

The Changing Information Environment and Disclosure *De*-regulation: Evidence from the 2005 Securities Offering Reform

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ABSTRACT

In 2005, the SEC enacted the Securities Offering Reform (Reform), which relaxes restrictions on the release of forward-looking information before equity offerings. The SEC argues that a richer information environment in recent years has rendered these disclosure restrictions unnecessary, as it prevents timely and broad information flow when recent disclosure rules provide sufficient investor protection. We examine whether managers use forecast announcements to hype their firm's stock price before equity offerings. We also investigate the impact of the improved information environment and the Reform on this behavior. We find that managers provide more good news during forecast announcements in the months before an offering. Moreover, the pre-offering good news is negatively associated with post-offering returns, indicating that at least some of the forecast announcement news is hype. In contrast, we find no evidence of hyping after 2002, suggesting that the richer information environment may play a disciplining role on hyping behavior. Finally, we continue to find no evidence of hyping after the 2005 Reform, despite an increase in the number of pre-offering forecast announcements. Overall, these results indicate that while managers may have engaged in hyping in earlier years, these actions have been mitigated in a richer information environment, allowing the SEC to relax disclosure constraints on firms before offerings.

JEL Classification: G14; M41

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"The changes in the Exchange Act disclosure regime and the tremendous growth in communications technology are resulting in more information being provided to the market on a more non-discriminatory, current, and ongoing basis. Thus, while investor protection remains a paramount interest, the gun-jumping provisions of the Securities Act impose substantial and increasingly unworkable restrictions on many communications that would be beneficial to investors and markets and would be consistent with investor protection." (2005 Securities Offering Reform, p.41)

1. Introduction

In July 2005, the Securities and Exchange Commission (SEC) announced the enactment of the Securities Offering Reform (Reform), which, among other things, relaxes restrictions—known as ‘gun jumping’ provisions—on firms’ forward-looking disclosures prior to public equity offerings.¹ The SEC argues that in recent years, the information environment has become much richer through marked improvements in mandated disclosure quality and both broader and timelier dissemination of information, rendering the gun jumping restrictions “unnecessary and outdated,” as it restricts information flow when recent disclosure rules provide sufficient investor protection (SEC [2005]). However, opponents of the Reform argue that the restrictions were included in the Securities Act of 1933 to protect investors from managers conditioning the market (i.e., hyping the stock) before offerings, and the relaxation of these restrictions through a safe harbor will increase managerial incentives to mislead the market (e.g., Morrissey [2007]).²

This paper examines the impact of the Reform on management forecasting behavior before equity offerings. To provide a more robust context in which to evaluate the impact of the Reform, we first investigate the effect of the recently improved information environment on management forecasting behavior before seasoned equity offerings (SEOs). We contend that if the information environment has become richer in recent years, investors should be able to better monitor managerial behavior. This intuition is grounded in a well-established disclosure

¹ In particular, the gun jumping rules state that issuers should not *initiate* forecasts, predictions, or projections related (but not limited) to revenues or income, and should avoid publishing opinions concerning the value of the stock; however, the SEC avoids drawing a bright line on other forms of disclosure. The gun-jumping provisions extend over a vaguely defined “quiet period” thought to last from the time a firm first contemplates an offering, which can be quite difficult to determine, through the completion of the offering. We provide more details on the gun-jumping rules and the Reform in section 2.

² In this paper, we use the terms ‘market conditioning’ and ‘hyping’ interchangeably. We define this process as increasing the amount of good news disclosure activity in the months just prior an equity offering, where this disclosure increase exceeds an expected amount of disclosure *and* leads to an increase in price that is unwarranted, as evidenced by a post-offering price reversal *related to the disclosure activity*.

literature that indicates that higher disclosure quality can reduce information asymmetry between managers and investors (Healy and Palepu [2001]). Moreover, Foster [1981] indicates that investors are also able to obtain information about a particular firm from its competitors' disclosures, thereby enhancing the effect of regulation that improves disclosure quality. As a result of this increased transparency, managers are less able to mislead investors through disclosures, as investors are more likely to both better understand firm value and better assess the relevancy of firm disclosures with respect to that valuation. That is, investors have a better context in which to evaluate the disclosures. Thus, to the extent the information environment has improved, we should observe less hyping in the new disclosure regime.

To capture the shift in the information environment, we focus on the passage of the Sarbanes Oxley Act (SOX) in July 2002. SOX is often identified as the most broad-sweeping financial reporting legislation since the Securities Act of 1933, and the Reform specifically identifies the impact of SOX in enriching the information environment, namely through improvements in disclosure controls, reported events and the timeliness of those reports, content and understandability of reports, report certification, and governance (SEC [2005]).³ The SEC also points to the impact of technological advances in electronic dissemination of information in improving the information environment. Thus, the information environment has improved as a result of not only major improvements in disclosure, but also more timely and broadly disseminated information.

This paper consists of three main analyses. Our first set of tests focuses on the pre-SOX period, where we determine whether managers condition the market prior to SEOs in the less rich information environment. Although managers have a strong incentive to boost their firms' stock prices prior to equity offerings in order to lower the cost of raising capital, this incentive is offset by gun jumping rules that significantly restrict disclosure before offerings. To determine

³ The 2002 proxy for the shift in the information environment serves as a close temporal proxy for enhanced dissemination, as there has been a marked increase in the use of electronic communications, such as email, teleconferencing, videoconferencing and webcasting, since the early 2000's.

whether managers condition the market before SEOs, we first examine both the propensity of managers to issue good news forecasts and the magnitude of good news released by managers in the months leading up to the SEO filing date. Prior research (e.g., Lang and Lundholm [2000]) finds no increase in the *number* of forward-looking disclosures prior to SEOs; however, we argue that managers may adjust the information provided during forecast announcements to condition the market without necessarily providing more forecasts.⁴ Specifically, managers can optimistically bias forecasts and/or provide supplemental information, both of which can be qualitative or quantitative in nature. To capture this combined effect, we use the short-window return around the forecast announcement. We then investigate whether increases in the likelihood and magnitude of good news disclosures lead to an *unwarranted* increase in the firm's stock price, as evidenced by the firm's post-SEO abnormal returns.

Using a difference in differences design, we find that there is a statistically significant increase in the propensity and magnitude of good news disclosures by SEO firms via management forecasts in the period before the SEO, as compared to those of non-SEO firms in the same industry and of similar size, growth, and performance. Moreover, we observe a negative association between the pre-SEO good news disclosure activity and long-term abnormal returns following the SEO. This suggests that in the less rich information environment, managers use forecast announcements to hype the stock price in the months prior to equity offerings.⁵

In our second set of tests, we explore the change in market conditioning in the improved information environment (i.e., post-SOX). In particular, we re-examine the change in the likelihood and magnitude of good news released before SEOs and its association with post-SEO abnormal returns in the new richer information environment. Using a similar difference in differences design to that in our first set of tests, we find that although there is still some evidence of an increase in the propensity and magnitude of good news disclosures before SEOs,

⁴ Lang and Lundholm [2000] do find that managers alter other disclosures before equity offerings; in particular, managers provide more factual business information and optimism in press releases.

⁵ Note that an increase in good news disclosures before SEOs is not sufficient to infer that managers are conditioning the market; it must be considered along with the post-SEO stock return underperformance.

the increases are significantly muted. Further, the negative association between the pre-SEO disclosure activity and post-SEO long-term performance found in the pre-SOX period no longer holds. Combined, these results are consistent with the improved information environment acting as a disciplining mechanism that limits market conditioning.⁶

In our final set of tests, we examine the effect of the 2005 Securities Offering Reform on managers' forecasting behavior as well as the relation between pre-SEO forecasts and post-SEO returns. Given the Reform's safe harbor and encouragement of forward-looking information, we also look at whether there was an increase in the number of management forecasts in the months prior to offerings. Consistent with the SEC's intent, we find an increase in the *number* of forecasts given in the pre-SEO period; however, the propensity and magnitude of good news disclosures does not increase. In addition, we continue to find no evidence of market conditioning post-Reform, suggesting that managers are less able to hype their stock price via disclosures in the richer information environment. Overall, these results indicate that while managers may have engaged in market conditioning in earlier years (i.e., pre-SOX), these actions have been mitigated in a richer information environment, allowing the SEC to relax information constraints on firms before SEOs.

Our findings contribute to the literature along several dimensions. First, we contribute to the scant literature on the role of voluntary disclosure in conditioning the market prior to SEOs. Lang and Lundholm [2000] show a temporary increase in disclosure frequency prior to SEOs for a small sample of firms in 1992, where the increased disclosure is associated with larger subsequent underperformance. However, they find that the increased disclosure relates to factual business information and optimism in press releases, *not* forward-looking information. We contribute to this study by providing evidence of market conditioning via the information disclosed *within* the forecast announcement for a broader and more recent sample of firms. Perhaps more importantly, we also document shifts in market conditioning behavior over time.

