Journal of Accounting and Economics 46 (2008) 349–365

Contents lists available at ScienceDirect

Journal of Accounting and Economics

journal homepage: www.elsevier.com/locate/jae

The impact of the SEC's regulation of non-GAAP disclosures ☆

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ARTICLE INFO

Article history:
Received 17 February 2006
Received in revised form
8 July 2008
Accepted 15 July 2008
Available online 29 July 2008

JEL classification:
G10
G29
G38
K20
K22
M41
M45

Keywords:
Capital markets
Regulation
Non-GAAP earnings
Disclosure
Analysts' forecasts

ABSTRACT

Rules implemented by the U.S. Securities and Exchange Commission in 2003 impose additional disclosure and filing requirements on firms publicly disclosing non-GAAP earnings. We find the regulations produced (1) modest declines in the frequency of special- and other-item exclusions, (2) a decline in exclusion magnitude, (3) a modest decline in the probability disclosed earnings meet or beat forecasts, and (4) a decline in the association between returns and forecast errors. Our results suggest that, while the regulations reduced firms' use of non-GAAP disclosures to improve performance perceptions, they also reduced firms' willingness to use non-GAAP earnings to convey permanent earnings.

1. Introduction

While corporate managers often claim non-GAAP earnings disclosures help them convey permanent earnings, there has been much concern that managers also use non-GAAP earnings to opportunistically portray their performance.[1] Section 401(b) of Sarbanes–Oxley (SOX) (Public Law 107-204) directs the U.S. Securities and Exchange Commission (SEC) to establish rules regulating 'pro forma' (i.e. non-GAAP) earnings disclosures. Accordingly, the SEC proposed, in November 2002, and implemented, in March 2003, new non-GAAP earnings disclosure rules. The new rules require that, if a firm

☆ We thank Bruce Billings, Vicki Dickinson, Gilles Hilary, Sanjay Kallapur, Bill Kross, Clive Lennox, Rick Morton, Jeff Pittman, Steven Todd, seminar participants at Florida State University, Northwestern University, University of Florida, University of Minnesota, University of Oklahoma, the "People and Money" conference at DePaul University, the 2006 AAA meetings, and especially Ilia Dichev (the referee) and S.P. Kothari (the editor) for helpful comments. Hsu acknowledges financial support from the Hong Kong Research Grants Council (DAG05/06.BM04). We thank I/B/E/S and Thomson Financial for analyst forecast data.

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[1] For example, see Fox (2003), Weil (2003), Bradshaw and Sloan (2002), Brown and Sivakumar (2003), Doyle et al. (2003), Doyle and Soliman (2005), and Zhang and Zheng (2005). See also US Securities and Exchange Commission (SEC, 2001). We discuss both motivations for non-GAAP disclosures in more detail in Section 2.

0165-4101/$ - see front matter
doi:10.1016/j.jacceco.2008.07.002

discloses non-GAAP earnings in any public communication, it must also (a) disclose the most directly comparable GAAP earnings number, (b) disclose a reconciliation of the non-GAAP number to the GAAP number, and (c) furnish, within 5 days, a Form 8-K containing an explanation of why management believes the non-GAAP number is useful to investors. In this paper, we assess the consequences of the regulations along several dimensions.

We find the regulations produced (1) a modest decline in non-GAAP earnings disclosures, (2) a decline in the magnitude of GAAP–non-GAAP earnings differences (i.e. exclusion magnitudes), (3) a modest decline in the probability firms disclose earnings that meet or beat forecasts, and (4) a decline in the association between returns and earnings forecast errors. We partition exclusions into special- and non-special-item (i.e. 'other-item') exclusions, and find the regulations reduced the frequency and magnitude of both. However, we find the regulations reduced meeting-or-beating analysts' forecasts only when firms exclude other items.

