emeraldinsight

International Journal of Accounting & Information Management

Accounting Quality and Media Attention around Seasoned Equity Offerings
Fernando Comiran, Tatiana Fedyk, Joohyung Ha,

Article information:

To cite this document:
Fernando Comiran, Tatiana Fedyk, Joohyung Ha, "Accounting Quality and Media Attention around Seasoned Equity Offerings", International Journal of Accounting & Information Management, https://doi.org/10.1108/IJAIM-02-2017-0029
Permanent link to this document:
https://doi.org/10.1108/IJAIM-02-2017-0029

Downloaded on: 23 June 2018, At: 06:09 (PT)
References: this document contains references to 0 other documents.
To copy this document: permissions@emeraldinsight.com
Access to this document was granted through an Emerald subscription provided by emerald-srm:178665 []

For Authors

If you would like to write for this, or any other Emerald publication, then please use our Emerald for Authors service information about how to choose which publication to write for and submission guidelines are available for all. Please visit www.emeraldinsight.com/authors for more information.

About Emerald www.emeraldinsight.com

Emerald is a global publisher linking research and practice to the benefit of society. The company manages a portfolio of more than 290 journals and over 2,350 books and book series volumes, as well as providing an extensive range of online products and additional customer resources and services.

Emerald is both COUNTER 4 and TRANSFER compliant. The organization is a partner of the Committee on Publication Ethics (COPE) and also works with Portico and the LOCKSS initiative for digital archive preservation.

*Related content and download information correct at time of download.

Downloaded by INSEAD At 06:09 23 June 2018 (PT)

Accounting Quality and Media Attention around Seasoned Equity Offerings

Fernando Comiran
University of San Francisco
fcomiran@usfca.edu

Tatiana Fedyk (corresponding author)
University of San Francisco
tfedyk@usfca.edu

Joohyung Ha
University of San Francisco
jha6@usfca.edu

Downloaded by INSEAD At 06:09 23 June 2018 (PT)

Abstract

Purpose
This paper investigates how media coverage affects the quality of accouning information for seasoned equity offering (SEO) firms.

Design/methodology/approach
The sample includes SEOs completed between January 1993 and December 2014 in the United States that are available from Thomson Financial's Securities Data Company (SDC). The FactSet database was used to measure the amount of media coverage. The paper considers two types of earnings management: accrual-based earnings management and real earnings management.

Findings
This study finds that the media serves as a watchdog for real earnings management, but does not affect accrual manipulations. These findings hold when endogenous factors affecting firms' earnings management choices are controlled for, and also when alternative time windows for media coverage are examined.

Originality/value
This paper is the first to demonstrate that media attention affects the quality of accounting information during equity offerings, as it successfully reduces real earnings management.

© Emerald Publishing Limited
This is a pre-print of a paper and is subject to change before publication. This pre-print is made available with the understanding that it will not be reproduced or stored in a retrieval system without the permission of Emerald Publishing Limited.

KEYWORDS: media attention, real earnings management, accounting information quality, seasoned equity offerings

Downloaded by INSEAD At 06:09 23 June 2018 (PT)

© Emerald Publishing Limited
This is a pre-print of a paper and is subject to change before publication. This pre-print is made available with the understanding that it will not be reproduced or stored in a retrieval system without the permission of Emerald Publishing Limited.

1. Introduction

Does media coverage influence firms' decisions to engage in earnings management? A voluminous literature documents the importance of financial media in disseminating information to market participants and affecting firms' financial performance (e.g., Fang and Peress, 2009; Engelberg and Parsons, 2011). Although equally important, the media's effect on firms' operational performance is less studied. By exerting pressure for particular managerial decisions, the media can influence firms' investment in R&D and their quality of innovation (Hirshleifer *et al*., 2012), stock option grants to CEOs (Kuhnen and Niessen, 2012), and firms' corporate social responsibility strategies (Zyglidopoulos *et al*., 2012). This paper examines the seasoned equity offering (SEO) setting to investigate the effect of the media on a key aspect of firms' operational decision-making: earnings management. The study finds that higher media coverage before the offering corresponds to substantially lower real earnings management (REM) around the offering, but has no significant effect on accrual-based earnings management.

This paper's focus on earnings management is motivated by two factors: the importance of earnings management to a firm's performance and the responsiveness of earnings management to managerial incentives. On the one hand, a large literature documents the impact of earnings management on shareholder value (e.g., Loomis, 1999), innovation (e.g., Fedyk and Khimich, 2016), and future performance (e.g., Rangan, 1998; Teoh *et al*., 1998). On the other hand, earnings management is one of the managerial decisions most susceptible to pressure from incentives—for example, managers manage earnings to reach bonus benchmarks or to increase the value of stock option holdings (Healy, 1985), and managers tailor activities management to the most value-relevant areas (Fedyk *et al*., 2016). These two features make earnings

Downloaded by INSEAD At 06:09 23 June 2018 (PT)

© Emerald Publishing Limited
This is a pre-print of a paper and is subject to change before publication. This pre-print is made available with the understanding that it will not be reproduced or stored in a retrieval system without the permission of Emerald Publishing Limited.

management an ideal domain for observing the effect of the media on managerial decision-making within firms.

Conceptually, media coverage can affect a firm's incentives for earnings management through two channels. The first channel is the media's role as a watchdog, highlighted by Miller (2006), Kuhnen and Niessen (2012), and Dai *et al*. (2015). The key prediction of the watchdog channel (watchdog hypothesis) is a negative correlation between the volume of preexisting media coverage and the extent of earnings management. The second channel is the possibility that the greater visibility induced by higher media coverage can create incentives to report stronger earnings (Dyck and Zingales, 2002; Schrand and Zechman, 2012; Hribar and Yang, 2016). This channel (attention pressure hypothesis) predicts a positive correlation between a firm's preexisting media coverage and its earnings management.

This study tests these channels empirically using the SEO setting. Corporate issuance events such as initial public offerings (IPOs) and SEOs provide incentives for a firm's management to maximize the firm's perceived valuation in the short term (see, e.g., Cook et al., 2006). The interplay between these strategic incentives and the media is illustrated by Ahern and Sosyura (2014), who document that firms time their press releases during merger negotiations in a way that is consistent with the incentives induced by the structure of the individual offerings (fixed versus floating exchange ratio). The present paper focuses not on how and when firms choose to reveal information to the media, but rather on the extent to which firms embellish their earnings given a preexisting media spotlight. The analysis focuses on SEOs rather than IPOs in order to observe earnings management both immediately preceding and immediately following the corporate issuance event.

Downloaded by INSEAD At 06:09 23 June 2018 (PT)

© Emerald Publishing Limited
This is a pre-print of a paper and is subject to change before publication. This pre-print is made available with the understanding that it will not be reproduced or stored in a retrieval system without the permission of Emerald Publishing Limited.

For each SEO considered, this study examines the earnings reported immediately preceding the offering as well as the first earnings reported after the offering. The measure of media attention that is used captures the volume of news articles covering the firm during the six months before each earnings announcement.[1] For the outcome variables, both real and accrual-based earnings management are considered, using common proxies from the literature.

The baseline results support the media-as-watchdog channel for REM but detect, on net, no impact of the media on accrual-based earnings management. For example, regarding earnings announcements in the year preceding an SEO announcement, the results show that a drop from the 75th to the 25th percentile in the number of media mentions during the six months before the announcement corresponds to a 6.07% increase in the total REM, significant at the 10% level. The effect is analogous for the earnings announcement immediately following the SEO announcement: an increase of 9.43%, significant at the 1% level. Turning to accrual-based earnings management, however, the estimated effect of a drop from the 75th to the 25th percentile in media mentions is statistically indistinguishable from zero during the period immediately preceding the SEO announcement, and there is a 1.50% (and weakly significant) decrease in accrual-based earnings management for the year of the SEO announcement—that is, an increase in media attention leads to an increase in accrual-based earnings management in the year of the SEO announcement. Overall, this paper's analysis suggests that the media plays an important watchdog function in checking earnings management, but that the scope is limited to REM.

In order to address a potential omitted variable bias stemming from the nonrandom sample selection and the endogeneity of media coverage to managerial actions, a Heckman two-stage selection procedure was used, following Cohen and Zarowin (2010). In the first stage, the predicted level of earnings management for each firm is estimated using a cross-sectional

Downloaded by INSEAD At 06:09 23 June 2018 (PT)

© Emerald Publishing Limited
This is a pre-print of a paper and is subject to change before publication. This pre-print is made available with the understanding that it will not be reproduced or stored in a retrieval system without the permission of Emerald Publishing Limited.

maximum likelihood model that includes explanatory variables that prior literature links to earnings management, such as firm size, leverage, auditors, and analyst following. In the second stage, the baseline regressions are repeated, but this including the inverse Mills ratio from the first stage as an additional control variable. The two-stage analysis results support the baseline finding that media attention reduces REM around SEOs.