⁶ 'Disciplining' can mean either (i) managers reduce hyping behavior as a result of the new environment or (ii) the market sees through the hype and adjusts appropriately. In either case, hyping has been mitigated, or 'disciplined.'

Second, we contribute to the literature that argues that disclosure plays a governance role by allowing outsiders to better monitor managers (see Armstrong, Guay, and Weber [2010] and Beyer, Cohen, Lys, and Walther [2010] for reviews of the literature). For example, many studies argue that financial reporting plays a governance role by providing outsiders with information that help discipline managerial behavior (Bushman and Smith [2001]). In a more related study, Jo and Kim [2007] demonstrate that more frequent voluntary disclosures (press releases) constrain earnings management before SEOs via reductions in information asymmetry. The authors focus on the relation between *voluntary* disclosure and earnings management, where SEOs is used as the setting to analyze the relation. We contribute to this literature by documenting how increases in the quality of *mandatory* disclosure and dissemination affect how firms *change voluntary disclosures* prior to SEOs.

Third, our study also contributes to the literature on market (in)efficiency. Extant research suggests that managers influence the price received in equity offerings through accruals management prior to the security offering (e.g., Teoh, Welch, and Wong [1998]; Rangan [1998]) because the market is inefficient in undoing the earnings management. Our study indicates that the market is also inefficient in assessing voluntary disclosures around equity offerings in the pre-SOX period. We also document a marked reduction in this inefficiency in a richer information environment, which continues through the Reform.

Finally, we inform the debate as to whether the relaxation of gun-jumping restrictions during SEO quiet periods provides perverse incentives to managers with respect to market conditioning. Our results suggest that although market conditioning appeared to occur in earlier years, more recent years have seen an elimination of this phenomenon, thereby providing initial support for the SEC's removal of the restrictions that were put in place to combat market conditioning.

The remainder of the paper is organized as following: section 2 discusses the background and hypotheses development; section 3 discusses research design; section 4 presents the sample

selection procedure and descriptive statistics; section 5 presents the empirical analyses and results; section 6 discusses additional analyses, and we conclude the paper in section 7.

2. Background and Hypotheses Development

2.1 GUN JUMPING LAWS AND MARKET CONDITIONING

Seasoned equity offerings represent major corporate events that serve as vital mechanisms through which firms can foster economic growth. However, these transactions can provide strong incentives for managers to inflate prices through firm disclosures in an attempt to lower the cost of equity capital at issuance (Lang and Lundholm [2000]). Recognizing the ripe setting for adverse selection, Congress included rules (known as ‘gun-jumping’ laws) in section 5(c) of the Securities Act of 1933 that prohibit firms from conditioning the market by significantly restricting their disclosure activity prior to equity offerings.

Section 5 (c) of the Securities Act prohibits any ‘offer to sell’ a security prior to filing a registration statement with the SEC. Since the time of this regulation, however, the term ‘offer to sell’ has been more broadly interpreted as any act that might “contribute to conditioning the public mind or arousing public interest in the issuer” (SEC release no. 3844). The restriction period is known as the ‘quiet period’ and, although not defined by federal securities laws,⁷ is commonly thought to run from the time an issuer “contemplates an offering...until the sale is completed.” Lang and Lundholm [2000, pg. 655] Further, intent of disclosure is irrelevant, as the SEC views any disclosure that has the effect of conditioning the market as a violation of section 5(c). Given too that gun-jumping rules conflict with the ongoing disclosure requirements under the Securities Exchange Act of 1934 and the associated anti-fraud rules under 10-b5, it can be quite difficult to determine *ex ante* precisely what constitutes a violation of these rules. The gun-jumping laws allow firms to continue following established disclosure policies, but discourage any additional disclosures, during the quiet period. Further, the SEC explicitly states that issuers

⁷ See <http://www.sec.gov/answers/quiet.htm>.

and their underwriters should not initiate forecasts, predictions, or projections of financial items, such as revenues and earnings.⁸ Thus, offering firms face a conflict between incentives to raise equity capital on favorable terms and gun-jumping laws.

Given this interesting setting, it is somewhat surprising that there is little research on voluntary disclosures around seasoned equity offerings.⁹ In particular, Frankel, McNichols and Wilson [1995] find no evidence of an increase in the likelihood of a forecast or increased forecast bias before equity offerings for 1,880 firms during the 1980 to 1983 period. Consistent with these findings, Lang and Lundholm [2000] also do not find evidence of increased forecast frequency prior to equity offerings for a sample of 41 small, industrial firms in 1992. However, they do find more disclosure related to past performance and more optimism in disclosures prior to the offering and shortly thereafter, which is consistent with firms engaging in questionable disclosure practices that may run afoul of the gun jumping laws. As Lang and Lundholm [2000] note, the lack of evidence related to higher *forecast frequency* before SEOs may simply be a result of the explicit prohibition in the gun jumping rules. We argue that managers may instead adjust the information given *within* a forecast announcement to condition the market.

Prior studies argue and find evidence consistent with managers strategically using voluntary disclosure as a tool to influence the market's expectation. These studies show that, in general, the market is inefficient in judging the credibility of news in these voluntary disclosures. For example, Barclay and Smith [1988] suggest that managers can alter the normal flow of information to the market through spurring or delaying the release of news. Cheng and Lo [2006] find that managers opportunistically time the release of corporate news with their stock trades. This is consistent with the widely documented observation that self-interested managers have strong incentives to convey favorable signals to boost stock prices before they sell their own

⁸ See Jennings and Marsh [1987] for more details related to the offering process and regulation therein.

⁹ Studies, such as Cohen and Zarowin [2010], Jo and Kim [2007], Kim and Park [2005], DuCharme, Malatesta, and Sefcik [2004], Rangan [1998], and Teoh, Welch, and Wong [1998], do examine earnings management around equity offerings. However, much less research focuses on voluntary disclosure around these important and incentive-rich corporate events.

shares. In addition, Brockman, Khurana and Martin [2008] demonstrate that managers increase bad news disclosure when they have incentive to dampen stock price prior to open market repurchases, and increase good news disclosure after their open market repurchases. Thus, there is considerable evidence that voluntary disclosure is used opportunistically to adjust stock price.

In this study, we argue that managers may engage in disclosure activities, such as optimistically biasing financial forecasts and/or providing supplemental information along with the forecast, to inflate the firm's stock price before an offering. Managers may also refrain from providing bad news. As such, we should observe a greater positive market reaction around forecast announcements in the months before an SEO, as compared to other periods for the same firm and the same period for similar firms that are not engaging in an SEO. Moreover, the forecast announcement reaction should be negatively associated with stock performance after the SEO, as the market learns of the mispricing.¹⁰

2.2 THE NEW INFORMATION ENVIRONMENT (POST-2002) AND MARKET CONDITIONING

As the SEC points out, in recent years, the information environment has become much richer through marked improvements in mandated disclosure quality and both broader and timelier dissemination of information. In particular, the SEC highlights the significant impact of SOX in 2002 on disclosure quality and emphasizes the benefits of advances in information technology, such as electronic mail, video-conferencing and webcasting, in broadly and timely informing the market of important corporate information in recent years (SEC [2005]).

Perhaps the most notable contributing factor to the improved information environment is SOX. As the SEC states (SEC [2005], p.20):

¹⁰ We acknowledge that it is unclear exactly when the market learns of the mispricing, as it may not perfectly unravel when the forecast settles up for at least two reasons. First, managers are known to manage earnings in the quarters following offerings due to legal liabilities and lock-up agreements (Rangan [1998]; Teoh et al. [1998]; Jo and Kim [2007]; Cohen and Zarowin [2010]). So, if investors are unable to see through the forecast hype, it is very likely managers will also be able to support the hype with managed financial reports. Second, the forecast and/or supplemental information may be relatively qualitative, and thus more difficult to reconcile with actual results in the future. Accordingly, we follow prior research (e.g., Lang and Lundholm [2000]) in using the 18 months stock returns after the SEO to identify hyping reversals.

“[W]e have significantly expanded our current disclosure requirements consistent with the provision in the Sarbanes-Oxley Act of 2002 that ‘[e]ach issuer reporting under Section 13(a) or 15(d) ... disclose to the public on a rapid and current basis such additional information concerning material changes in the financial condition or operations of the issuer ... as the Commission determines ... is necessary or useful for the protection of investors and in the public interest.’”

In detailing the ways in which SOX (and interpretive actions) have significantly enhanced disclosure quality, the SEC highlights several factors, including the required establishment of disclosure controls and procedures (SEC release no. 33-8238), significant increases in the types of reported events and the timeliness of those reports (SEC release no. 33-8400A), interpretive guidance on the content and understandability of Management’s Discussion and Analysis of Financial Condition and Results of Operations in the reports (SEC release no. 33-8350), the requirement of issuers’ top management to certify the content of the reports and highlight their oversight of disclosure controls and procedures and internal control over financial reporting (SEC Release No. 33-8124), and improved governance and enhanced audit committee features via listing standard changes (SEC Release No. 33-8220). Thus, SOX improves disclosure quality both *directly* through substantial increases in the amount, transparency, and timeliness of the information and *indirectly* through stronger governance and financial reporting accountability.

