positive exclusions***Market reaction to earnings announcement (H_{3a} and H_{3b})****Dependent Variable: 3_day_MAR**

Independent Variables	(H_{3a})		(H_{3b})	
	Regulation G		C&DIs	
	Coefficient (t-statistic)	Coefficient (t-statistic)	Coefficient (t-statistic)	Coefficient (t-statistic)
<i>Intercept</i>	-0.0009*** (-2.76)	-0.0001 (-0.12)	0.0010*** (3.29)	0.0010** (2.23)
<i>Surprise</i>	-0.0001 (-0.27)	0.0005 (1.27)	0.0027*** (6.58)	0.0027*** (6.59)
<i>Positive_Total_Exclusions</i>	(omitted)		(omitted)	
<i>Positive_Special_Items</i>		-0.0011*** (-7.28)		0.0004* (1.79)
<i>Positive_Other_Exclusions</i>		-0.0003 (-0.89)		-0.0002 (-0.79)
<i>POST</i>	0.0022*** (8.18)	0.0024*** (8.78)	0.0014*** (3.05)	0.0014*** (3.11)
<i>Surprise × POST</i>	0.0004 (0.88)	0.0001 (0.17)	-0.0043*** (-5.84)	-0.0044*** (-5.90)
<i>Growth</i>	0.0001 (0.26)	0.0000 (-0.10)	0.0000 (-0.03)	0.0000 (0.35)
<i>Ln(Size)</i>	-0.0011*** (-3.09)	-0.0008** (-2.37)	0.0001 (0.37)	0.0000 (-0.02)
<i>Loss</i>	(omitted)	(omitted)	(omitted)	(omitted)
<i>Earnings_Volatility</i>	0.0001 (0.31)	-0.0006** (-2.07)	-0.0004 (-1.35)	-0.0001 (-0.22)
<i>Book_to_Market_Assets</i>	0.0011*** (4.81)	0.0011*** (5.22)	-0.0013*** (-6.35)	-0.0014*** (-6.41)
<i>Adjusted-R²</i>	0.4453	0.522	0.1208	0.1247
<i>Number of Firm-Quarters</i>	383	383	828	828

3_day_MAR (Market-Adjusted Return): the sum of difference between firm's value-weighted return, inclusive of dividends and other distributions, from one day before to one day after the IBES earnings announcement date, less the return on the value-weighted market portfolio; *Surprise*: a firm's earnings surprise divided by firm's market price. See Table 1 and 4 for additional information. *Note*: this hypothesis is measured by earnings response coefficients (ERCs) as returns on earnings surprise. All continuous variables are winsorized at the top and bottom of two percent. Standard errors are corrected for serial correlation and heteroscedasticity. *, **, and *** represent significance levels at 10%, 5%, and 1%, respectively (two-tailed test).

Table A19*Top 20 percent of negative exclusions***Future Operating Earnings on Exclusions and Control Variables (H_{1a} and H_{1b})****Dependent Variable: $SUM_FutOpEarn$**

Independent Variables	(H_{1a})		(H_{1b})	
	Regulation G		C&DIs	
	Coefficient (t-statistic)	Coefficient (t-statistic)	Coefficient (t-statistic)	Coefficient (t-statistic)
<i>Intercept</i>	0.001*** (5.03)	0.001*** (3.55)	0.001*** (5.83)	0.000 (0.77)
<i>Non_GAAP_Earnings</i>	0.956*** (7.58)	0.908*** (7.28)	0.605*** (11.87)	0.546*** (9.60)
<i>Total_Exclusions</i>	2.082*** (8.36)		2.362*** (7.70)	
<i>Special_Items</i>		6.723*** (2.85)		0.290 (0.15)
<i>Other_Exclusions</i>		1.714*** (6.41)		1.182*** (3.60)
<i>POST</i>	0.000** (2.39)	0.000*** (3.76)	0.000* (1.93)	0.000* (2.99)
<i>Total_Exclusions</i> × <i>POST</i>	-0.722 (-0.85)		-1.056* (-1.69)	
<i>Special_Items</i> × <i>POST</i>		2.971 (0.97)		7.915*** (3.04)
<i>Other_Exclusions</i> × <i>POST</i>		-0.202 (-0.26)		-0.736 (-1.47)
<i>Growth</i>	0.000 (-0.89)	0.000 (-1.12)	0.000*** (-3.02)	0.000*** (-3.43)
<i>Ln(Size)</i>	0.000*** (-5.42)	0.000*** (-4.26)	0.000*** (-6.70)	0.000 (-1.29)
<i>Loss</i>	-0.001*** (-7.07)	-0.001*** (-7.48)	-0.001*** (-14.94)	-0.001*** (-14.71)
<i>Earnings_Volatility</i>	0.000* (-1.64)	0.000* (-1.77)	0.000*** (-4.07)	0.000*** (-4.04)
<i>Book_to_Market_Assets</i>	0.000*** (4.33)	0.000*** (4.07)	0.000*** (5.12)	0.000*** (5.09)
<i>Adjusted-R²</i>	0.5454	0.5292	0.4728	0.4137
Number of Firm- Quarters	2,672	2,672	4,097	4,097