This paper contributes to the existing literature by linking media coverage to earnings management choices by SEO firms. This is, to the best of the authors' knowledge, the first paper that demonstrates that the media effectively reduces REM around SEOs. While prior literature mainly focuses on venture capitalists and auditors as the parties that prevent earnings management (DuCharme *et al.*, 2004; Chi *et al.*, 2011; Wongsunwai, 2013), this is the first paper to highlight the role of the media as an earnings management watchdog. The study demonstrates that auditors and the media complement each other in preventing earnings management: While auditors effectively reduce accrual-based earnings management, media attention helps to prevent the type of earnings management that stymies auditors, namely, cases of real activities manipulations. This is a new, interesting observation that enriches our understanding of how multiple parties influence managers' earnings management decisions.

The remainder of this paper proceeds as follows. Section 2 reviews prior research and formulates the paper's main hypothesis. Section 3 discusses the research methodology, and Section 4 presents the data. Section 5 discusses the results of the main analysis and robustness tests, and Section 6 concludes the paper.

2 Related literature and hypothesis development

Downloaded by INSEAD At 06:09 23 June 2018 (PT)

© Emerald Publishing Limited
This is a pre-print of a paper and is subject to change before publication. This pre-print is made available with the understanding that it will not be reproduced or stored in a retrieval system without the permission of Emerald Publishing Limited.

This paper connects two previously unconnected steams of research: one concerning earnings management around SEOs and the other the media's effect on firms' disclosure, operation, and financial performance.

2.1. Earnings management around SEOs

Prior literature on managers' reporting behavior around SEOs mainly concentrates on two types of earnings management: accrual-based earnings management (e.g., Rangan, 1998; Teoh *et al*., 1998; DuCharme *et al*., 2004) and REM (e.g., Cohen and Zarowin, 2010; Kothari *et al*., 2016).

Downloaded by INSEAD At 06:09 23 June 2018 (PT)

Recognizing that incentives are an essential condition for earnings management (see Healy and Wahlen, 1999), early studies on accrual-based earnings management find that firms manage reported earnings around SEOs in order to increase SEO offer prices and proceeds. Rangan (1998) and Teoh *et al*. (1998) document abnormal accruals around SEOs and present evidence that earnings management around SEOs is associated with poor long-run operating performance following the equity offering. As additional support for the earnings management hypothesis, DuCharme *et al*. (2004) show that accruals are abnormally high for SEO firms, especially those that are subsequently sued by shareholders.

An SEO provides both a motivation and an opportunity for earnings management. The need to raise external financing, which is cited as an important motivation for earnings management (Healy and Whalen, 1999; Dechow *et al*., 2011), is combined with high information asymmetry between insiders and potential investors. However, increased monitoring and enhanced regulatory scrutiny around an SEO should substantially limit, if not prevent, firms from inflating their earnings via accrual-based earnings management (Ball and Shivakumar, 2008). REM is arguably an attractive alternative to accrual-based earnings management, as it

© Emerald Publishing Limited
This is a pre-print of a paper and is subject to change before publication. This pre-print is made available with the understanding that it will not be reproduced or stored in a retrieval system without the permission of Emerald Publishing Limited.

cannot easily be detected by auditors and regulators (Graham *et al*., 2005; Cohen *et al*., 2008). Two recent studies explore both types of earnings management around SEOs and find pervasive evidence and significantly more negative consequences of real activities manipulations among SEO firms. Cohen and Zarowin (2010) demonstrate that SEO firms engage in REM around SEOs and that the decline in post-SEO performance documented by prior literature is more severe for REM than for accrual-based earnings management. Kothari *et al*. (2016) further elaborate the findings in Cohen and Zarowin (2010) by demonstrating that post-SEO market underperformance is mainly driven by REM.

In contrast to accrual-based earnings management, which is more a shifting of revenues and expenses between different time periods, REM involves the manipulation of real economic activities and is considered less likely to be scrutinized by auditors and regulators.[2] For example, a survey paper by Graham *et al*. (2005), which reports on interviews with CFOs about earnings management decisions, supports the idea that managers prefer REM since auditors "cannot readily challenge real economic actions to meet earnings targets that are taken in the ordinary course of business" (p. 36), and Chi *et al*. (2011) demonstrate that when firms' ability to manage earnings through accruals manipulation is constrained by higher quality auditors, firms engage more in REM. As a result, higher quality auditors are (rather unintentionally) associated with higher levels of REM. This paper demonstrates that the media plays an important role in reducing REM around SEOs when standard monitors, such as auditors, fail.

2.2. The media's effect on firms' disclosures, operation, and financial performance

Media attention can either serve as a "watchdog" and effectively reduce earnings management or, alternatively, create extra pressure on managers by placing them in the spotlight so that the managers manage earnings in order to try to fulfill market expectations.

Downloaded by INSEAD At 06:09 23 June 2018 (PT)

© Emerald Publishing Limited
This is a pre-print of a paper and is subject to change before publication. This pre-print is made available with the understanding that it will not be reproduced or stored in a retrieval system without the permission of Emerald Publishing Limited.

Miller (2006) was among the first to demonstrate that the media plays a "watchdog" role, as the press helps to identify accounting irregularities that eventually result in SEC investigations. Consistent with a "watchdog" role of the media, Kuhnen and Niessen (2012) find that the press monitors CEO compensation and identifies excess compensation, and they demonstrate that firms reduce stock option grants to CEOs in cases of negative press coverage. Dai *et al*. (2015) study how news coverage of SEC filings regarding managers' insider sales affects managers' behavior and find that media attention has a "disciplinary" effect—wider news coverage reduces managers' future trading and the profitability of the trades.

Downloaded by INSEAD At 06:09 23 June 2018 (PT)

Alternatively, the media can tempt firms to engage in earnings management. For example, Dyck and Zingales (2002), who stress the role of media attention in influencing managerial behavior, argue that the media can play a significant role in shaping public expectations for managers and, as a result, create extra pressure on managers to fulfill those expectations. Qi *et al*. (2014) examine the influence of media attention on earnings management among Chinese public firms and find that around special events such as SEOs, media attention triggers more accrual-based earnings management—evidence that is more consistent with the media placing extra pressure on managers and "forcing" them to opportunistically manage earnings.

Building on the above, this study seeks to examine how media attention affects different means of earnings management around SEOs. Therefore, the study's primary hypothesis is:

Hypothesis: *The decision by SEO firms to manage earnings is affected by media attention around SEOs.*

3 Methodology

3.1. Main model specification

© Emerald Publishing Limited
This is a pre-print of a paper and is subject to change before publication. This pre-print is made available with the understanding that it will not be reproduced or stored in a retrieval system without the permission of Emerald Publishing Limited.

To test the hypothesis, this study examines how different types of earnings management (i.e., accrual-based earnings management and REM) are affected by media coverage. The model includes accounting, nonaccounting, and control variables, as follows:

$$EM = \beta_0 + \beta_1 Media + \beta_2 Big8 + \beta_3 UW + \beta_4 ROA + \beta_5 BM + \beta_6 Leverage + \beta_7 SGR + \beta_8 LogMcap + \beta_9 Loss + \varepsilon, \quad (1)$$

where *EM* is one of the accrual (*DACC*) or REM (*REM1, REM2,* and *REM_Index*) proxies. To estimate *DACC*, a modified Jones model is used (see the Appendix for details). For the REM proxies, the following measures of REM from prior literature are utilized: sales manipulation estimated through abnormal cash flows from operations (*Ab_CFO*), overproduction (*Ab_Prod*), and discretionary expenses (*Ab_Exp*), the sum of abnormal advertising expenses, abnormal R&D expenditures, and abnormal SG&A. Equation (1) uses three aggregate REM metrics currently employed in the literature (Cohen *et al*., 2008; Cohen and Zarowin, 2010; Zang, 2012): 1*REM_1,* which is the sum of the abnormal production costs and -1 times the abnormal discretionary expenses, *REM_2,* which is the sum of -1 times the abnormal cash flows and -1 times the abnormal discretionary expenses, and a composite index, *REM_Index*, which is the sum of -1 times the abnormal cash flows, the abnormal production costs, and -1 times the abnormal discretionary expenses. All REM proxies are constructed in such a way that a higher *REM* value indicates a greater likelihood that the company has engaged in activities manipulations in order to manage earnings upwards. The Appendix discusses in detail all variable definitions, the discretionary accrual (*DACC*) estimation model, and the REM (*Ab_CFO, Ab_Prod, Ab_Exp*) estimation models.