Academic research indicates that higher disclosure quality can reduce information asymmetry (e.g., Healy and Palepu [2001]; Schrand and Verrecchia [2004]; Jo and Kim [2007]). In turn, this constrains managers’ ability to mislead investors, as investors have a better context in which to evaluate the disclosures. With respect to equity offerings, Lang and Lundholm [2000, p.629] suggest, “[S]ustained disclosure may reduce the information asymmetry and, hence, the adverse selection present at the offering.” Jo and Kim [2007] provide empirical evidence of this relation around SEOs. In particular, they find that issuing firms with more voluntary disclosure tend to engage in less earnings management and are associated with less underperformance subsequent to SEOs. Using similar intuition, we examine a more comprehensive and exogenous shift in the information environment, i.e., SOX disclosure requirements, and its impact on managerial hyping during forecast announcements.

Mandatory improvements in disclosure regulation, such as those induced by SOX, not only have a direct effect on a firm's information environment by requiring the firm to disclose more information, but can also have significant positive externalities in the form of information transfers (Dye [1990]; Admati and Pfleiderer [2000]). Since cash flows are likely to be correlated across firms, the disclosure of one firm can be useful to investors in valuing and assessing disclosures of other firms (Foster [1981]). Therefore, any SOX-imposed constraint on managers' ability to mislead investors is likely to be enhanced by information transfers across firms. Overall, if the information environment improved post-2002, we should observe less market conditioning.¹¹

Consistent with the above intuition, both survey evidence (Graham, Harvey, and Rajgopal [2005]) and empirical evidence (Cohen, Dey, and Lys [2008]) suggest that managers are much less likely to engage in accrual-based earnings management following the passage of SOX. However, these studies also indicate that following SOX managers may prefer to adjust discretionary spending on R&D, advertising, and maintenance to achieve performance objectives. Graham et al. [2005, p.36] illustrate the significant pressure managers feel to properly account for transactions and the trade-off between accrual and real earnings management:

“An interviewed CFO offers an insight into the choice between real and accounting-based earnings management in the current environment: While auditors can second-guess the firm's accounting policies, they cannot readily challenge real economic actions to meet earnings targets that are taken in the ordinary course of business. Another executive emphasizes that firms now go out of their way to assure stakeholders that there is no accounting based earnings management in their books. He goes on to express a corporate fear that even an appropriate accounting choice runs the risk of an overzealous regulator concluding ex post that accounting treatment was driven by an attempt to manage earnings.

If scrutiny imposed by auditors, regulators, and market participants as well as harsh penalties for fraud in the post-SOX regime incentivize managers to use alternate means to impact stock price *and* the richer disclosure environment does not constrain managers' ability to successfully hype,

¹¹ This date also serves as a close temporal proxy for enhanced information dissemination. In particular, since the early 2000's, there has been a marked increase in the use of electronic communications, such as email and corporate websites to communicate firm information. Moreover, in August 2000, the SEC passed Regulation FD, which greatly increased the breadth of coverage and timeliness of firm disclosures. Note that our intent is not to identify a particular piece of legislation or technological innovation that is responsible for the improved information environment, but rather to examine whether there has been a change in market conditioning in recent years, in particular post-2002.

we may observe greater hyping during forecast announcements following the passage of SOX. Therefore, ex ante, the impact of SOX on pre-offering hyping behavior is unclear.¹²

2.3 THE 2005 SECURITIES OFFERING REFORM AND MARKET CONDITIONING

Using the improved information environment as a catalyst for overhauling the securities offering and communication processes, in July 2005, the SEC announced the enactment of the Securities Offering Reform, which liberalizes communications during equity offerings. Most relevant for this study, the Reform relaxes gun-jumping rules that had previously prohibited communications during equity offering quiet periods.¹³ In particular, Rule 168 of the Reform states that all reporting issuers are now permitted, at any time, to continue to publish regularly released factual business information and forward-looking information so long as they do not reference a securities offering (SEC [2005]). Specifically, the safe harbor in Rule 168 applies to forward-looking information, such as (i) projections of the issuer's revenues, earnings, capital expenditures, dividends, capital structure, or other financial items, (ii) statements about the issuer's plans and objectives for future operations, including those relating to the issuer's products or services, (iii) statements about the issuer's future economic performance, and (iv) assumptions underlying or relating to any of the foregoing information (SEC [2005]).

In providing its rationale for the Reform, the SEC states that:

“The primary benefit that the rules seek to achieve is an increased flow of information to investors during a registered offering. While much of the Commission's recent rulemaking is intended to encourage reporting issuers to provide materially accurate and complete information to the market on a more current basis, the Securities Act's constraints on communications during an offering cause issuers to be concerned about the treatment of their ongoing communications and whether their customary disclosures will be considered an impermissible offer of securities. As a result of the multiplicity of means of communication, restricting written offers to a statutory prospectus inhibits desirable methods of timely communication of information.

¹² A third possibility is that publicity surrounding accounting scandals, such as Enron, WorldCom, and Tyco, and the associated passage of SOX increased managerial risk aversion, which in turn reduced managerial willingness to engage in hyping activity. However, we argue that any such increase in managerial risk aversion is likely to be temporary, and is unlikely to persist beyond the 2005 Reform, particularly given managers' strong incentives and the Reform's encouragement of, and safe harbor for, forward-looking information.

¹³ The Reform creates a regulatory distinction between firms considered to be well-known seasoned issuers (WKSIs) and other firms (non-WKSIs), where WKSIs are large, seasoned issuers that benefit from greater disclosure freedoms under the Reform compared to non-WKSIs. In section 6, we discuss the major differences in the rules between these two types of firms and rerun our analyses partitioning the sample on these two groups. We find qualitatively similar results.

We believe that more information will be provided on a more timely basis because the rules will eliminate regulatory barriers to the dissemination of that information, and the markets may provide incentives for issuers, underwriters, and broker dealers to produce additional information.” (SEC [2005], p.281)

The SEC adds that increased information flow will promote more efficient capital markets by allowing investors to more accurately value securities while current “rules regarding liability and disclosure...will maintain and enhance investor protection in connection with registered securities offerings” (SEC [2005]). Along this dimension, we should observe both an increase in the number of forecasts and no evidence of (greater) market conditioning after the Reform.

In contrast, opponents of the Reform argue that the gun-jumping restrictions were put in place to protect investors from managers conditioning the market before offerings, and the relaxation of these restrictions through a safe harbor will increase managerial incentives to mislead the market. For example, Morrissey [2007, p.576] suggests, “Forward-looking statements do exactly what the SEC had historically not wanted issuers to do before filing a registration statement: condition the market to purchase the securities to be issued.” Further, in providing an *ex ante* opinion regarding the then-proposed Reform, Lang and Lundholm [2000, p.648] offer that their evidence suggests that “firms may be tempted to increase the use of forecasts before issuing equity absent the gun-jumping regulations.” To the extent the Reform strengthens managerial incentives *and* the information environment cannot overcome these incentives, we should observe (greater) market conditioning.

3. Research Design

3.1 VARIABLE MEASUREMENT AND EMPIRICAL METHODOLOGY

To examine whether managers use forecast announcements to condition the market prior to equity offerings, we rely on two complementary sets of analyses. We first examine the relative good news in management forecast announcements prior to an SEO using two proxies to measure good news. The first proxy is an indicator variable (*GN*) that equals one if there is a positive cumulative abnormal return over the three-day window [-1, 1] around the forecast

announcement, where abnormal return is the firm's return minus the return of the CRSP value weighted index. The second proxy (*SRET*) is the cumulative abnormal returns over the three-day window [-1, 1] around the forecast announcement. Thus, *GN* captures the *propensity* of managers to issue good news, and *SRET* captures the *magnitude* of the news, where good news is a positive change in market expectations regarding firm value. If managers are hyping the stock to obtain cheaper equity financing, we should observe a greater managerial propensity to issue good news and/or a larger amount of good news conveyed to the market before an SEO.