POST: a dummy variable that equals one if the observation falls between *q1* 2003 and *q4* 2005 (inclusive) for Regulation G sample, as well as between *q1* 2010 and *q4* 2012 (inclusive) for C&DIs, and zero otherwise. See Table 1 for additional information. All continuous variables are winsorized at the top and bottom of two percent. Standard errors are corrected for serial correlation and heteroscedasticity. *, **, and *** represent significance levels at 10%, 5%, and 1%, respectively (two-tailed test). *Note*: the quality of exclusions in H_{1a} and H_{1b} is explicitly measured by positive or negative values of correlation analyses and linear regression coefficients among variables compared with pre- and post-Regulation G and C&DIs.

Table A20*Top 20 percent of negative exclusions***Probit regressions of meet or exceed analysts' forecasts on exclusion variables (H_{2a} and H_{2b})****Dependent Variable: *MEF***

Independent Variables	(H_{2a})		(H_{2b})	
	Regulation G		C&DIs	
	Coefficient (z-statistic)	Coefficient (z-statistic)	Coefficient (z-statistic)	Coefficient (z-statistic)
<i>Intercept</i>	-0.708*** (-6.52)	-0.709*** (-6.42)	-0.575*** (-6.15)	-0.608*** (-6.35)
<i>Positive_Total_Exclusions</i>	(omitted)		(omitted)	
<i>Positive_Special_Items</i>		0.260*** (2.86)		0.277*** (3.80)
<i>Positive_Other_Exclusions</i>		0.305* (1.86)		0.222* (1.81)
<i>POST</i>	0.117** (-2.30)	-0.085 (-1.40)	-0.146*** (-3.65)	-0.077 (-1.59)
<i>Positive_Total_Exclusions</i> × <i>POST</i>	(omitted)		(omitted)	
<i>Positive_Special_Items</i> × <i>POST</i>		-0.157 (-1.33)		-0.203** (-2.15)
<i>Positive_Other_Exclusions</i> × <i>POST</i>		0.189 (0.79)		-0.366** (-2.18)
<i>Growth</i>	0.009 (0.87)	0.010 (0.93)	0.000 (0.04)	-0.001 (-0.09)
<i>Ln(Size)</i>	0.074*** (5.40)	0.062*** (4.40)	0.086*** (7.84)	0.080*** (7.10)
<i>Loss</i>	-0.361*** (-5.06)	-0.401*** (-5.52)	-0.374*** (-6.65)	-0.418*** (-7.28)
<i>Earnings_Volatility</i>	0.023 (0.84)	0.020 (0.73)	0.038 (1.54)	0.037 (1.49)
<i>Book_to_Market_Assets</i>	0.162*** (2.48)	0.184*** (2.77)	0.053 (0.79)	0.065 (0.97)
<i>Pseudo R</i> ²	0.0242	0.0295	0.034	0.0377
Number of Firm-Quarters	2,672	2,672	4,097	4,097

Positive_Total_Exclusions: a dummy variable equal to one if *Total_Exclusions* are greater than zero, and zero otherwise; *Positive_Special_Items*: a dummy variable equal to one if *Special_Items* are greater than zero, and zero otherwise; *Positive_Other_Exclusions*: a dummy variable equal to one if *Other_Exclusions* are greater than zero, and zero otherwise. See Table 1 for additional information. All continuous variables are winsorized at the top and bottom of two percent. Standard errors are corrected for serial correlation and heteroscedasticity. *, **, and *** represent significance levels at 10%, 5%, and 1%, respectively (two-tailed test).