The main variable of interest in this study is *Media*. A significantly negative coefficient estimate on the *Media* variable will confirm a "watchdog" hypothesis. A significantly positive

Downloaded by INSEAD At 06:09 23 June 2018 (PT)

© Emerald Publishing Limited
This is a pre-print of a paper and is subject to change before publication. This pre-print is made available with the understanding that it will not be reproduced or stored in a retrieval system without the permission of Emerald Publishing Limited.

coefficient estimate will suggest that media attention is not effective for preventing earnings management, but quite the opposite: it "pressures" managers to manage earnings. *Media* is the natural logarithm of the monthly average number of news headlines for an SEO firm during the 6 months prior to the earnings announcement date.[3] Because the SEO literature does not fully agree regarding the time period in which firms are more likely to manage earnings (the SEO year or the year prior to the SEO), this study runs model (1) for both time periods: the last annual earnings announced prior to the SEO (hereafter, year T-1) and the first annual earnings announced after the SEO (hereafter, year T). Figure 1 depicts year T and year T-1.

[Insert Figure 1 Here]

This study includes a number of control variables that, according to the literature, may affect the level of REM (Cohen and Zarowin, 2010; Zang, 2012; Wongsunwai, 2013). The first set of control variables (*Big8* and *UW*[4]) captures external monitoring provided by auditors and underwriters. We also include the return on assets (*ROA*), book-to-market ratio (*BM*), leverage (*Leverage*), sales growth (*SGR*), and the natural logarithm of market capitalization (*LogMcap*) to control for variations in profitability, growth, capital structure, and size, as these firm characteristics might affect earnings management incentives and are known to be correlated with measurement errors of earnings management proxies. Finally, we include a *Loss* indicator variable because the earnings management behavior of firms operating at a profit may differ from that of firms operating at a loss.

3.2. Heckman's (1979) selection model

To address a potential omitted variable bias stemming from the nonrandom sample selection and the endogeneity of media coverage to managerial actions, this study uses Heckman's (1979) two-stage selection procedure, following Cohen and Zarowin (2010). In the

Downloaded by INSEAD At 06:09 23 June 2018 (PT)

© Emerald Publishing Limited
This is a pre-print of a paper and is subject to change before publication. This pre-print is made available with the understanding that it will not be reproduced or stored in a retrieval system without the permission of Emerald Publishing Limited.

first stage, the study estimates the predicted level of earnings management for each firm using a cross-sectional maximum likelihood model that includes explanatory variables linked by prior literature to earnings management. Specifically, the first stage probit regression models (2) are estimated using all SEO firms with non-missing values of the variables by running annual cross-sectional maximum likelihood models each year to obtain the inverse Mills ratio (*InverseMills*).

$$Total\_EM = \beta_0 + \beta_1 Hab\_Beat + \beta_2 LogShares + \beta_3 Num\_analysts + \beta_4 Bonus + \beta_5 Option + \beta_6 ROA + \beta_7 LogMcap + \beta_8 BM + \beta_9 Leverage + \varepsilon. \quad (2)$$

The dependent variable, *Total_EM,* measures whether a firm is classified as an earnings management firm-year observation. *Total_EM* is a dummy variable that equals one if either the discretionary accruals (*DACC*) or one of the composite REM proxies (*RM1, RM2*, and *REM_Index*) is above the industry-year median, and zero otherwise. The industry is defined through the 2-digit SIC code. The independent variables are related to capital market incentives to engage in different types of earnings management. For example, Bartov *et al*. (2002) and Kasznik and McNichols (2002) find that firms that habitually meet or beat market expectations (*Hab_Beat*) have stronger incentives to continue to do so. As earnings benchmarks are often per-share numbers, it becomes harder to achieve the target as firms have more shares outstanding. This may either encourage more earnings management (Zang, 2012) or discourage earnings management (Barton and Simko, 2002). To control for this, *LogShares* (the natural logarithm of the number of shares outstanding) is included. Firms are more likely to engage in earnings management if executive compensation is tied to earnings, so top executives' bonus (*Bonus)* and stock options (*Option)* are also included. Analyst coverage (*Num_analysts*) is also included. Although analyst coverage is believed to provide external monitoring, analyst coverage might also create pressure for managers to beat earnings forecasts. Finally, the return on assets (*ROA),*

Downloaded by INSEAD At 06:09 23 June 2018 (PT)

© Emerald Publishing Limited
This is a pre-print of a paper and is subject to change before publication. This pre-print is made available with the understanding that it will not be reproduced or stored in a retrieval system without the permission of Emerald Publishing Limited.

market capitalization *(LogMcap),* book-to-market ratio *(BM)*, and leverage *(Leverage*) are controlled for in order to capture the possibility that earnings management incentives vary with firms' profitability, size, growth potential, and capital structure.

In the second stage, the baseline regressions using the SEO sample firms are repeated, but this time including the inverse Mills ratio from the first stage to correct for potential selection bias. The following model using the cross-sectional pooled maximum likelihood regression is estimated:

$$REM\_dummy = \beta_0 + \beta_1 Media + \beta_2 Big8 + \beta_3 Tenure + \beta_4 Litigation + \beta_5 NOA + \beta_6 InverseMills + \varepsilon. \quad (3)$$

The dependent variable *REM_dummy* is a dummy variable that equals one if a firm's REM proxy (*REM1*, *REM2*, or *REM_Index*) exceeds the industry-year median REM proxy, and zero otherwise.

The independent variables capture the costs of engaging management through accruals management. The idea is that the trade-off between the two earnings management approaches is determined by their relative costliness. Prior studies show that Big 8 auditors have more resources for auditing and more reputation at risk than smaller auditors. Big 8 auditors are expected to constrain accruals-based management more than smaller auditors. Also, prior research (e.g., Myers *et al*., 2003) shows that the auditor's tenure (*Tenure*) is negatively related to accruals management. As firms find earnings management through accruals to be harder, they are expected to rely more on REM. Barton and Simko (2002) argue that higher current net operating assets (*NOA*) imply greater past earnings management activities, which reduces the current ability to manage earnings through accrual manipulations. Therefore, the *NOA* level is expected to be negatively related to earnings management through accruals and, in turn,

Downloaded by INSEAD At 06:09 23 June 2018 (PT)

© Emerald Publishing Limited
This is a pre-print of a paper and is subject to change before publication. This pre-print is made available with the understanding that it will not be reproduced or stored in a retrieval system without the permission of Emerald Publishing Limited.

positively related to REM. Because earnings management through accruals can be detected more easily than REM, firms operating in the highly litigious industries (*Litigation*) are more likely to use real earnings management tactics to avoid legal consequences.

4 Data sample

This study began with all SEOs completed between January 1993 and December 2014 in the United States that are available from Thomson Financial's Securities Data Company (SDC). The sample period starts in 1993 because the ExecuComp database is available only from 1993 onward. The study excludes unit offers, closed-end funds, spinoffs, real estate investment trusts (REITs), American depositary receipts (ADRs), limited partnerships, withdrawn SEOs with a filing range midpoint below $5, and firms with offer prices below $5, leaving 9,832 observations. Further observations were removed if they did not have the necessary data to calculate the discretionary accruals metrics and REM proxies employed in this study's analysis. In order to avoid counting the same firm-year observation multiple times, we kept only the earliest SEO in a particular year if the firm had multiple SEOs during that year.[5] Information on all these variables was obtained from Compustat (financial information and earnings management proxies), CRSP (*logMCAP*), Audit Analytics (*Tenure, Big 8*), ExecuComp (*Bonus* and *Option*), and IBES (*Num_analysts*). The underwriters' ranking variable was obtained from Jay Ritter's website (https://site.warrington.ufl.edu/ritter/ipo-data). The FactSet database was used to measure the amount of media coverage. FactSet provides the daily number of headlines a company has on any given day. After the sample was restricted to the intersection of the various databases, the final sample consisted of 907 firm-year observations for year T and 773 firm-year observations for year T-1. Table 1 summarizes the sample selection process.

[Insert Table 1 Here]

Downloaded by INSEAD At 06:09 23 June 2018 (PT)

© Emerald Publishing Limited
This is a pre-print of a paper and is subject to change before publication. This pre-print is made available with the understanding that it will not be reproduced or stored in a retrieval system without the permission of Emerald Publishing Limited.

5 Results

Table 2 presents the descriptive statistics for this study's two main SEO samples: year T and year T-1. Since there is not a clear consensus in the current literature regarding the period (year T or year T-1) in which earnings manipulation would most likely appear in the financial statements, all of this study's tests were performed for both samples.