Prior studies (e.g., Lang and Lundholm [2000]; Frankel et al. [1995]) find no evidence of an increase in forward-looking disclosures. However, we argue that rather than increase forecast frequency, managers can adjust the *type* of information (i.e., good or bad news) released in the forecast announcement to optimistically bias investor perceptions of firm value. This can include bias not only in the forecasted number, but also in the supplemental information that is provided along with the forecast, both of which can be qualitative and quantitative.¹⁴ Hutton, Miller, and Skinner [2003] indicate that managers often provide supplemental information with their forecasts when making *good news* disclosures. We use the stock returns around the forecast announcement because it provides a comprehensive measure of the news conveyed by managers *as perceived by investors*. Following Lang and Lundholm [2000], we assume that any change in firms' disclosure activities intended to hype the stock price happens in the 180 days prior to the SEO filing date.¹⁵

¹⁴ Even though we argue that managers might bias the forecasted number (e.g., earnings) to hype the stock price prior to an SEO, the observed forecast bias (earnings forecast minus actual earnings) might not be different from zero because firms can manage earnings to the forecasted earnings number. In fact, prior research finds that firms manage earnings both before and after an SEO (Rangan [1998]; Teoh, Welch, and Wong [1998]; Cohen and Zarowin [2010]). Further, prior research provides strong evidence that managers deliberately try to meet or beat their earnings forecast by managing earnings (Kasznik [1999]). Graham, Harvey, and Rajgopal [2005] find that "CFOs dislike the prospect of coming up short on their numbers, particularly if they are guided numbers..." (pg. 42). Such incentives to meet management-issued earnings forecasts are likely to be even stronger immediately before an SEO.

¹⁵ The 180-day window is intended to capture the pre-SEO period during which managers know that they are going to issue additional equity. Our results are robust to using a 90-day window instead.

Next, we examine whether the additional pre-SEO good news is negatively associated with abnormal stock returns in the period following the SEO. If managers successfully hype the stock price prior to an SEO using favorable disclosures, then we should observe a reversal in the stock price following the SEO that is associated with these disclosures, as the effect of the hype unravels (Lang and Lundholm [2000]). We measure abnormal returns (*AR*) as market-adjusted returns, where we calculate the market return as the return on the CRSP value-weighted market index (Rangan [1998]; Teoh, Welch, and Wong [1998]; Jo and Kim [2007]). Following Lang and Lundholm [2000], returns are compounded over the 18 months following the SEO issuance date. To capture the extent to which managers engage in hyping behavior before the SEO, we use two measures: (1) *Sum of GN*, measured as the number of forecast announcements that induced a positive 3-day abnormal return in the 180 days prior to an SEO, and (2) *Sum of SRET*, measured as the total of all 3-day forecast announcement abnormal returns in the 180 days prior to an SEO.¹⁶

We employ a difference-in-differences design to examine whether SEO firms provide more (i.e., higher propensity and greater magnitude) good news in the months before an SEO than they do in other periods, as compared to a set of matched non-SEO control firms. To ensure the matched non-SEO firms operate in similar information environments and have similar return determinants to the SEO firms, we match on the following variables as measured in the SEO filing quarter: (1) size, measured by the market value of equity, (2) growth opportunities, measured by the market-to-book ratio of equity, (3) past performance, measured by return on assets and the cumulative abnormal returns computed as the excess of the firm's returns over the returns on the CRSP value weighted index in the prior three months, and (4) two-digit SIC code. This research design not only accounts for the possibility that the forecast announcements of an SEO firm might be systematically different from a non-SEO matched firm, but also controls for

¹⁶ We also verify the robustness of our results to using the number of good news forecast announcements *relative* to the total number of forecast announcements (i.e., average *GN*).

time period effects in forecast announcements before SEOs that affect both SEO and non-SEO firms.¹⁷

We match firms on size because prior research shows that larger firms have richer information environments and lower expected returns than smaller firms (Lang and Lundholm [1993]; Fama and French [1993]). We match firms on growth opportunities using the market-to-book ratio of equity because high growth firms require more external financing and are likely to access equity markets more frequently, which cause them to have systematically different disclosure policies (Frankel, McNichols, and Wilson [1995]; Khurana, Pereira, and Martin [2006]; Jo and Kim [2007]). In addition, the market-to-book ratio of equity is an important determinant for stock returns (Fama and French [1993]). We match on past performance because prior research shows that firm performance affects disclosure policy (Miller [2002]). And lastly, we match on industry to allow for the possibility that unobservable industry characteristics affect firms' disclosure choices.

We begin our matching procedure by restricting the sample of candidate matches to those firms that have at least one management forecast in the quarter in which the SEO firm files for the offering. Next, we rank all candidate firms into deciles based on our matching variables each quarter. We then pick a matched *non*-SEO firm with the same decile rank as the SEO firm for all matching variables in the quarter of the SEO filing date. In cases where we obtain multiple matches we select the match with the closest size to the SEO firm. As we show later, there is no significant difference in the mean values of the matching variables for our SEO sample and the matched non-SEO sample (Table 2, Panel A). In untabulated results, we also find that there is no significant difference between the SEO and non-SEO firms' disclosure activity one year prior to

¹⁷ We do not use a difference-in-differences test design for our analyses of post-SEO abnormal returns because it requires us to estimate regressions with more than three interaction terms for our later tests making inference intractable. Further, unlike the analyses of management forecasts, we use *abnormal* stock returns over 18 month intervals, and we control for economic factors using industry and year fixed effects as well as control variables for size, growth, and performance.

the SEO filing date. Therefore, it appears that our matching criteria provide us with a sample of non-SEO firms with similar information environments one year prior to the SEO.

3.2 ENDOGENEITY

We chose the research design described above recognizing the endogeneity in the disclosure choices, the equity offering choice, and the stock returns. Using a difference-in-differences design with a matched control sample allows us to make more precise statements about the manner in which the SEO firms alter their disclosures around the equity offering and provides a natural control for industry-, size-, performance-, and growth opportunity-related effects in our disclosure and return analyses. The endogeneity concern stems from the possibility that a firm's decision to issue equity and the associated disclosure choices are driven by a third factor, a positive net present value project that becomes available to the firm (or some similar good news that the manager is privy to). However, if the increase in stock price prior to the offering is caused by an expanded investment opportunity set (as opposed to managerial hyping), then the stock returns subsequent to the equity offering announcement should not be negatively related to pre-SEO disclosure activity after controlling for other factors, such as past performance and growth opportunities. Instead, we find a negative relation between this disclosure activity and subsequent returns. Further, given that we find the relation becomes statistically insignificant following an improvement in the information environment, alternative stories related to growth prospects are less viable.

Another potential source of endogeneity is market timing, where managers attempt to time the market by issuing equity in periods of overvaluation of the firm's equity. That is, the equity offering decision might be in *response* to the overvaluation. To address this reverse causality concern, we control for the abnormal returns in the three-months before the three-day forecast announcement window. Further, we test whether there is a negative relation between the forecast announcement news and subsequent returns, beyond that for a matched firm with similar past returns. This allows us to determine whether any potential return reversal is related

specifically to the disclosures made during the forecast announcement, and whether the original market response to these disclosures are warranted. Lastly, we examine whether the relation between pre-SEO disclosure activity and post-SEO returns changes in the post-SOX information environment. If managers are simply timing the market when engaging in offerings, we should observe no change in this behavior following SOX. In contrast, if the improved information environment improves monitoring, we should observe a reduction in market conditioning, and therefore a muted relation between pre-SEO disclosures and post-SEO returns.

Despite our attempts to control for endogeneity, we recognize that we cannot unambiguously establish the SEO firms' motives for increasing their good news disclosure propensity prior to the SEO. However, the combined evidence we provide suggests that it may be in anticipation of the SEO.¹⁸ Moreover, it is important to note that evidence consistent with managers conditioning the market does *not* preclude the possibility that managers release good news to the market regarding legitimate investment opportunities or time equity offerings during periods of overvaluation. In fact, it is possible, and perhaps even likely, that managers will engage in all of these behaviors. As discussed above, we construct our research design to parse out these competing stories to identify whether managers are, at a minimum, conditioning the market.

4. Data, Sample Selection, and Summary Statistics

We obtain data on management-issued forecast announcements from First Call, seasoned equity offering from Security Data Company (SDC) Platinum, financial information from Compustat, and stock returns from CRSP. Our sample period begins in 1993 because the data on

¹⁸ Lang and Lundholm [2000] point out that given the endogeneity in the disclosure choices, the offering choice, and the stock returns, a simultaneous system of equations might appear to be the appropriate statistical design. However, that approach would likely introduce more inconsistency in the estimates than does simultaneity. A simultaneous-equations approach requires us to identify determinants of each of the three choice variables with significant explanatory power, but that are exogenous to the other two variables. If the variables either are not exogenous or have low explanatory power, a simultaneous equations approach will introduce more inconsistency than it eliminates (see Larcker and Rusticus [2010]). Therefore, we stop short of addressing endogeneity using an instrumental variables approach.

management forecasts prior to 1993 is very sparse (Anilowski, Feng, and Skinner [2007]), and our sample period ends in 2008 because we require 18 months of stock returns following a SEO event. We begin our sample construction by identifying the SEOs in SDC with non-missing filing dates and issuance dates that are less than 90 days apart. We next require that the SEO firms also have data available in First Call, Compustat, and CRSP. This procedure leaves us with 413 SEO events for the period 1993 to 2008. We drop 24 SEO events for which we are unable to obtain a matched firm, leaving us with 389 SEO events with a matched non-SEO firm.