Table A21*Top 20 percent of negative exclusions***Market reaction to earnings announcement (H_{3a} and H_{3b})****Dependent Variable: 3_day_MAR**

Independent Variables	(H_{3a})		(H_{3b})	
	Regulation G		C&DIs	
	Coefficient (t-statistic)	Coefficient (t-statistic)	Coefficient (t-statistic)	Coefficient (t-statistic)
<i>Intercept</i>	-0.0006*** (-2.56)	-0.0006** (-2.31)	0.0032*** (6.52)	0.0032*** (6.57)
<i>Surprise</i>	-0.0003 (-1.02)	-0.0004 (-1.14)	-0.0009* (-1.68)	-0.0009* (-1.82)
<i>Positive_Total_Exclusions</i>	(omitted)		(omitted)	
<i>Positive_Special_Items</i>		0.0004** (2.39)		-0.0001 (-0.59)
<i>Positive_Other_Exclusions</i>		-0.0003 (-1.38)		0.0003 (0.76)
<i>POST</i>	0.0021*** (9.75)	0.0021*** (9.71)	-0.0036*** (-9.26)	-0.0037*** (-9.31)
<i>Surprise × POST</i>	0.0009** (2.20)	0.0009** (2.20)	0.0013** (2.14)	0.0013** (2.22)
<i>Growth</i>	0.0000 (-0.18)	0.0001 (-0.40)	0.0003 (1.26)	0.0003 (1.28)
<i>Ln(Size)</i>	-0.0001 (-0.45)	-0.0002 (-0.85)	0.0005 (1.12)	0.0005 (1.08)
<i>Loss</i>	0.0005*** (3.57)	0.0003* (1.72)	-0.0012*** (-3.26)	-0.0012*** (-3.17)
<i>Earnings_Volatility</i>	0.0001 (0.65)	0.0001 (0.76)	0.0015*** (5.19)	0.0015*** (5.05)
<i>Book_to_Market_Assets</i>	0.0000 (-0.12)	0.0000 (0.11)	-0.0027*** (-8.83)	-0.0026*** (-8.41)
<i>Adjusted-R^2</i>	0.3646	0.3737	0.3103	0.3114
<i>Number of Firm-Quarters</i>	765	765	760	760

3_day_MAR (Market-Adjusted Return): the sum of difference between firm's value-weighted return, inclusive of dividends and other distributions, from one day before to one day after the IBES earnings announcement date, less the return on the value-weighted market portfolio; *Surprise*: a firm's earnings surprise divided by firm's market price. See Table 1 and 4 for additional information. *Note*: this hypothesis is measured by earnings response coefficients (ERCs) as returns on earnings surprise. All continuous variables are winsorized at the top and bottom of two percent. Standard errors are corrected for serial correlation and heteroscedasticity. *, **, and *** represent significance levels at 10%, 5%, and 1%, respectively (two-tailed test).

Table A22*Top and bottom 20 percent of positive special items***Future Operating Earnings on Exclusions and Control Variables (H_{1a} and H_{1b})****Dependent Variable: $SUM_FutOpEarn$**