[Insert Table 2 Here]

Table 3 shows the results from testing the study's main hypothesis that media coverage affects companies' earnings management decisions. The coefficients on the media coverage are negative and statistically significant at least at the 5% level for all REM proxies in year T: -2.49 for *REM1*, -2.75 for *REM2,* and -2.58 for *REM_Index*. The REM results for year T-1 are very similar to those for year T, i.e., media attention is negatively correlated with REM. These results indicate that the media effectively serves as a "watchdog" by reducing the amount of REM among SEO firms.

For a better understanding of the media effects, Table 3 reports the marginal effects of media coverage and other control variables on different earnings management proxies, with the objective of evaluating whether the coefficients are not only statistically significant but also economically significant. The marginal effects are calculated following Dechow *et al.* (2011). Specifically, (1) the value of the predicted earnings management when all variables are held at their mean values is calculated; (2) the earnings management value after moving one independent variable to its lower quartile value while holding all other variables at their mean value is recalculated; (3) the earnings management when the independent variable is moved to its upper quartile value is recalculated; and (4) the percentage change in the predicted earnings

Downloaded by INSEAD At 06:09 23 June 2018 (PT)

© Emerald Publishing Limited
This is a pre-print of a paper and is subject to change before publication. This pre-print is made available with the understanding that it will not be reproduced or stored in a retrieval system without the permission of Emerald Publishing Limited.

management across the interquartile range for that variable is calculated. The results in Table 3 show how much moving from the bottom quartile to the top quartile of the independent variable affects REM. Thus, for the earnings announcement in the year preceding an SEO (year T-1), a drop from the 75th to the 25th percentile in the number of media mentions during the six months prior to an earnings announcement results in 6.82%, 4.94%, and 6.07% significant increases in *REM1*, *REM2,* and *REM_Index,* respectively. Even larger marginal effects are observed for the earnings announcement immediately following the SEO announcement (year T). More specifically, a drop from the 75th to the 25th percentile in media mentions during the six months prior to an earnings announcement results in 8.22%, 7.62%, and 9.43% increases in *REM1*, *REM2*, and *REM_Index*, respectively, all statistically significant at less than the 5% level.

[Insert Table 3 Here]

However, when the effect of media attention on accrual-based earnings management is tested, the results are very different: In year T, media mentions are positively correlated with discretionary accruals (coefficient of 1.67, significant at the 10% level), and in year T-1, their relation is insignificant. Stated differently, media presence appears to play no role in reducing accrual-based earnings management during the period immediately preceding the SEO announcement but rather induces firms to choose accrual-based management during the period following the SEO announcement. Looking at the auditor's effects on accrual-based management and REM, it is interesting to note that while auditors effectively reduce accrual-based earnings management in both years, T-1 and T, they are ineffective for preventing REM. Thus, the coefficient on *Big8* is positive and significant for all three REM proxies in year T-1, and is either positive but insignificant (*REM1* and *REM_Index*) or positive and weakly significant (*REM2*) in year T. These results are consistent with the findings of Chi *et al*. (2011), who provide evidence

Downloaded by INSEAD At 06:09 23 June 2018 (PT)

© Emerald Publishing Limited
This is a pre-print of a paper and is subject to change before publication. This pre-print is made available with the understanding that it will not be reproduced or stored in a retrieval system without the permission of Emerald Publishing Limited.

that when firms' ability to manage earnings through accruals manipulation is constrained by higher quality auditors, the firms engage more in REM. The higher media coverage seems to complement the auditors' job by decreasing the possibility that companies will get away with any form of earnings management.

Table 4 reports the results of the Heckman (1979) two-stage selection procedure. Panel A reports first-stage coefficients, and Panel B reports second-stage regression coefficients. As can be seen in Panel B, even after controlling for possible biases, the coefficients for media coverage are still negative and significant for all three measures of REM in year T-1, and for two out of three measures of REM in year T. The coefficients for auditors (*Big8*) are, on the other hand, positive and significant for all measures of REM for both years, T-1 and T, indicating that auditors are not effective in reducing real earnings management.

[Insert Table 4 Here]

Finally, Table 5 presents an analysis using alternative windows for media coverage. The analysis examines the effect of media coverage on earnings management, measured as *REM_Index*, immediately following the SEO announcement (in year T). The main tests use the natural log of the average monthly news mentions related to the company during the 6 months before the company's earnings announcement around the SEO. The alternative time windows tested are 1 year (*Media_1yr*), 3 months (*Media_3mo*), and 1 month (*Media_1mo)* before the SEO announcement date. It was expected that the media effect on SEO earnings management would be less pronounced for the 1-year period since the average media coverage 1 year before the SEO announcement date is less likely to be directly related to the SEO earnings management. We also did not expect to find any correlation between the media coverage during the one month before the company's earnings announcement around the SEO and earnings management in the

Downloaded by INSEAD At 06:09 23 June 2018 (PT)

© Emerald Publishing Limited
This is a pre-print of a paper and is subject to change before publication. This pre-print is made available with the understanding that it will not be reproduced or stored in a retrieval system without the permission of Emerald Publishing Limited.

SEO year, given that the month before the issuance date is legally required to be a quiet period (Heyman, 2013).[6] The results reported in Table 5 indicate that, as expected, the only time period for which media coverage is significant in preventing REM is the 3-month period before the earnings announcement date. Given that media coverage 3 months prior to the SEO also incorporates the 1-month quiet period to a larger extent than the original 6-month period does, the decrease in statistical significance was expected.

[Insert Table 5 Here]

Downloaded by INSEAD At 06:09 23 June 2018 (PT)

6 Conclusion

Miller and Skinner (2015) note that "It is now clear that the role of the media is of interest in its own right, especially if it does more than simply disseminate news. One promising approach is to consider the media's interaction with other players in financial markets, such as analysts, auditors, investors etc. While some research on the media has occurred, this area is still relatively undeveloped" (p. 232).

This paper considers the role of the media in preventing two types of earnings management around SEOs: accrual-based earnings management and real activities manipulation. After establishing a relationship between the media and earnings management, it further studies the differential roles of media and auditors in enhancing the earnings quality.

Prior literature demonstrates that media coverage can serve as a "watchdog" and prevent financial misreporting and fraud (Miller, 2006; Kuhnen and Niessen, 2012; Dai *et al*., 2015). Alternatively, prior research also suggests that the media can "force" a manager to manage earnings by placing the manager in the spotlight, creating high expectations, and adding to the manager's overconfidence (Schrand and Zechman, 2012; Hribar and Yang, 2016). Using a

© Emerald Publishing Limited
This is a pre-print of a paper and is subject to change before publication. This pre-print is made available with the understanding that it will not be reproduced or stored in a retrieval system without the permission of Emerald Publishing Limited.

sample of SEOs from 1993 to 2014 and news coverage data from the FactSet database, this study shows that the media effectively reduces REM but is inefficient in preventing accrual-based earnings management in both the fiscal year prior to and the one following the SEO. However, the results are the opposite for auditors: while auditors are effective in reducing accrual-based earnings management, they actually increase REM. This happens because REM is not easily detected by auditors and regulators (Graham *et al*., 2005) and is chosen by managers during times of high scrutiny (Cohen *et al*., 2008).

This is, to the authors' knowledge, the first study to highlight the role of the media as an REM "watchdog" around SEOs. It further demonstrates that auditors and the media complement each other in preventing different types of earnings management: While auditors effectively reduce accrual-based earnings management, the media's role is to prevent earnings management in the case that stymies auditors, namely, real activities manipulations. This finding enriches our understanding of how multiple parties influence managers' earnings management decisions.

Downloaded by INSEAD At 06:09 23 June 2018 (PT)

[1] For robustness, we also examine alternative media coverage windows of 1 month, 3 months, and 1 year.

[2] Examples of REM include overproduction in order to report lower costs of goods sold, special discounts or incentive programs to increase sales when revenue targets are not met, and myopic operation and investment decisions, such as cutting R&D expenditures or postponing desirable investments.

[3] For robustness analysis, we also examine three alternative time windows for media coverage: 1 month, 3 months, and 1 year (the results are presented and discussed in Section 5).

[4] Values for the *UW* variable are obtained from Jay's Ritter website, https://site.warrington.ufl.edu/ritter/ipo-data/.

[5] For robustness, we also run the regression (1) using average media coverage for firms with multiple SEOs in a given year. For example, if company A had three SEOs during 2004, we measure media coverage for each of three SEOs in year 2004, and take the average of three. The results are almost identical to those reported in Table 3.

[6] For SEC regulation of the quiet period, refer to https://www.sec.gov/answers/quiet.htm.

© Emerald Publishing Limited
This is a pre-print of a paper and is subject to change before publication. This pre-print is made available with the understanding that it will not be reproduced or stored in a retrieval system without the permission of Emerald Publishing Limited.