We merge the 389 SEO events with management forecast announcements from First Call and obtain 8,499 forecast announcements around the SEO events. Following Cheng and Lo [2006] and Brockman, Khurana, and Martin [2008], we include all forecast announcements, regardless of whether it is an earnings forecast or a forecast of other summary measures, such as cash flows or revenue, and regardless of whether the forecasts are for a quarterly or annual period. We treat multiple forecasts made by the same firm on the same day as a single forecast event. For example, an earnings forecast for the following quarter and the following year are treated as a single forecast event.

We remove 104 forecast announcements that relate to earnings that will be announced prior to the equity offering, since some of the news in these forecasts is likely to unravel prior to the offering, and the relatively short forecast horizon makes managers more accountable for any information in the announcement.¹⁹ This procedure leaves us with a final sample of 8,395 management forecasts. We use the same procedure described above to obtain the management forecasts for our matched firm sample. The matched firms made 9,983 management forecasts over the same time period. Our primary analyses of forecast announcements are based on a sample of 18,378 observations (i.e., 8,395 + 9,983).

Of the 389 SEO events in our management forecast sample, we delete 183 observations that do not have 18 months of consecutive stock returns following the SEO for the returns

¹⁹ We thank the referee for this suggestion.

analyses. Therefore, our analyses of abnormal stock returns following SEOs are based on 206 SEO firms and the corresponding 206 matched firms totaling to 412 observations. Table 1 outlines our sample selection process.

Table 2 presents the descriptive statistics for the main variables used in our analyses. Panel A shows that our SEO firm sample and the matched firm sample have firms with similar size, market-to-book ratio, ROA, and past returns in the calendar quarter preceding the SEO filing date, indicating that our matching procedure is effective. Panel B shows that our sample of SEO firms (matched firms) have good news forecast announcements 52% (50%) of the time, and their forecast announcements induce a 0.3% (0.0%) median abnormal return in the three day window around the announcement. The control variables – *LSIZE*, *MTB*, *ROA*, and *ABRET* – are similar for both samples. Panel C presents the descriptive statistics for the observations used in our post-SEO return analyses. We find that equity offering firms have a lower post-SEO abnormal return compared to the matched firms on average (1.6% vs 2.4%), which is consistent with hyping behavior. We also find that equity-offering firms make more good-news forecast announcements relative to the matched firms (i.e., 1.22 vs. 1.08) and the announcement returns are also larger for equity-offering firms relative to the matched firms (5.6% vs. 2.1%), which is also consistent with hyping behavior.

5. Empirical Analyses and Results

We conduct three main sets of analyses in this paper. First, we examine whether managers generally attempt to condition the market using forecast announcements prior to equity offerings in the less rich information environment (i.e., pre-SOX). Second, we explore the role that the improved information environment (i.e., post-SOX) plays in mitigating market conditioning. Finally, we examine the impact of the 2005 Securities Reform on managerial forecast behavior and the market's responses to these actions.

5.1 MARKET CONDITIONING BEFORE THE CHANGE IN THE INFORMATION ENVIRONMENT

5.1.1 Pre-SEO forecast announcements

Our initial analyses are restricted to calendar years prior to 2003 to remove the confounding effects of changes in the information environment following the enactment of the Sarbanes-Oxley Act. If managers use forecast announcements to increase their stock price before an SEO, we should observe an increase in the likelihood and/or magnitude of price-increasing forecast announcements just prior to SEOs. Therefore, we examine forecast announcements in the 180 days before an SEO using the following difference-in-differences regression.

$$Forecast_{it} = \beta_1 + \beta_2 SEOFIRM_i + \beta_3 SEO_{it} + \beta_4 SEOFIRM_i \times SEO_{it} + \sum \gamma Controls + \varepsilon_{it}, \quad (1)$$

where *Forecast* is either *GN* or *SRET*, as defined in the previous section. *SEOFIRM* is an indicator variable that equals one for the SEO firm sample and zero for the matched firm sample. *SEO* is an indicator variable that equals one for forecast announcements made in the 180 days prior to the SEO filing date for the equity offering firm and its matched control firm (see Figure 1). *Controls* is a vector of control variables that includes the natural logarithm of the market value equity (*LSIZE*), market-to-book ratio of equity (*MTB*), return on assets (*ROA*) measured as income before extraordinary items scaled by total assets, cumulative abnormal returns computed as the excess of the firm's returns over the CRSP value weighted index in the three months before the three-day forecast announcement window (*ABRET*), and indicator variables for each year and each of the 48 industries in Fama and French [1997]. *LSIZE*, *MTB*, and *ROA* are measured at the fiscal quarter end immediately preceding the date of the forecast announcement. Our choice of control variables closely follows that in Lang and Lundholm [2000], Jo and Kim [2007], and Brockman, Khurana, and Martin [2008]. The coefficient of interest in equation 1 is β_4 , which captures the change in the disclosure behavior of SEO firms in the pre-SEO period *beyond* the change in the disclosure behavior of matched non-SEO firms in the same time period.

Table 3 presents the results from estimating equation 1 using ordinary least squares (OLS),²⁰ where we cluster the standard errors at the firm-quarter level. The coefficient for $SEO \times SEOFIRM$ (β_4) is positive and statistically significant at the one percent level for both measures of good news disclosure activity — GN and $SRET$. In particular, the coefficient for $SEO \times SEOFIRM$ is 0.38 when the dependent variable is GN , which indicates that an equity offering firm is 38% more likely to have a good news forecast announcement before an equity offering than it is at other times, as compared to forecast announcements for the non-SEO matched firms in the same period. Moreover, the coefficient for $SEO \times SEOFIRM$ is 0.05 when the dependent variable is $SRET$, suggesting that the abnormal return induced by forecast announcements made by an SEO firm before an offering is five percentage points higher than the abnormal return for its forecast announcements in other periods, as compared to the difference in forecast announcement returns for non-SEO matched firms over the same periods. These findings suggest that although prior studies find no evidence of an increase in forecast frequency prior to an SEO (Frankel, McNichols, and Wilson [1995]; Lang and Lundholm [2000]), forecast announcements before the SEO are significantly more likely to contain good news and the magnitude of the good news disclosure is significantly higher prior to the SEO.

The coefficients for the control variables in Table 3 are consistent with expectations. Specifically, the coefficient for ROA ($ABRET$) is positive and significant (marginally insignificant), which suggests that firms with better past performance are more likely to issue good news forecasts. The coefficients for $LSIZE$ and MTB are insignificant, which suggests that controlling for performance, larger firms and firms with higher growth opportunities are no more

²⁰ Note that we estimate equation 1 with OLS even when the dependent variable is an indicator variable (GN). We make this choice because the set of covariates includes interaction terms, and Ai and Norton [2003] show that the coefficient for an interaction term in non-linear models such as the Probit and Logit does not equal its marginal effect. While we can estimate the “correct” marginal effects as recommended by Ai and Norton for a single interaction term, our later tests include triple interaction terms. Computing the Ai and Norton statistic for a triple interaction is a non-trivial procedure and we are not aware of any existing solution for it. Therefore, to maintain consistency with the results in later tables we use a Linear Probability Model (i.e., OLS) instead of a Probit or Logit model. However, in untabulated tests, we find that our inferences are unchanged in terms of both statistical significance and economic magnitude when we use a Logit model, and when we compute the Ai and Norton statistic where possible.

likely to issue good news forecasts than smaller firms and firms with fewer growth opportunities. The coefficient for *SEOFIRM* is insignificant, which suggests that equity offering firms are no more likely to issue good news forecasts than the matched firms in non-SEO periods. Lastly, the coefficient for *SEO* is insignificant, which suggests that our matched sample firms are no more likely to issue good news in the pre-SEO period than at other times.

5.1.2 Post-SEO abnormal returns

We next examine whether the pre-SEO disclosure activity is associated with abnormal returns in the post-SEO period for equity offering firms. If managers do indeed hype their stock price before an SEO, we should observe such pre-SEO hyping unravel in the post-SEO period. To test this prediction, we estimate an OLS regression of post-SEO abnormal returns on the pre-SEO disclosure activity and control variables using the sample of SEO firms and our matched control sample.

$$AR_{it} = \beta_1 + \beta_2 SEOFIRM_i + \beta_3 DISC_{it} + \beta_4 SEOFIRM_i \times DISC_{it} + \sum \gamma Controls + \varepsilon_{it}, \quad (2)$$

where *AR* is the abnormal returns in the 18 months following the SEO issuance date (Figure 2); *SEOFIRM* is an indicator variable that equals one for the SEO firm sample and zero for the matched firm sample; *DISC* is either the number of good-news forecast announcements in the 180 days before the SEO filing date (*Sum of GN*) or the sum of the news in forecast announcements in the 180 days before the SEO filing date (*Sum of SRET*); and *Controls* is a vector of control variables that includes the average cumulative abnormal return in the three months before the forecast announcement windows (*QABRET*), natural log of market value of equity (*QSIZE*), market-to-book ratio of equity (*QMTB*), return on assets (*QROA*), and performance-adjusted discretionary accrual (*QPDA*).²¹ *QSIZE*, *QMTB*, *QROA*, and *QPDA* are measured at the end of the calendar quarter preceding the SEO filing date.