Independent Variables	(H_{1a})		(H_{1b})	
	Regulation G		C&DIs	
	Coefficient (t-statistic)	Coefficient (t-statistic)	Coefficient (t-statistic)	Coefficient (t-statistic)
<i>Intercept</i>	-0.002*** (-5.83)	-0.001*** (-6.22)	0.000 (-1.58)	0.000 (-0.74)
<i>Non_GAAP_Earnings</i>	0.625*** (11.27)	0.998*** (9.71)	0.514*** (19.31)	0.615*** (22.68)
<i>Total_Exclusions</i>	-1.109*** (-18.85)		-0.753*** (-19.58)	
<i>Special_Items</i>		-12.914*** (-4.94)		-2.490** (-2.17)
<i>Other_Exclusions</i>		-1.764*** (-8.99)		-0.784*** (-17.45)
<i>POST</i>	0.000*** (3.49)	0.000*** (-2.48)	0.000** (2.16)	0.000*** (6.95)
<i>Total_Exclusions</i> × <i>POST</i>	0.169** (2.01)		0.174** (2.42)	
<i>Special_Items</i> × <i>POST</i>		14.453*** (5.75)		3.637*** (3.66)
<i>Other_Exclusions</i> × <i>POST</i>		0.403*** (3.14)		-0.433*** (-7.03)
<i>Growth</i>	0.000*** (-3.49)	0.000*** (-3.45)	0.000* (-1.73)	0.000*** (-2.77)
<i>Ln(Size)</i>	0.000*** (5.89)	0.000*** (6.48)	0.000* (1.66)	0.000 (0.17)
<i>Loss</i>	0.000*** (-6.20)	0.000*** (-4.01)	0.000*** (-6.73)	0.000*** (-7.69)
<i>Earnings_Volatility</i>	0.000 (1.39)	0.000 (0.01)	0.000*** (5.23)	0.000 (1.39)
<i>Book_to_Market_Assets</i>	0.001*** (7.29)	0.001*** (7.11)	0.000*** (3.93)	0.000*** (4.79)
<i>Adjusted-R²</i>	0.7071	0.7112	0.4393	0.7172
Number of Firm- Quarters	2,835	2,835	5,031	5,031

POST: a dummy variable that equals one if the observation falls between *q1* 2003 and *q4* 2005 (inclusive) for Regulation G sample, as well as between *q1* 2010 and *q4* 2012 (inclusive) for C&DIs, and zero otherwise. See Table 1 for additional information. All continuous variables are winsorized at the top and bottom of two percent. Standard errors are corrected for serial correlation and heteroscedasticity. *, **, and *** represent significance levels at 10%, 5%, and 1%, respectively (two-tailed test). *Note*: the quality of exclusions in H_{1a} and H_{1b} is explicitly measured by positive or negative values of correlation analyses and linear regression coefficients among variables compared with pre- and post-Regulation G and C&DIs.

Table A23*Top and bottom 20 percent of positive special items***Probit regressions of meet or exceed analysts' forecasts on exclusion variables (H_{2a} and H_{2b})****Dependent Variable: *MEF***

Independent Variables	(H_{2a})		(H_{2b})	
	Regulation G		C&DIs	
	Coefficient (z-statistic)	Coefficient (z-statistic)	Coefficient (z-statistic)	Coefficient (z-statistic)
<i>Intercept</i>	-0.095 (-0.81)	-0.093 (-0.79)	-0.023 (-0.25)	0.024 (0.27)
<i>Positive_Total_Exclusions</i>	0.095 (1.11)		0.365*** (5.60)	
<i>Positive_Special_Items</i>		(omitted)		(omitted)
<i>Positive_Other_Exclusions</i>		-0.054 (-0.67)		0.180*** (3.15)
<i>POST</i>	-0.269*** (-3.09)	-0.222*** (-2.85)	-0.312*** (-4.65)	-0.430*** (-7.50)
<i>Positive_Total_Exclusions</i> × <i>POST</i>	0.745*** (6.98)		0.298*** (3.73)	
<i>Positive_Special_Items</i> × <i>POST</i>		(omitted)		(omitted)
<i>Positive_Other_Exclusions</i> × <i>POST</i>		0.789*** (7.73)		0.541*** (7.28)
<i>Growth</i>	0.010 (1.09)	0.010 (1.13)	-0.005 (-0.66)	-0.003 (-0.50)
<i>Ln(Size)</i>	-0.008 (-0.69)	-0.004 (-0.34)	0.002 (0.22)	0.008 (0.92)
<i>Loss</i>	-0.421*** (-7.39)	-0.311*** (-5.74)	-0.413*** (-9.45)	-0.298*** (-7.45)
<i>Earnings_Volatility</i>	-0.044* (-1.65)	-0.056** (-2.08)	0.034 (1.31)	0.039 (1.55)
<i>Book_to_Market_Assets</i>	-0.154** (-2.36)	-0.114* (-1.75)	-0.098** (-2.05)	-0.090* (-1.87)
<i>Pseudo R</i> ²	0.0468	0.0450	0.0270	0.0353
Number of Firm-Quarters	2,757	2,757	5,031	5,031