References

Ahern, K.R. and Sosyura, D. (2014), "Who writes the news? Corporate press releases during merger negotiations", *The Journal of Finance*, Vol. 69 No. 1, pp. 241-91.

Ball, R. and Shivakumar, L. (2008), "Earnings quality at initial public offerings", *Journal of Accounting and Economics*, Vol. 45 No. 2, pp. 324-49.

Barton, J. and Simko, P.J. (2002), "The balance sheet as an earnings management constraint", *The Accounting Review* Vol. 77, pp. 1-27.

Bartov, E., Givoly, D. and Hayn, C. (2002), "The rewards to meeting or beating analysts' forecasts", *Journal of Accounting and Economics* Vol. 33, pp. 173-204.

Chi, W., Lisic, L.L. and Pevzner, M. (2011), "Is enhanced audit quality associated with greater real earnings management?", *Accounting Horizons*, Vol. 25 No. 2, pp. 315-35.

Cohen, D.A., Dey, A. and Lys, T.Z. (2008), "Real and accrual-based earnings management in the pre-and post-Sarbanes-Oxley periods", *The Accounting Review*, Vol. 83, No. 3, pp. 757-87.

Cohen, D.A. and Zarowin, P. (2010), "Accrual-based and real earnings management activities around seasoned equity offerings", *Journal of Accounting and Economics,* Vol. 50 No. 1, pp. 2-19.

Cook, D.O., Kieschnick, R. and Van Ness, R.A. (2006). "On the marketing of IPOs", *Journal of Financial Economics*, Vol. 82, pp. 35-61.

Dai, L., Parwada, J.T. and Zhang, B. (2015), "The governance effect of the media's news dissemination role: evidence from insider trading", *Journal of Accounting Research*, Vol. 53 No. 2, pp. 331-66.

Dechow, P.M., Ge, W., Larson, C.R. and Sloan, R.G. (2011), "Predicting material accounting misstatements", *Contemporary Accounting Research*, Vol. 28, pp. 17-82.

DuCharme, L.L., Malatesta, P.H. and Sefcik, S.E. (2004), "Earnings management, stock issues, and shareholder lawsuits", *Journal of Financial Economics*, Vol. 71 No. 1, pp. 27-49.

Dyck, A. and Zingales, L. (2002), "The corporate governance role of the media," in Islam, R., Djankov, S. and McLeish, C. (Eds.), *The Right to Tell: The Role of Mass Media in Economic Development*, The World Bank, Washington, DC, pp. 107-37.

Engelberg, J.E. and Parsons. C.A. (2011), "The causal impact of media in financial markets", *The Journal of Finance*, Vol. 66 No. 1, pp. 67-97.

Fang, L. and Peress, J. (2009), "Media coverage and the cross-section of stock returns", *Journal of Finance*, Vol. 54, No. 5, pp. 2023-52.

Downloaded by INSEAD At 06:09 23 June 2018 (PT)

© Emerald Publishing Limited

This is a pre-print of a paper and is subject to change before publication. This pre-print is made available with the understanding that it will not be reproduced or stored in a retrieval system without the permission of Emerald Publishing Limited.

Fedyk, T. and Khimich, N. (2017), "Real activities management during initial public offerings: evidence from R&D expenditures", working paper, University of San Francisco, San Francisco, CA, February 17.

Fedyk, T., Singer, Z. and Soliman, M. (2017), "The sharpest tool in the shed: IPO financial statement management of STEM vs. Non-STEM firms", *Review of Accounting Studies*, forthcoming.

Graham, J., Harvey, C. and Rajgopal, S. (2005), "The economic implications of corporate financial reporting", *Journal of Accounting and Economics,* Vol. 40, pp. 3-73.

Healy, P.M. (1985), "The effect of bonus schemes on accounting decisions", *Journal of Accounting and Economics*, Vol. 7 No. 1, pp. 85-107.

Healy, P.M. and Whalen, J.M. (1999), "A review of the earnings management literature and its implications for standard setting", Vol. 13, pp. 365-83.

Heckman, J.J. (1979), "Sample selection bias as a specification error", *Econometrica*, Vol. 47 No. 1, pp. 53-161.

Heyman, S.B. (2013), "The quiet period in a noisy world: rethinking securities regulation and corporate free speech", *Ohio State Law Journal*, Vol. 74, p. 189-239.

Hirshleifer, D., Low, A. and Teoh, S. (2012), "Are overconfident CEOs better innovators?" *Journal of Finance,* Vol. 67 No. 4, pp. 1457-98.

Hribar, P. and Yang, H. (2016), "CEO overconfidence and management forecasting", *Contemporary Accounting Research,* Vol. 33 No. 1, pp. 204-27.

Jones, J.J. (1991), "Earnings management during import relief investigations", *Journal of Accounting Research*, Vol. 29 No. 2, pp. 193-228.

Kasznik, R. and McNichols, M.F. (2002), "Does meeting expectations matter? Evidence from analyst forecast revisions and share prices", *Journal of Accounting Research*, Vol. 40, pp. 727-59.

Kothari, S.P., Mizik, N. and Roychowdhury, S. (2016), "Managing for the moment: the role of earnings management via real activities versus accruals in SEO valuation", *The Accounting Review*, Vol. 91 No. 2, pp. 559-86.

Kuhnen, C.M. and Niessen, A. (2012), "Public opinion and executive compensation", *Management Science*, Vol. 58 No. 7, pp. 1249-72.

Loomis, C. (1999), "The crackdown is here", *Fortune*, August 2, Vol. 140, pp. 75-92.

Downloaded by INSEAD At 06:09 23 June 2018 (PT)

© Emerald Publishing Limited
This is a pre-print of a paper and is subject to change before publication. This pre-print is made available with the understanding that it will not be reproduced or stored in a retrieval system without the permission of Emerald Publishing Limited.

Miller, G.S. (2006), "The press as a watchdog for accounting fraud", *Journal of Accounting Research*, Vol. 44 No. 5, pp. 1001-33.

Miller, G.S. and Skinner, D.J. (2015), "The evolving disclosure landscape: how changes in technology, the media, and capital markets are affecting disclosure", *Journal of Accounting Research*, Vol. 53 No. 2, pp. 221-39.

Myers, J.N., Myers, L.A. and Omer, T.C. (2003), "Exploring the term of the auditor-client relationship and the quality of earnings: a case for mandatory auditor rotation?", *The Accounting Review*, Vol. 78 No. 3, pp. 779-99.

Qi, B., Yang, R. and Tian, G. (2014), "Can media deter management from manipulating earnings? evidence from China", *Review of Quantitative Finance and Accounting*, Vol. 42 No. 3, pp. 571-97.

Rangan, S. (1998), "Earnings management and the performance of seasoned equity offerings", *Journal of Financial Economics*, Vol. 50 No. 1, pp. 101-22.

Roychowdhury, S. (2006), "Earnings management through real activities manipulation", *Journal of Accounting and Economics*, Vol. 42 No. 3, pp. 335-70.

Schrand, C.M. and Zechman, S.L. (2012), "Executive overconfidence and the slippery slope to financial misreporting", *Journal of Accounting and Economics*, Vol. 53 No. 1, pp. 311-29.

Teoh, S.H., Welch, I. and Wong, T.J. (1998), "Earnings management and the underperformance of seasoned equity offerings", *Journal of Financial Economics*, Vol. 50 No. 1, pp. 63-99.

Wongsunwai, W. (2013), "The effect of external monitoring on accrual-based and real earnings management: evidence from venture-backed initial public offerings", *Contemporary Accounting Research*, Vol. 30 No. 1, pp. 296-324.

Zang, A. (2012), "Evidence on the tradeoff between real manipulation and accrual manipulation", *The Accounting Review*, Vol. 87 No. 2, pp. 675-703.

Zyglidopoulos, S.C., Georgiadis, A.P., Carroll, C.E. and Siegel, D.S. (2012), "Does media attention drive corporate social responsibility?", *Journal of Business Research*, Vol. 65 No. 11, pp. 1622-27.

Downloaded by INSEAD At 06:09 23 June 2018 (PT)

© Emerald Publishing Limited
This is a pre-print of a paper and is subject to change before publication. This pre-print is made available with the understanding that it will not be reproduced or stored in a retrieval system without the permission of Emerald Publishing Limited.

Appendix: Variable descriptions

Main Variables

Media natural logarithm of the average monthly number of media articles covering the SEO firm during the previous 6 months up to 1 day before the earnings announcement for the pre-SEO year (year T-1) or for the SEO year (year T).