²¹ To estimate the performance-adjusted discretionary accruals, we first estimate the discretionary accruals with the accruals model in Ball and Shivakumar [2006]: $ACC_{it} = \alpha_0 + \alpha_1 CFO_{it} + \alpha_2 DCFO_{it} + \alpha_3 CFO_{it} * DCFO_{it} + \alpha_4 \Delta REV_{it} + \alpha_5 PPE_{it} + \varepsilon_{it}$. We use all the available observations in Compustat to run this model by each quarter and two-digit SIC code industry with restriction that each quarter-industry must have at least 10 observations, and use the residual,

We control for firm size ($QSIZE$) and market-to-book ratio ($QMTB$) because it is well documented in prior research that these variables are important determinants of future stock returns (Fama and French [1992]). We control for performance-adjusted discretionary accrual ($QPDA$) since Rangan [1998] and Teoh, Welch, and Wong [1998] show that pre-SEO discretionary accruals predict post-SEO returns. Lastly, we control for pre-SEO abnormal returns ($QABRET$) and return on assets (ROA) to allow for the effects of return momentum and past performance on future returns following Lang and Lundholm [2000] and Jo and Kim [2007].

Table 4 presents the results from estimating equation 2. As predicted, we find that the coefficient for $SEOFIRM \times DISC$ (β_4) is negative and statistically significant at the one and five percent level when $DISC$ is *Sum of GN* and *Sum of SRET*, respectively. These results show that pre-SEO good news disclosures of equity offering firms are negatively associated with post-SEO abnormal returns. That is, the overvaluation of the equity offering firm in the pre-SEO period reverses in the post-SEO period, and the reversal is associated with the pre-SEO disclosures, after controlling for other determinants of stock returns, which is consistent with hyping behavior before SEOs.

Consistent with Jo and Kim [2007], we also find that the coefficient for $QPDA$ is consistently negative, albeit insignificantly in all regression specifications.²² The coefficients for $QSIZE$ and $QMTB$ are also negative, which is consistent with expectation. However, only the $QMTB$ coefficient is statistically significant. Lastly, the coefficient for $QABRET$ is positive and significant indicating that firms with abnormal returns in the past continue to earn abnormal returns in the same direction in near future, consistent with Brockman et al. [2008].

Collectively, the evidence in Tables 3 and 4 suggest that firms are more likely to provide good news disclosures and disclosures with a larger magnitude of good news before SEOs.

ε_{it} , as the proxy for discretionary accruals. We then follow the procedure in Kothari, Leone, and Wasley [2005] to calculate the performance-adjusted discretionary accruals.

²² In untabulated results, we find that the coefficient for $QPDA$ is negative and statistically significant when we use a one year return window. This result supports the evidence in Jo and Kim [2008] who use a one-year return window. Our results continue to be statistically significant when we use a one-year return window.

Further, these disclosures are negatively associated with future abnormal returns, suggesting that firms hype their stock price prior to equity offerings by changing their disclosure behavior.

5.2 MARKET CONDITIONING AND THE CHANGE IN THE INFORMATION ENVIRONMENT

5.2.1 Pre-SEO forecast announcements

In this section, we examine whether the change in the information environment following SOX leads to a change in firms' disclosure practices prior to equity offerings. Specifically, if the improved information environment allows investors to better assess management disclosures through reduced information asymmetry, we predict that market conditioning prior to SEOs declines post-SOX. To test this hypothesis, we use the entire sample period, 1993 to 2008, and we augment equation 1 by including additional covariates to capture the change in good-news forecast announcements before equity offerings post-SOX. In particular, we estimate the following regression using OLS, where we cluster standard errors at the firm-quarter level.

$$\begin{aligned} Forecast_{it} = & \beta_1 + \beta_2 SEOFIRM_i + \beta_3 SEO_{it} + \beta_4 POSTSOX_t + \beta_5 SEOFIRM_i \times SEO_{it} + \\ & \beta_6 SEOFIRM_i \times POSTSOX_t + \beta_7 SEO_{it} \times POSTSOX_t + \\ & \beta_8 SEOFIRM_i \times SEO_{it} \times POSTSOX_t + \sum \gamma Controls + \varepsilon_{it} \end{aligned} \quad (3)$$

where *Forecast*, *SEOFIRM*, *SEO*, and *Controls* are as defined in section 5.1. *POSTSOX* is an indicator variable that takes on the value of one for the years 2003 to 2008. The coefficients of interest are β_5 and β_8 , where β_5 captures pre-SEO disclosure behavior in the less rich information environment before the enactment of SOX and β_8 captures the *change* in pre-SEO disclosure behavior following SOX.

Table 5 presents the results from estimating equation 3. We find that the coefficient for *SEO*×*SEOFIRM* (β_5) is positive and statistically significant at the one percent level for both measures of *Forecast* (i.e., *GN* and *SRET*). These results suggest that before the enactment of SOX, equity offering firms have a greater tendency to issue good news forecast announcements and provide more good news during forecast announcements in the period just prior to the equity offering, consistent with the evidence in Table 3. Further, Table 5 shows that the coefficient for

$SEO \times SEOFIRM \times POSTSOX$ (β_8) is negative and statistically significant at the one percent level for both measures of disclosure activity. This indicates that the likelihood of good news forecast announcements and the magnitude of good news in forecast announcements in the period just before SEOs significantly declines post-SOX, consistent with our prediction that the new information environment helps mitigate market conditioning. We note though that in the post-SOX period, there is some evidence of good news disclosure activity just prior to SEOs, although the economic magnitude of these effects is much smaller.²³

5.2.2 Post-SEO abnormal returns

To determine whether the good news disclosure activity is used to condition the market or to justifiably inform investors of news, we next examine the relation between pre-SEO forecast announcements and post-SEO abnormal returns. We estimate the following OLS regression:

$$AR_{it} = \beta_1 + \beta_2 SEOFIRM_i + \beta_3 DISC_{it} + \beta_4 POSTSOX_t + \beta_5 SEOFIRM_i \times DISC_{it} + \beta_6 SEOFIRM_i \times POSTSOX_t + \beta_7 DISC_{it} \times POSTSOX_t + \beta_8 SEOFIRM_i \times DISC_{it} \times POSTSOX_t + \sum \gamma Controls + \varepsilon_{it} , \quad (4)$$

where all variables are as described previously, and the coefficients of interest are β_5 and β_8 , where β_5 captures the relation between pre-SEO disclosure activity and post-SEO abnormal returns during 1993 to 2002 and β_8 captures the *change* in this relation post-2002.

Table 6 presents the results from estimating equation 4. We find that β_5 is negative and statistically significant at the five percent level or better, regardless of the proxy used to measure pre-SEO disclosure behavior. The negative association between pre-SEO good news disclosure activity and future abnormal returns is consistent with hyping behavior prior to SEOs in the 1993

²³ This inference is based on the results from an F-test where the null hypothesis is that the sum of the coefficients for the interaction between *SEO* and *SEOFIRM* and the interaction between *SEO*, *SEOFIRM*, and *POSTSOX* is zero. Note that more good news disclosure activity in the pre-SEO period does not necessarily mean that managers are conditioning the market. We examine whether this disclosure activity is negatively associated with post-SEO abnormal returns to identify market conditioning in section 5.2.2.

to 2002 period, as documented in Table 4. We also find that the coefficient for $SEOFIRM \times DISC \times POSTSOX$ (β_8) is positive and statistically significant at the five percent level for both proxies of pre-SEO disclosure activity - *Sum of GN* and *Sum of SRET*. Further, the F-test for the total effect of $SEOFIRM \times DISC$ in the post-SOX period is insignificantly different from zero (i.e., $\beta_5 + \beta_8 = 0$). Collectively, the results in Tables 5 and 6 suggest that firms hype their stock price before an SEO using management forecast announcements. However, in the post-SOX information environment, we find no evidence that firms engage in such hyping behavior. These results provide initial support for the SEC's contention that recent enhancements in firms' information environments have made some of the gun-jumping restrictions "unnecessary" (SEC [2005]).