Positive_Total_Exclusions: a dummy variable equal to one if *Total_Exclusions* are greater than zero, and zero otherwise; *Positive_Special_Items*: a dummy variable equal to one if *Special_Items* are greater than zero, and zero otherwise; *Positive_Other_Exclusions*: a dummy variable equal to one if *Other_Exclusions* are greater than zero, and zero otherwise. See Table 1 for additional information. All continuous variables are winsorized at the top and bottom of two percent. Standard errors are corrected for serial correlation and heteroscedasticity. *, **, and *** represent significance levels at 10%, 5%, and 1%, respectively (two-tailed test).

Table A24*Top and bottom 20 percent of positive special items***Market reaction to earnings announcement (H_{3a} and H_{3b})****Dependent Variable: 3_day_MAR**

Independent Variables	(H_{3a})		(H_{3b})	
	Regulation G		C&DIs	
	Coefficient (t-statistic)	Coefficient (t-statistic)	Coefficient (t-statistic)	Coefficient (t-statistic)
<i>Intercept</i>	-0.0016*** (-3.64)	-0.0018*** (-4.23)	0.0019*** (6.20)	0.0019*** (6.25)
<i>Surprise</i>	0.0010*** (3.00)	0.0010*** (3.20)	-0.0010** (-2.43)	-0.0012*** (-2.94)
<i>Positive_Total_Exclusions</i>	-0.0006*** (-3.56)		0.0001 (0.52)	
<i>Positive_Special_Items</i>		(omitted)		(omitted)
<i>Positive_Other_Exclusions</i>		-0.0006*** (-4.15)		0.0005*** (2.56)
<i>POST</i>	0.0029*** (9.27)	0.0029*** (9.03)	-0.0010** (-2.03)	-0.0011** (-2.11)
<i>Surprise × POST</i>	0.0003 (0.63)	0.0004 (0.86)	-0.0003 (-0.39)	-0.0002 (-0.28)
<i>Growth</i>	0.0001 (0.66)	0.0001 (0.54)	0.0003 (1.33)	0.0003 (1.40)
<i>Ln(Size)</i>	-0.0001 (-0.24)	0.0001 (0.14)	0.0009*** (3.08)	0.0010*** (3.38)
<i>Loss</i>	0.0004** (2.33)	0.0004** (2.26)	-0.0001 (-0.46)	-0.0003 (-1.45)
<i>Earnings_Volatility</i>	-0.0002 (-0.90)	-0.0002 (-0.78)	-0.0009*** (-3.60)	-0.0010*** (-3.83)
<i>Book_to_Market_Assets</i>	0.0005** (2.29)	0.0008*** (3.19)	0.0006*** (2.90)	0.0006*** (3.11)
<i>Adjusted-R^2</i>	0.4628	0.4648	0.1939	0.2019
<i>Number of Firm-Quarters</i>	534	534	731	731

3_day_MAR (Market-Adjusted Return): the sum of difference between firm's value-weighted return, inclusive of dividends and other distributions, from one day before to one day after the IBES earnings announcement date, less the return on the value-weighted market portfolio; *Surprise*: a firm's earnings surprise divided by firm's market price. See Table 1 and 4 for additional information. *Note*: this hypothesis is measured by earnings response coefficients (ERCs) as returns on earnings surprise. All continuous variables are winsorized at the top and bottom of two percent. Standard errors are corrected for serial correlation and heteroscedasticity. *, **, and *** represent significance levels at 10%, 5%, and 1%, respectively (two-tailed test).