DACC Discretionary accruals are estimated cross-sectionally for each year *t* using all firm-years within the same two-digit SIC code:

$TA=\alpha + \beta_1 1/TotalAssets_{i,t-1} + \beta_2(\Delta Rev_{i,t}-\Delta AR_{i,t}) + \beta_3 PPE_{i,t} + \varepsilon_{i,t}$

where *TA* = total accruals = net income (*NI*) minus cash flow from operations (*OANCF*), *TotalAssets* = total assets (*AT*), ΔRev = change in revenues (*Sale*) scaled by lagged total assets, ΔAR = change in accounts receivable (*RECT*) scaled by lagged total assets, and *PPE* = gross value of PPE (*PPEGT*) scaled by lagged total assets. Residuals from this model are modified Jones-model discretionary accruals (Jones, 1991).

abs(DACC) absolute value of *DACC*

Ab_CFO abnormal cash from operations, estimated as the error term from the following industry-year regression:

$$\frac{CFO_{it}}{Assets_{i,t-1}} = K_1 \frac{1}{Assets_{i,t-1}} + K_2 \frac{Sales_{it}}{Assets_{i,t-1}} + K_3 \frac{\Delta Sales_{it}}{Assets_{i,t-1}} + \varepsilon_{it}$$

Ab_Prod abnormal production costs, estimated as the error term from the following industry-year regression:

$$\frac{PROD_{it}}{Assets_{i,t-1}} = K_1 \frac{1}{Assets_{i,t-1}} + K_2 \frac{Sales_{it}}{Assets_{i,t-1}} + K_3 \frac{\Delta Sales_{it}}{Assets_{i,t-1}} + K_4 \frac{\Delta Sales_{i,t-1}}{Assets_{i,t-1}} + \varepsilon_{it}$$

where *PROD* is the sum of the costs of goods sold (*COGS*) and change in inventory (*INVCH*) during the year.

Ab_Exp abnormal discretionary expenses, estimated as the error term from the following industry-year regression:

$$\frac{DISX_{it}}{Assets_{i,t-1}} = K_1 \frac{1}{Assets_{i,t-1}} + K_2 \frac{Sales_{it}}{Assets_{i,t-1}} + \varepsilon_{it}$$

where DISX is defined as the sum of advertising expenses (*XAD*), R&D expenses (*XRD*), and SG&A (*XSGA*) expenses. As long as SG&A is available, advertising expenses and R&D are set to zero if they are missing.

REM1 = - *Ab_Exp* + *Ab_Prod*

REM2 = - *Ab_CFO* – *Ab_Exp*

REM_Index = - *Ab_Exp*+ *Ab_Prod*- *Ab_CFO*

Downloaded by INSEAD At 06:09 23 June 2018 (PT)

© Emerald Publishing Limited
This is a pre-print of a paper and is subject to change before publication. This pre-print is made available with the understanding that it will not be reproduced or stored in a retrieval system without the permission of Emerald Publishing Limited.

REM_dummy dummy variable that equals one if a firm's REM proxy (*REM1*, *REM2*, or *REM_Index*) exceeds the industry-year median REM proxy, and zero otherwise.

Total_EM dummy variable that equals one if either discretionary accruals (*DACC)* or one of the composite REM proxies (*RM1, RM2*, and *REM_Index*) is above the industry-year median, and zero otherwise. The industry is defined based on the 2-digit SIC code.

Control Variables

Big8 dummy variable for whether a firm has a Big 8 auditor

BM book-to-market ratio, defined as the total book value of assets(*AT*) divided by the fiscal year end market price (*PRCC_F*) times the number of shares (*CSHO*) plus the book value of total liabilities (*LT*)

Bonus average bonus compensation as a proportion of total compensation received by the CEO and the CFO of a firm

Cash cash holding (*CH*) deflated by beginning-of-year total assets (*AT*)

Hab_Beat frequency of meeting/beating analysts' earnings forecasts during the past 4 quarters

Leverage long-term debt (*DLTT*) divided by total assets (*AT*)

Litigation dummy variable that equals one if a firm is in a high litigation industry, and zero otherwise. High litigation industries are those with SIC codes 2833–2836, 8731–8734, 7371–7379, 3570–3577, and 3600–3674, which correspond to the pharmaceuticals/biotechnology, computer, and electronics industries

LogMcap natural logarithm of market capitalization (*CSHO x PRCC_F*)

LogShares natural logarithm of the number of shares outstanding (*CSHO*)

Loss indicator variable that equals one if income before extraordinary items (*IB*) is positive, and zero otherwise

NOA net operating assets, which is calculated as the sum of shareholders' equity (*CEQ*) less cash and marketable securities (*CHE*) plus total debt (*DLTT* + *DLC*) at the beginning of the year, deflated by total sales (*SALE*) for the previous year

Num_analysts natural logarithm of one + the number of analysts following the firm in a given year

Offersize number of shares offered divided by the number of shares outstanding before the SEO

Downloaded by INSEAD At 06:09 23 June 2018 (PT)

© Emerald Publishing Limited
This is a pre-print of a paper and is subject to change before publication. This pre-print is made available with the understanding that it will not be reproduced or stored in a retrieval system without the permission of Emerald Publishing Limited.

Option	Black-Scholes value of option compensation as a proportion of total compensation received by the CEO and the CFO of a firm
Proceeds	dollar amount of the SEO
ROA	income before extraordinary items (*IB*) divided by the beginning total assets (*AT*)
SGR	sales growth calculated as the difference between current and previous period sales (*SALE*) divided by the previous period sales ($SALE_{t-1}$)
Tenure	natural logarithm of the number of years the auditor has audited the firm
UW	underwriter rating variable, obtained from Jay Ritter's website, https://site.warrington.ufl.edu/ritter/ipo-data

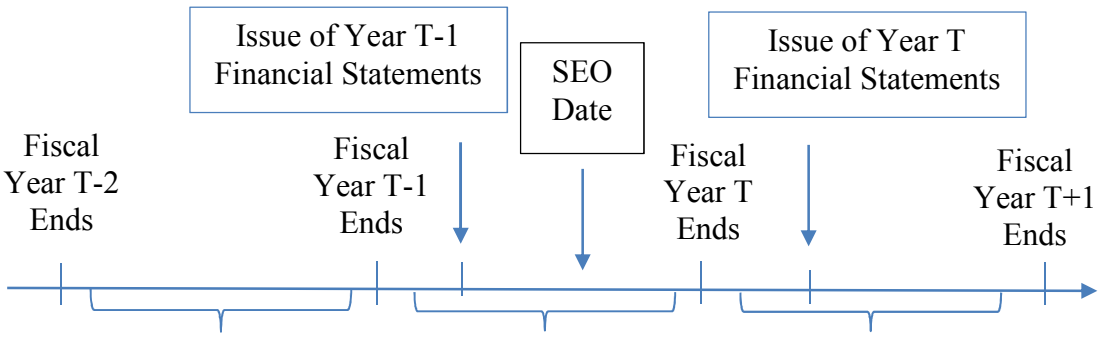
Downloaded by INSEAD At 06:09 23 June 2018 (PT)

© Emerald Publishing Limited
This is a pre-print of a paper and is subject to change before publication. This pre-print is made available with the understanding that it will not be reproduced or stored in a retrieval system without the permission of Emerald Publishing Limited.

FIGURE 1

SEO Timeline: Year T-1 and Year T

Figure 1 depicts the timeline around the SEO, including years T-1 and T.



Downloaded by INSEAD At 06:09 23 June 2018 (PT)

© Emerald Publishing Limited
This is a pre-print of a paper and is subject to change before publication. This pre-print is made available with the understanding that it will not be reproduced or stored in a retrieval system without the permission of Emerald Publishing Limited.

TABLE 1

Sample selection for SEO firms with news coverage

	Firm-Year Observations
Starting Sample:	
All SEOs between 1993 and 2014 after filtering out unit offers, closed-end funds, spinoffs, real estate investment trusts (REITs), American depositary receipts (ADRs), limited partnerships, withdrawn SEOs with a filing range midpoint less than $5, and firms with offer prices below $5	9,832
Year T (SEO year) sample:	
Less:	
observations with multiple SEOs in the same fiscal year	2,945
observations without the data necessary to calculate the discretionary accruals metrics and REM proxies	4,837
observations without media coverage	1,143
Final Sample, Year T	**907**
Year T-1 (pre-SEO year) sample:	
Less:	
observations with multiple SEOs in the same fiscal year	2,945
observations without the data necessary to calculate the discretionary accruals metrics and REM proxies	5,272
observations without media coverage	842
Final Sample, Year T-1	**773**

Downloaded by INSEAD At 06:09 23 June 2018 (PT)

© Emerald Publishing Limited
This is a pre-print of a paper and is subject to change before publication. This pre-print is made available with the understanding that it will not be reproduced or stored in a retrieval system without the permission of Emerald Publishing Limited.