5.3 MARKET CONDITIONING AND THE 2005 SECURITIES OFFERING REFORM

5.3.1 Pre-SEO forecast announcements

In this section, we restrict our analysis to the post-SOX period from 2003 to 2008 to minimize confounding effects due to changes in the information environment. We examine whether the relaxation of the pre-SEO disclosure restrictions following the 2005 Reform has an impact on pre-SEO disclosure behavior and its association with post-SEO abnormal returns. If the new information environment plays a significant role in disciplining managerial disclosure behavior, we should observe no increase in market conditioning after the passage of the Reform. However, if the relaxation of gun-jumping rules increases managerial incentives to condition the market before SEOs *and* the improved information environment is not a constraint, we should observe increased market conditioning post-Reform.

To test these predictions, we augment equation 1 by including additional covariates to capture the change in good-news forecast announcements before equity offerings following the 2005 Reform as follows:

$$Forecast_{it} = \beta_1 + \beta_2 SEOFIRM_i + \beta_3 SEO_{it} + \beta_4 POSTREFORM_t + \beta_5 SEOFIRM_i \times SEO_{it} + \beta_6 SEOFIRM_i \times POSTREFORM_t + \beta_7 SEO_{it} \times POSTREFORM_t + \beta_8 SEOFIRM_i \times SEO_{it} \times POSTREFORM_t + \sum \gamma Controls + \varepsilon_{it} \quad (5)$$

where, *Forecast*, *SEOFIRM*, *SEO*, and *Controls* are as defined earlier, and *POSTREFORM* is an indicator variable that takes on the value of one for the years in which the Reform was in place—2006 to 2008. The coefficients of interest in equation 5 are β_5 and β_8 , where β_5 captures pre-SEO disclosure behavior before the Reform, and β_8 captures the change in pre-SEO disclosure behavior following the Reform.

Table 7 presents the results from estimating equation 5. The coefficient for *SEO*×*SEOFIRM*×*POSTREFORM* is statistically insignificant for both measures of disclosure activity with a two-tailed p-value of 0.26 (0.67) in the *GN (SRET)* regression. Thus, we find no evidence that firms increase their good news disclosure activity in the post-2005 period when there is a significant relaxation in disclosure regulation. Although we do not find any evidence of a *change* in disclosure behavior following the Reform, we still find evidence of a marginal increase in the tendency of firms to issue good news forecasts in the 180 days preceding the SEO, consistent with the evidence in Table 5. Specifically, we find that the sum of the coefficients for the interaction between *SEO* and *SEOFIRM*, and the triple interaction term (i.e., $\beta_5 + \beta_8$ in equation 6) is positive and statistically significant with a p-value of 0.057 (0.020) in the *GN (SRET)* regression.

5.3.2 Post-SEO abnormal returns

Finally, we examine whether there is any evidence of an association between the pre-SEO good news disclosure activity and post-SEO abnormal returns, and whether this relation changes following the Reform. We estimate the following OLS regression:

$$AR_{it} = \beta_1 + \beta_2 SEOFIRM_i + \beta_3 DISC_{it} + \beta_4 POSTREFORM_t + \beta_5 SEOFIRM_i \times DISC_{it} + \beta_6 SEOFIRM_i \times POSTREFORM_t + \beta_7 DISC_{it} \times POSTREFORM_t + \beta_8 SEOFIRM_i \times DISC_{it} \times POSTREFORM_t + \sum \gamma Controls + \varepsilon_{it} \quad (6)$$

where all variables are as described previously. The coefficients of interest in equation 6 are β_5 and β_8 , where β_5 captures the relation between pre-SEO disclosure activity and post-SEO abnormal returns before the 2005 Reform, and β_8 captures the change in this relation following the enactment of the Reform.

Table 8 presents the results from estimating equation 6. We find that the coefficient for $SEOFIRM \times DISC$ (β_5) is statistically insignificant across both disclosure activity proxies (i.e., *Sum of GN* and *Sum of SRET*). Recall that we restrict our analysis in this section to the post-SOX period from 2003 to 2008 to minimize confounding effects due to changes in the information environment. As such, these results suggest that the pre-SEO good news disclosure activity of equity offering firms are unrelated to future abnormal returns in the post-SOX period, consistent with the evidence in Table 6. We also find that the coefficient for $SEOFIRM \times DISC \times POSTREFORM$ (β_8) is statistically insignificant in both specifications indicating that there is no change in the relation between pre-SEO disclosure and post-SEO abnormal returns following the Reform. Further, the F-test for the total effect (as opposed to the incremental effect) of the Reform (i.e., $\beta_5 + \beta_8$) is also insignificantly different from zero. Collectively, the results in Tables 7 and 8 provide no evidence of market conditioning following the Reform.

6. Additional Analyses and Robustness Tests

6.1 FORECAST FREQUENCY

In this section, we examine the forecast frequency of equity offering firms just before the offering, and whether it changes following the Reform. The Reform encourages managers to provide forward-looking disclosures, such as managerial forecasts, before SEOs by providing a safe harbor. We examine forecast frequency in the pre-SEO window relative to the neighboring windows in two sample periods – 1993 to 2002 (pre-SOX) and 2003 to 2008 (post-SOX). Following Rogers and Van Buskirk [2009], we measure forecast frequency as the annualized

number of forecasts in the 180-day window before an SEO (pre-SEO window), and in the 730-day intervals around the pre-SEO window (neighboring windows).

Table 9 presents the results from the forecast frequency analysis. Consistent with Frankel et al. [1995] and Lang and Lundholm [2000], we find no evidence of an increase in forecast frequency before offerings in the pre-SOX period. In fact, Table 9 shows that firms significantly decrease the number of forecasts made just before an SEO in the pre-SOX period. The post-SOX analysis in Table 9 shows that the decline in forecast frequency in the pre-SEO period persists following the enactment of SOX (i.e., the coefficient for *SEO* is negative and statistically significant). However, firms significantly increase the frequency of pre-SEO management forecasts following the Reform. Following the Reform, the forecasting frequency in the pre-SEO window is no different than the forecasting frequency in the neighboring windows (see Table 9, F-test). These results suggest that firms now maintain their forecast frequency before SEOs, consistent with the SEC's intent.

6.2 WELL-KNOWN SEASONED ISSUERS (WKSIs)

The Reform creates a regulatory distinction between firms considered to be well-known seasoned issuers (WKSIs) and other firms (non-WKSIs). WKSIs are essentially firms that are in compliance with the filing requirements under the Securities Exchange Act of 1934 (i.e., filings such as form 10K, 10Q, etc. are up-to-date) and have a world-wide public equity float of at least \$700 million *or* have issued at least \$1 billion in non-convertible securities for cash in the past three years.²⁴ Although the Reform relaxes pre-SEO disclosure restrictions for all firms, it has the most far-reaching revisions for WKSIs. In particular, WSKI are allowed to make offers at any time *before and after* the filing of a registration statement. Moreover, WKSIs are entitled to automatic shelf registration on demand without SEC review.²⁵ In contrast, non-WKSIs are

²⁴ See SEC [2005; pg. 22-31] for a detailed definition of WKSIs.

²⁵ There are two significant advantages of using an automatic shelf registration statement, as opposed to a regular non-WSKI Form S-3 shelf registration statement. First, as the name indicates, a Form S-3ASR registration statement becomes effective automatically upon filing, without review by the SEC. Accordingly, after filing a Form

allowed much greater freedom in communications, provided those communications occur more than 30 days before the registration statement is filed and do not refer to the equity offering. In addition, a new safe harbor allows the continued regular release of factual and forward-looking information.

The SEC argues that given their size and visibility, WKSIs are highly scrutinized by institutional investors and analysts, and thus unlikely to be able to condition the market with forward-looking disclosures (SEC [2005]). However, opponents of the Reform suggest that WKSIs are actually the *most* likely to hype their stock price following the Reform, since WKSIs are provided the most discretion with respect to the amount and timing of their disclosures.

We partition our sample into two groups, WKSIs and non-WKSIs, and investigate whether our results differ for these two groups of firms. We find that our inferences are remarkably similar for WKSIs and non-WKSIs in all but one test (untabulated). Specifically, we find that both WKSIs and non-WKSIs engage in more good news disclosure activity before equity offerings and witness a post-SEO return reversal that is associated with this activity before the enactment of SOX. Following SOX, we find that neither WKSIs nor non-WKSIs provide more pre-SEO good news disclosures, and we find no evidence of a return reversal in the post-SEO period. However, we find that following the Reform, non-WKSIs show a greater tendency to provide pre-SEO good news disclosures whereas WKSIs show no such tendency. Despite this, we find no evidence of a post-SEO return reversal associated with pre-SEO disclosures for either group of firms following the Reform. Overall, our evidence suggests that the Reform does not lead to an increase in pre-SEO market conditioning for either group.

S-3ASR with a “universal” prospectus, an issuer can, promptly thereafter, file a prospectus supplement indicating the amount, and describing the features, of the securities that it wishes to “take off the shelf,” and then commence to sell those securities immediately upon the filing of the prospectus supplement. Second, as a WKSI, the issuer is not required to register a specified dollar amount of securities at the time of filing the Form S-3ASR; and it may postpone the payment of the filing fee until the time of filing the prospectus supplement for each shelf take-down (called “pay as you go”).