Table A25*Top and bottom 20 percent of positive other exclusions***Future Operating Earnings on Exclusions and Control Variables (H_{1a} and H_{1b})****Dependent Variable: $SUM_FutOpEarn$**

Independent Variables	(H_{1a})		(H_{1b})	
	Regulation G		C&DIs	
	Coefficient (t-statistic)	Coefficient (t-statistic)	Coefficient (t-statistic)	Coefficient (t-statistic)
<i>Intercept</i>	-0.001*** (-3.28)	0.000 (0.57)	0.000 (0.66)	0.000*** (2.91)
<i>Non_GAAP_Earnings</i>	0.467*** (10.51)	0.652*** (13.56)	0.441*** (11.07)	0.578*** (12.41)
<i>Total_Exclusions</i>	-1.452*** (-29.36)		-1.445*** (-39.94)	
<i>Special_Items</i>		-3.099 (-1.58)		-4.161*** (-3.05)
<i>Other_Exclusions</i>		-1.840*** (-29.10)		-1.681*** (-33.87)
<i>POST</i>	0.000 (1.05)	0.000 (-3.21)	0.000 (-0.23)	0.000** (-2.21)
<i>Total_Exclusions</i> × <i>POST</i>	0.186*** (3.69)		0.080* (1.78)	
<i>Special_Items</i> × <i>POST</i>		16.625*** (5.88)		13.675*** (7.15)
<i>Other_Exclusions</i> × <i>POST</i>		0.371*** (6.80)		0.124*** (2.51)
<i>Growth</i>	0.000*** (-3.06)	0.000*** (-2.55)	0.000*** (-3.56)	0.000*** (-3.37)
<i>Ln(Size)</i>	0.000*** (6.08)	0.000*** (3.21)	0.000*** (3.39)	0.000 (1.06)
<i>Loss</i>	-0.001*** (-19.30)	-0.001*** (-23.13)	-0.001*** (-24.36)	-0.001*** (-25.47)
<i>Earnings_Volatility</i>	0.000 (-1.46)	0.000** (-1.96)	0.000*** (2.74)	0.000*** (2.99)
<i>Book_to_Market_Assets</i>	0.000*** (2.85)	0.000*** (2.51)	0.000 (0.46)	0.000** (2.36)
<i>Adjusted-R²</i>	0.6567	0.7277	0.7212	0.7378
Number of Firm- Quarters	6,428	6,428	11,274	11,274

POST: a dummy variable that equals one if the observation falls between *q1* 2003 and *q4* 2005 (inclusive) for Regulation G sample, as well as between *q1* 2010 and *q4* 2012 (inclusive) for C&DIs, and zero otherwise. See Table 1 for additional information. All continuous variables are winsorized at the top and bottom of two percent. Standard errors are corrected for serial correlation and heteroscedasticity. *, **, and *** represent significance levels at 10%, 5%, and 1%, respectively (two-tailed test). *Note*: the quality of exclusions in H_{1a} and H_{1b} is explicitly measured by positive or negative values of correlation analyses and linear regression coefficients among variables compared with pre- and post-Regulation G and C&DIs.

Table A26*Top and bottom 20 percent of positive other exclusions***Probit regressions of meet or exceed analysts' forecasts on exclusion variables (H_{2a} and H_{2b})****Dependent Variable: *MEF***

Independent Variables	(H_{2a})		(H_{2b})	
	Regulation G		C&DIs	
	Coefficient (z-statistic)	Coefficient (z-statistic)	Coefficient (z-statistic)	Coefficient (z-statistic)
<i>Intercept</i>	-0.494*** (-3.35)	-0.262*** (-3.84)	-0.069 (-0.72)	0.097** (1.98)
<i>Positive_Total_Exclusions</i>	0.231* (1.81)		0.184** (2.15)	
<i>Positive_Special_Items</i>		0.290*** (4.90)		0.122*** (2.98)
<i>Positive_Other_Exclusions</i>		(omitted)		(omitted)
<i>POST</i>	0.592*** (3.03)	0.240*** (6.11)	0.157 (1.25)	-0.0287 (-1.06)
<i>Positive_Total_Exclusions</i> × <i>POST</i>	-0.373* (-1.88)		-0.230* (-1.80)	
<i>Positive_Special_Items</i> × <i>POST</i>		-0.101 (-1.33)		-0.147*** (-2.72)
<i>Positive_Other_Exclusions</i> × <i>POST</i>		(omitted)		(omitted)
<i>Growth</i>	-0.023*** (-2.70)	-0.024*** (-2.86)	-0.001 (-0.17)	-0.001 (-0.19)
<i>Ln(Size)</i>	0.015* (1.74)	0.003 (0.33)	0.003 (0.52)	0.000 (0.06)
<i>Loss</i>	-0.198*** (-5.53)	-0.223*** (-6.19)	-0.122*** (-4.78)	-0.123*** (-4.86)
<i>Earnings_Volatility</i>	-0.068*** (-3.83)	-0.062*** (-3.49)	-0.049*** (-3.39)	-0.049*** (-3.41)
<i>Book_to_Market_Assets</i>	-0.312*** (-7.46)	-0.302*** (-7.27)	-0.140*** (-5.22)	-0.140*** (-5.24)
<i>Pseudo R</i> ²	0.0246	0.0287	0.0046	0.0049
Number of Firm-Quarters	6,186	6,186	11,630	11,630