Downloaded by INSEAD At 06:09 23 June 2018 (PT)

© Emerald Publishing Limited
This is a pre-print of a paper and is subject to change before publication. This pre-print is made available with the understanding that it will not be reproduced or stored in a retrieval system without the permission of Emerald Publishing Limited.

TABLE 2
Descriptive statistics (for all SEOs with media variable available)

Variable	N	Mean	Median	Std Dev	Mean sig	Median sig	N	Mean	Median	Std Dev	Mean sig	Median sig
	Main variables measured at T-1						***Main variables measured at T***					
Media	773	2.654	2.872	0.936	<.0001	<.0001	907	2.757	3.076	0.973	<.0001	<.0001
Ab_Prod	773	-0.003	0.012	0.234	0.728	0.314	907	-0.021	-0.009	0.237	0.007	0.037
Ab_CFO	773	0.032	0.033	0.170	<.0001	<.0001	907	0.053	0.048	0.183	<.0001	<.0001
Ab_Exp	773	0.003	-0.047	0.391	0.824	<.0001	907	0.004	-0.043	0.355	0.731	<.0001
REM1	773	0.002	0.054	0.526	0.917	0.000	907	-0.023	0.032	0.525	0.188	0.041
REM2	773	-0.028	0.025	0.365	0.031	0.056	907	-0.054	0.007	0.378	<.0001	0.421
REM_Index	773	-0.026	0.033	0.532	0.178	0.122	907	-0.074	-0.001	0.562	<.0001	0.185
DACC	773	0.003	0.007	0.136	0.538	0.072	907	0.025	0.015	0.153	<.0001	<.0001
abs(DACC)	773	0.084	0.052	0.107	<.0001	<.0001	907	0.096	0.058	0.121	<.0001	<.0001
	Control variables measured at T-1						***Control variables measured at T***					
Total Assets	773	2045.290	627.173	4441.980	<.0001	<.0001	907	2101.150	632.137	4793.260	<.0001	<.0001
BM	773	0.446	0.335	0.772	<.0001	<.0001	907	0.410	0.345	0.342	<.0001	<.0001
Leverage	773	0.336	0.284	0.339	<.0001	<.0001	907	0.314	0.253	0.383	<.0001	<.0001
LogMcap	773	7.005	7.100	2.010	<.0001	<.0001	907	6.854	6.965	1.965	<.0001	<.0001
Offersize	773	0.148	0.127	0.112	<.0001	<.0001	907	0.161	0.140	0.122	<.0001	<.0001
Proceeds	773	196.096	112.000	267.601	<.0001	<.0001	907	184.965	106.750	247.944	<.0001	<.0001
Big8	773	0.658	1.000	0.475	<.0001	<.0001	907	0.636	1.000	0.481	<.0001	<.0001
Tenure	527	3.313	3.000	2.568	<.0001	<.0001	598	3.560	3.000	2.624	<.0001	<.0001
NOA	772	0.913	0.611	1.448	<.0001	<.0001	905	1.071	0.616	2.312	<.0001	<.0001
UW	773	7.401	9.001	4.015	<.0001	<.0001	907	7.250	9.001	4.230	<.0001	<.0001
Num_analysts	773	7.216	6.000	5.540	<.0001	<.0001	907	8.090	7.000	5.434	<.0001	<.0001
Option	373	0.113	0.000	0.262	<.0001	<.0001	460	0.135	0.000	0.308	<.0001	<.0001
Bonus	373	0.152	0.122	0.161	<.0001	<.0001	460	0.165	0.127	0.171	<.0001	<.0001

All variables are defined in the Appendix.

Downloaded by INSEAD At 06:09 23 June 2018 (PT)

© Emerald Publishing Limited
This is a pre-print of a paper and is subject to change before publication. This pre-print is made available with the understanding that it will not be reproduced or stored in a retrieval system without the permission of Emerald Publishing Limited.

TABLE 3
OLS regression of media coverage on earnings management proxies

Panel A: OLS regression using earnings management proxies at time T-1 (one year prior to SEO):

$$EM = \beta_0 + \beta_1 Media + \beta_2 Big8 + \beta_3 UW + \beta_4 ROA + \beta_5 BM + \beta_6 Leverage + \beta_7 SGR + \beta_8 LogMcap + \beta_9 Loss + \varepsilon \quad (1)$$

where *EM* is one of the accrual, *abs(DACC)*, or REM (*REM1, REM2, REM_Index*) proxies, defined in the Appendix along with all other variables. Marginal effects are calculated following Dechow *et al.* (2011).

	REM1				***REM2***				***REM_ Index***				***Abs(DACC)***			
Variables	Coeff	t-stat	Sig	Marginal Effects	Coeff	t-stat	Sig	Marginal Effects	Coeff	t-stat	Sig	Marginal Effects	Coeff	t-stat	Sig	Marginal Effects
Intercept	0.013	0.15			0.041	0.65			0.038	0.40			0.131	5.79	***	
Media	-0.049	-2.03	**	6.82%	-0.036	-2.02	**	4.94%	-0.044	-1.67	*	6.07%	0.007	1.39		0.92%
Big8	0.125	2.41	**	12.47%	0.118	2.90	***	11.81%	0.134	2.50	**	13.41%	-0.024	-2.38	**	2.43%
UW	-0.008	-2.04	**	0.77%	-0.005	-2.00	**	0.50%	-0.008	-2.15	**	0.81%	0.000	-0.33		0.03%
ROA	0.497	2.67	***	4.74%	0.243	1.50		2.31%	0.158	0.64		1.51%	-0.154	-2.21	**	1.47%
BM	0.079	2.19	**	2.81%	0.054	2.76	***	1.93%	0.094	2.58	**	3.34%	-0.010	-1.25		0.37%
Leverage	0.155	2.29	**	5.37%	0.084	1.62		2.88%	0.155	2.20	**	5.36%	0.012	0.81		0.43%
SGR	-0.047	-1.05		1.44%	-0.038	-1.10		1.14%	-0.033	-0.81		1.00%	0.009	1.47		0.28%
LogMcap	0.003	0.30		0.64%	-0.008	-1.31		1.67%	-0.008	-0.80		1.69%	-0.006	-2.62	***	1.28%
Loss	-0.040	-0.70		4.01%	-0.022	-0.45		2.22%	-0.024	-0.35		2.44%	-0.018	-1.10		1.78%
Adj. R square	9.02%				7.22%				4.50%				16.03%			
N. Obs	773				773				773				773			

Downloaded by INSEAD At 06:09 23 June 2018 (PT)

© Emerald Publishing Limited
This is a pre-print of a paper and is subject to change before publication. This pre-print is made available with the understanding that it will not be reproduced or stored in a retrieval system without the permission of Emerald Publishing Limited.

Panel B: OLS regression (1) using earnings management proxies at time T (the year of SEO)

	REM1				***REM2***				***REM_ Index***				***Abs(DACC)***			
Variables	Coeff	t-stat	Sig	Marginal Effects	Coeff	t-stat	Sig	Marginal Effects	Coeff	t-stat	Sig	Marginal Effects	Coeff	t-stat	Sig	Marginal Effects
Intercept	-0.110	-1.32			0.064	0.98			0.017	0.20			0.288	5.15	***	
Media	-0.057	-2.49	**	8.22%	-0.053	-2.75	***	7.62%	-0.066	-2.58	***	9.43%	0.010	1.67	*	1.50%
Big8	0.061	1.24		6.14%	0.077	1.83	*	7.72%	0.076	1.35		7.55%	-0.026	-2.15	**	2.57%
UW	-0.003	-0.71		0.29%	-0.004	-1.32		0.35%	-0.006	-1.59		0.61%	-0.001	-0.83		0.07%
ROA	-0.104	-0.43		1.11%	-0.131	-0.45		1.40%	-0.506	-1.53		5.41%	-0.056	-0.80		0.60%
BM	0.404	8.35	***	13.37%	0.251	7.58	***	8.29%	0.435	8.46	***	14.37%	-0.037	-3.79	***	1.22%
Leverage	0.162	2.93	***	6.34%	0.177	4.68	***	6.94%	0.224	4.32	***	8.79%	0.001	0.11		0.06%
SGR	-0.125	-2.97	***	4.70%	-0.129	-2.58	***	4.83%	-0.149	-2.84	***	5.60%	0.031	3.91	***	1.15%
LogMcap	0.013	1.49		2.74%	-0.012	-2.11	**	2.54%	-0.007	-0.83		1.51%	-0.009	-3.48	***	1.90%
Loss	-0.141	-2.01	**	14.11%	-0.069	-0.88		6.93%	-0.132	-1.42		13.17%	0.009	0.47		0.85%
Adj. R square	12.86%				17.10%				16.57%				13.37%			
N. Obs	907				907				907				907			

***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively, for two-tailed tests.

TABLE 4

Panel A First stage regression – annual cross-sectional maximum likelihood regression (at time T-1 and T):

$$Total\_EM = \beta_0 + \beta_1 Hab\_Beat + \beta_2 LogShares + \beta_3 Num\_analysts + \beta_4 Bonus + \beta_5 Option + \beta_6 ROA + \beta_7 LogMcap + \beta_8 BM + \beta_9 Leverage + \varepsilon \quad (2)$$

where *Total_EM* measures whether a firm is classified as an earnings management firm-year observation; it equals one if either discretionary accruals (*DACC*) or one of the composite REM proxies (*RM1, RM2*, and *REM_Index*) is above the industry-year median, and zero otherwise. The industry is defined based on the 2-digit SIC code. All other variables are defined in the Appendix.