Our results suggest the following interpretations. The declines we find in non-GAAP disclosure frequency and exclusion magnitude suggest the regulations have increased managerial focus on GAAP earnings. A regulation-induced decline in meeting-or-beating forecasts when firms exclude other-items suggests that, prior to the regulations, managers were using other-item exclusions to help them meet or beat and that the regulations have helped curtail this behavior. Other studies' results (e.g. Doyle et al., 2003; Kolev et al., 2008) suggest other-item exclusions are more opportunistic than special-item exclusions. Our results generally support that inference. Importantly though, our analyses of exclusion types provide some evidence of an unintended consequence. Quarters in which firms experience special items are presumably those where non-GAAP earnings could be most useful in communicating permanent earnings. As we explain in Section 2, the regulations place restrictions on a firm's ability to exclude transitory income components and potentially make excluding such items more costly. Our results suggest the regulations motivated a reduction in exclusions of special items, which are more transitory (Elliott and Hanna, 1996; Burgstahler et al., 2002). The decline we find in the association between returns and earnings forecast errors is consistent with (1) a shift toward GAAP-based forecast errors (Bradshaw and Sloan, 2002) that contain more transitory components, like special items, and (2) the effect of the shift toward GAAP-based forecast errors dominating the potential effect of any increase in earnings precision resulting from reduced opportunism.

A growing number of other papers address the consequences of the regulations. Using a smaller, hand-collected sample, Marques (2006) finds a decline in non-GAAP disclosure frequency after the SEC regulations. Marques (2006) also finds little or no change in earnings–return relations due to the regulations. In contrast, Yi (2007) concludes that the association between 3-day announcement period returns and non-GAAP earnings increases and that the association between exclusions and future stock returns declines after the regulations. Kolev et al. (2008) find the association between other-item exclusions and future operating income declines after the regulations but that the association between future operating income and special-item exclusions increases. Like Marques (2006), Entwistle et al. (2006) use a smaller sample of hand-collected non-GAAP earnings disclosures and, in univariate analyses, find declines in the frequency of non-GAAP earnings disclosures and in exclusion magnitudes, but an increase in special-item exclusions. Bowen et al. (2005) find increasing emphasis on GAAP earnings in early 2001 following an SEC warning and enforcement action concerning non-GAAP disclosures.

Our study offers several contributions beyond these studies. First and foremost, ours is the only study to assess the impact of the regulations on meeting-or-beating analysts' earnings forecasts and thus the only study to provide evidence that the regulations reduced meeting-or-beating. Second, we provide a comprehensive analysis of exclusion types and magnitudes (see also Entwistle et al., 2006). Our results suggest that an analysis of the effect of the regulations on only non-GAAP frequency understates the impact of the regulations and we provide new evidence regarding special- versus other-item exclusions. Third, unlike other studies, ours suggests a post-regulation decline in investor pricing of earnings forecast errors, which we attribute to a change in the nature of the forecast errors, as post-regulation disclosed earnings are more frequently GAAP-based and include more special items that are likely to be transitory. Overall, our comprehensive analysis of the consequences of the regulations for firms' non-GAAP disclosure decisions suggests they have produced changes mostly, but not entirely, consistent with SEC intentions.

We caution that a limitation of our empirical design (inherent in virtually all research on regulatory events) is the alignment of event and calendar time. Additionally, because non-GAAP reporting is a relatively recent phenomenon, we must work with a relatively short time series. Although we construct our tests to minimize the consequences of these limitations, we cannot rule out the possibility our results are due to some factor we have failed to adequately control.

Section 2 provides background on non-GAAP reporting including regulatory changes and legislative actions. Section 3 describes our sample selection process and variable measurement. Sections 4 and 5 discuss our analyses of non-GAAP disclosure frequency and exclusion magnitude, respectively. Section 6 discusses our analyses of the new rules' impact on meeting-or-beating analysts' forecasts. Section 7 presents our analyses of the pricing of disclosed earnings. Section 8 concludes.

2. Recent regulatory changes potentially affecting disclosures of non-GAAP earnings

Regulation of non-GAAP earnings disclosures began with the SEC's 'cautionary advice' on December 4, 2001, in which the SEC noted that non-GAAP (or "pro forma") financial information carries "no defined meaning and no uniform characteristics", may "mislead investors if it obscures GAAP results", and could violate the anti-fraud provisions of existing