Positive_Total_Exclusions: a dummy variable equal to one if *Total_Exclusions* are greater than zero, and zero otherwise; *Positive_Special_Items*: a dummy variable equal to one if *Special_Items* are greater than zero, and zero otherwise; *Positive_Other_Exclusions*: a dummy variable equal to one if *Other_Exclusions* are greater than zero, and zero otherwise. See Table 1 for additional information. All continuous variables are winsorized at the top and bottom of two percent. Standard errors are corrected to correct for serial correlation and heteroscedasticity. *, **, and *** represent significance levels at 10%, 5%, and 1%, respectively (two-tailed test).

Table A27*Top and bottom 20 percent of positive other exclusions***Market reaction to earnings announcement (H_{3a} and H_{3b})****Dependent Variable: 3_day_MAR**

Independent Variables	(H_{3a})		(H_{3b})	
	Regulation G		C&DIs	
	Coefficient (t-statistic)	Coefficient (t-statistic)	Coefficient (t-statistic)	Coefficient (t-statistic)
<i>Intercept</i>	-0.0020*** (-6.12)	-0.0013*** (-4.36)	0.0017*** (4.98)	0.0008*** (3.35)
<i>Surprise</i>	-0.0008*** (-2.56)	-0.0006** (-1.95)	0.0020*** (7.30)	0.0020*** (7.53)
<i>Positive_Total_Exclusions</i>	0.0006*** (3.49)		-0.0009*** (-3.78)	
<i>Positive_Special_Items</i>		-0.0006*** (-5.88)		0.0002 (1.40)
<i>Positive_Other_Exclusions</i>		(omitted)		(omitted)
<i>POST</i>	0.0021*** (8.57)	0.0021*** (8.81)	-0.0009*** (-3.32)	-0.0009*** (-3.16)
<i>Surprise × POST</i>	0.0015*** (4.08)	0.0015*** (4.07)	-0.0009** (-2.16)	-0.0010** (-2.44)
<i>Growth</i>	0.0002 (1.27)	0.0002 (1.43)	0.0001 (0.37)	0.0001 (0.53)
<i>Ln(Size)</i>	0.0001 (0.31)	0.0003* (1.65)	-0.0004** (-2.08)	-0.0004** (-2.14)
<i>Loss</i>	0.0005*** (3.64)	0.0007*** (5.62)	0.0002* (1.68)	0.0001 (0.67)
<i>Earnings_Volatility</i>	-0.0002 (-0.98)	-0.0006*** (-2.58)	0.0004** (2.05)	0.0005*** (2.82)
<i>Book_to_Market_Assets</i>	0.0009*** (5.16)	0.0008*** (4.42)	-0.0015*** (-8.37)	-0.0015*** (-8.52)
<i>Adjusted-R^2</i>	0.4652	0.4828	0.1648	0.1614
<i>Number of Firm-Quarters</i>	767	767	1,673	1,673

3_day_MAR (Market-Adjusted Return): the sum of difference between firm's value-weighted return, inclusive of dividends and other distributions, from one day before to one day after the IBES earnings announcement date, less the return on the value-weighted market portfolio; *Surprise*: a firm's earnings surprise divided by firm's market price. See Table 1 and 4 for additional information. *Note*: this hypothesis is measured by earnings response coefficients (ERCs) as returns on earnings surprise. All continuous variables are winsorized at the top and bottom of two percent. Standard errors are corrected for serial correlation and heteroscedasticity. *, **, and *** represent significance levels at 10%, 5%, and 1%, respectively (two-tailed test).