	Time T-1			Time T		
	Coeff	*z stat*	Sig	*Coeff*	*z stat*	Sig
Intercept	0.444	1.26		1.549	4.10	***
Hab_Beat	0.604	1.71	*	1.110	2.94	***
LogShares	0.095	0.27		-0.421	-1.12	
Num_analysts	-0.284	-0.80		1.104	2.92	***
Bonus	1.379	3.90	***	1.199	3.17	***
Option	-0.197	-0.56		-0.585	-1.55	
ROA	6.420	18.16	***	-12.239	-32.38	***
LogMcap	-0.724	-2.05	**	-1.691	-4.47	***
BM	0.524	1.48		-1.229	-3.25	***
Leverage	1.282	3.63	***	2.484	6.57	***
Average Psuedo-R square	75.78%			56.90%		
N.Obs	459			544		

Downloaded by INSEAD At 06:09 23 June 2018 (PT)

© Emerald Publishing Limited
This is a pre-print of a paper and is subject to change before publication. This pre-print is made available with the understanding that it will not be reproduced or stored in a retrieval system without the permission of Emerald Publishing Limited.

Panel B Second stage regression using variables measured at time T-1:

$$REM\_dummy = \beta_0 + \beta_1 Media + \beta_2 Big8 + \beta_3 Tenure + \beta_4 Litigation + \beta_5 NOA + \beta_6 InverseMills + \varepsilon \quad (3)$$

where *REM_dummy* is a dummy variable that equals one if a firm's REM proxy (*REM1*, *REM2*, or *REM_Index*) exceeds the industry-year median REM proxy, and zero otherwise.

	REM1			***REM2***			***REM_Index***		
Variables	*Coeff*	*Chi-Square*	*Sig*	*Coeff*	*Chi-Square*	*Sig*	*Coeff*	*Chi-Square*	*Sig*
Intercept	0.667	1.84		0.985	2.92	*	-0.123	0.33	
Media	-0.200	3.70	*	-0.242	3.87	**	-0.166	3.38	*
Big8	0.382	4.41	**	0.538	6.40	**	0.549	11.75	***
Tenure	0.031	0.11		-0.117	1.37		0.104	1.51	
Litigation	0.074	0.19		0.041	0.04		-0.363	5.19	**
NOA	-0.243	9.64	***	0.094	1.31		-0.121	3.05	*
Inverse Mills	-0.850	2.93	*	-1.368	6.86	***	-0.379	0.65	
Psuedo R-square	44.86%			45.33%			39.55%		
N. Obs	459			459			459		

Panel C Second stage regression using variables measured at time T

	REM1			***REM2***			***REM_Index***		
Variables	*Coeff*	*Chi-Square*	*Sig*	*Coeff*	*Chi-Square*	*Sig*	*Coeff*	*Chi-Square*	*Sig*
Intercept	-0.142	0.54		-0.413	4.42	**	-0.467	5.52	**
Media	-0.157	3.65	*	-0.149	3.15	*	-0.097	1.32	
Big8	0.551	12.66	***	0.584	13.46	***	0.567	12.69	***
Tenure	0.200	6.05	**	0.202	6.06	**	0.225	7.32	***
Litigation	-0.066	0.23		-0.349	5.87	**	-0.271	3.54	*
NOA	-0.039	0.42		0.129	4.86	**	-0.065	1.04	
Inverse Mills	-1.494	14.67	***	-1.616	16.38	***	-1.787	19.60	***
Pseudo R-square	45.98%			43.01%			44.02%		
N. Obs	544			544			544		

***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively, for two-tailed tests.

Downloaded by INSEAD At 06:09 23 June 2018 (PT)

© Emerald Publishing Limited
This is a pre-print of a paper and is subject to change before publication. This pre-print is made available with the understanding that it will not be reproduced or stored in a retrieval system without the permission of Emerald Publishing Limited.

TABLE 5

OLS regression of total real earnings management with alternative news coverage windows:

$$REM\_Index = \beta_0 + \beta_1 Media\_N + \beta_2 Big8 + \beta_3 UW + \beta_4 ROA + \beta_5 BM + \beta_6 Leverage + \beta_7 SGR + \beta_8 LogMcap + \beta_9 Loss + \varepsilon, \quad (4)$$

where *REM_Index* proxies for total REM and *Media_N* designates media coverage for three alternative periods: 1 year (Media_1yr), 3 months (Media_3mo) and 1 month (Media_1mo) before the first financial statement after the SEO announcement date. All other variables are defined in the Appendix.

	Media_1yr			***Media_3mo***			***Media_1mo***		
	Coeff	*t-stat*	*Sig*	*Coeff*	*t-stat*	*Sig*	*Coeff*	*t-stat*	*Sig*
Intercept	0.164	0.78		0.138	0.66		0.197	0.95	
Media_N	-0.115	-0.46		-0.053	-1.92	*	-0.034	-1.38	
Big8	0.102	1.91	*	0.137	2.54	**	0.107	1.92	*
UW	-0.008	-2.09	**	-0.009	-2.22	**	-0.009	-2.23	**
ROA	0.143	0.59		0.155	0.63		0.015	0.06	
BM	0.093	2.56	**	0.092	2.62	**	0.080	2.62	**
Leverage	0.147	2.09	**	0.162	2.30	**	0.167	2.50	**
SGR	-0.037	-0.86		-0.034	-0.83		-0.117	-1.85	*
LogMcap	-0.011	-1.10		-0.008	-0.80		-0.010	-0.98	
Loss	-0.053	-0.75		-0.028	-0.40		-0.060	-0.83	
Adj. R square	4.20%			4.57%			5.71%		
N. Obs	796			786			749		

***, **, and * denote significance at the 1%, 5%, and 10 % levels, respectively, for two-tailed tests.

Downloaded by INSEAD At 06:09 23 June 2018 (PT)

About the Authors

Dr. Tatiana Fedyk is an Assistant Professor at the University of San Francisco. Dr. Fedyk received her Ph.D. in Accounting from the University of California at Berkeley. Dr. Fedyk's research interests include accounting and contract theory, game theory, financial misreporting, real earnings management. Dr. Fedyk won WDSI 2014 Best Paper Award for her research on IPO earnings management among STEM firms. Dr. Fedyk's work is published in such journals as *Review of Accounting Studies*, *International Journal of Accounting and Information Management*, and *Journal of Accounting and Finance*.

Dr. Fernando Comiran is an Assistant Professor at the University of San Francisco. Dr. Comiran received his PhD in Accounting at the University of California at Berkeley. His research areas of interest include earnings management, accounting fraud, voluntary disclosure,

© Emerald Publishing Limited
This is a pre-print of a paper and is subject to change before publication. This pre-print is made available with the understanding that it will not be reproduced or stored in a retrieval system without the permission of Emerald Publishing Limited.

financial statement analysis, and security valuation. Dr. Comiran's work is published in such journals as *Journal of Accounting and Finance, ConTexto* (Brazil), and *Research in Accounting Regulation*.

Dr. Joohyung Ha is an Assistant Professor at the University of San Francisco. Dr. Ha received her Ph.D. in Accounting from Oklahoma State University. Dr. Ha's research interests include financial reporting, valuation, market anomaly, and agency costs. Dr. Ha won 2015 Midwest Region AAA annual meeting Best Paper Award for her paper on corporate social responsibility and tax aggressiveness. Dr. Ha's work is published in such journals as *Journal of Accounting and Finance, International Journal of Revenue Management*, and *Review of Quantitative Finance and Accounting.*

Downloaded by INSEAD At 06:09 23 June 2018 (PT)

© Emerald Publishing Limited
This is a pre-print of a paper and is subject to change before publication. This pre-print is made available with the understanding that it will not be reproduced or stored in a retrieval system without the permission of Emerald Publishing Limited.