6.3 BUNDLED VERSUS UNBUNDLED FORECASTS

Given that some forecast announcements are associated with earnings announcements (i.e., bundled forecasts), we investigate whether there are differential market-conditioning effects between bundled forecasts and unbundled forecasts. We partition our management forecast announcements into those provided along with earnings announcements and those provided independently. Some may argue that forecast announcement news can be confounded by the news in earnings announcements when both announcements are provided together. For example, the earnings announcement may serve to reduce information asymmetry so that forecasts are less likely to be effective at conditioning the market. In contrast, prior research shows that managers can manipulate earnings to condition the market (e.g., Rangan [1998]; Cohen and Zarowin [2010]). As such, the forecast announcement may simply serve as a proxy for this behavior. Although we control for performance-matched discretionary accruals in our returns analyses using *QPDA*, this may not fully capture the effect given the considerable measurement error in discretionary accrual models. Therefore, we rerun our analyses after partitioning our sample into forecast announcements made with and without earnings announcements.

We find that our inferences continue to hold for both samples. That is, the patterns in managerial disclosure behavior and market conditioning are similar for both groups. However, some of our abnormal returns results are statistically weaker. Specifically, the results in Table 4 become insignificant for forecasts made along with earnings announcements, which indicates that earnings announcements may play a disciplining role on market conditioning as these announcements reduce information asymmetry, as suggested in prior research (e.g., Korajczyk, Lucas, and McDonald [1991]). Nevertheless, our remaining results continue to be statistically significant at the one-tailed 10% level or better.

7. Conclusion

In July 2005, the SEC announced the enactment of the Securities Offering Reform, which relaxes restrictions on firms' forward-looking disclosures prior to public equity offerings. The

SEC argues that in recent years, the information environment has become much richer through marked improvements in mandated disclosure quality and both broader and timelier dissemination of information, rendering the gun jumping restrictions “unnecessary and outdated,” as these rules restrict valuable information flow to investors around a highly important corporate event (SEC [2005]). However, opponents of the Reform argue that the restrictions are meant to protect investors from managers conditioning the market before offerings, and the relaxation of these restrictions will increase market conditioning.

This paper examines the impact of the Reform on market conditioning. To provide a broader context in which to evaluate this impact, we also investigate the effect of the recently improved information environment on market conditioning. Thus, this paper is comprised of three main analyses. First, using the enactment of SOX in 2002 as the shift in the information environment, we examine whether managers generally attempt to mislead the market using forecast announcements in the pre-SOX period. We find evidence consistent with an increase in good news disclosure activity by offering firms in the months before an offering. Moreover, we observe a negative association between the pre-offering disclosure activity and post-offering returns, suggesting that managers condition the market using forecast announcements.

Second, we explore the role that the improved information environment plays in preventing managers from misleading the market. We find that the increase in good news disclosure activity in the pre-offering period becomes muted and the negative association between pre-offering disclosure activity and post-offering performance no longer holds in the post-SOX period. This is consistent with the information environment acting as a disciplining mechanism on managers’ market conditioning forecast behavior.

Finally, we examine whether the Reform has an impact on managerial forecast behavior and the market’s responses to these actions. Consistent with the SEC’s intent, we find an increase in the number of forecasts given in the pre-offering period. Further, our evidence suggests that there is no increase in market conditioning following the Reform. Overall, these

results indicate that while managers may have engaged in market conditioning in earlier years, these actions have been mitigated in a richer information environment, allowing the SEC to relax information constraints on firms before equity offerings.

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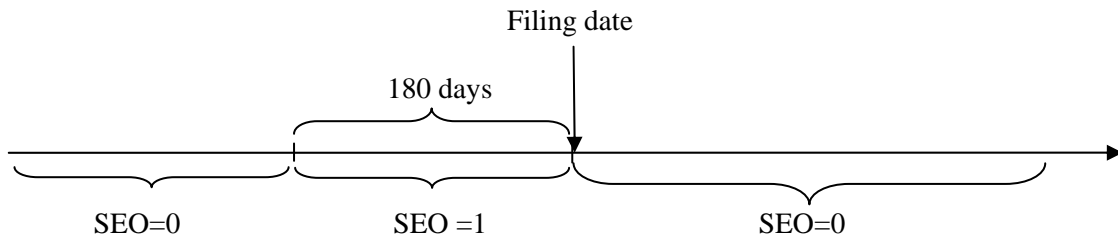
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FIGURE 1

Timeline of forecast announcement and SEO Filing

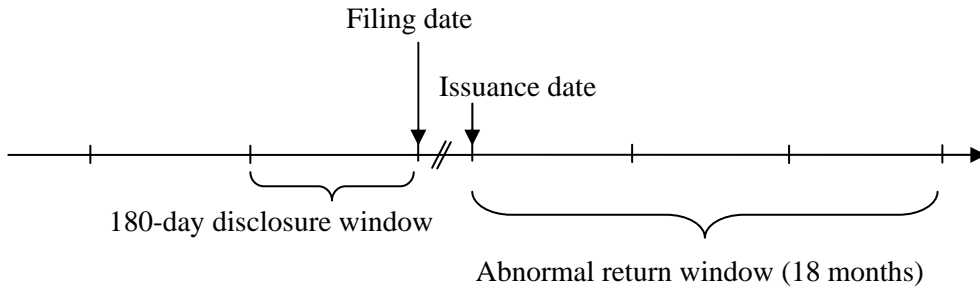


Note:

1. SEO =1 for both SEO firm and match firms.
2. This timeline is relevant for Tables 3, 5, and 7.

FIGURE 2

Timeline of forecast announcement, SEO issuance, and subsequent abnormal returns



Note: This timeline is for Tables 4, 6, and 8.

TABLE 1
Sample Selection

No.	<u>SEO event sample period: 1993-2008</u>	Observations Dropped	Number of Observations
1.	SEO events from 1993-2008 in the intersection of CRSP, Compustat & CIG		3,491
2.	<i>Less:</i> SEO events with no management forecast in 180-day pre-SEO window	3,078	413
3.	<i>Less:</i> SEO events missing a firm that meets the matching	24	389
4.	SEO events used in the management forecast analyses		389
5.	<i>Less:</i> SEO events that do not have 18 months of consecutive returns subsequent to issuance	183	206
6.	SEO events used in the post-SEO return analyses		206
7.	SEO firms plus matched non-SEO firms (i.e., No. 6 x 2)	Table 6	412
8.	Pre-SOX of sample SEO firms and matched non-SEO firms	Table 4	122
9.	Post-SOX sample of SEO firms and matched non-SEO firms	Table 8	290
<u>Mangement forecasts made during 1993 - 2008</u>			Number of Observations
10.	Total management forecast announcements by the 389 SEO firms		8,499
11.	<i>Less:</i> Forecasts concerning earnings announced prior to SEO issuance	104	8,395
12.	Total management forecast announcements by the 389 SEO firms used in analyses (No. 13 + No. 14)		8,395
13.	Number of forecast announcements in 180-day pre-SEO window		628
14.	Number of forecast announcements outside the 180-day pre-SEO window		7,767
15.	Total management forecasts by the 389 matched firms (No. 16 + No. 17)		9,983
16.	Number of forecast announcements in 180-day pre-SEO window		736
17.	Number of forecast announcements outside the 180-day pre-SEO window		9,247
18.	Total management forecast sample (No. 19 + No. 20)	Table 5	18,378
19.	Pre-SOX sample of management forecasts by SEO and matched firms	Table 3	6,222
20.	Post-SOX sample of management forecasts by SEO and matched firms	Table 7	12,156

TABLE 2
Descriptive Statistics

This table reports the descriptive statistics for the variables used in our analyses. *SRET* is the cumulative abnormal returns over the three-day window [-1, 1] around the forecast announcement, where abnormal return is the firm's return minus the return of the CRSP value weighted index. *GN* is an indicator variable that equals one if *SRET* is positive, and zero otherwise. *LSIZE* is natural logarithm of market value of equity measured at the fiscal quarter end immediately preceding the forecast announcement date. *MTB* is market to book ratio of equity measured at the fiscal quarter end immediately preceding the forecast announcement date. *ROA* is return on asset measured as income before extraordinary items scaled by total assets at the fiscal quarter end immediately preceding the forecast announcement date. *ABRET* is cumulative abnormal returns in the three months ending before the 3-day forecast announcement window, where abnormal return is the firm's return minus the return of the CRSP value weighted index. *AR* is the abnormal returns in the 18 months following the SEO issuance date. *Sum of GN* is the number of good-news forecast announcements in the 180 days before the SEO filing date. *Sum of SRET* is the sum of the abnormal returns in forecast announcement windows in the 180 days before the SEO filing date. *QSIZE* is natural logarithm of market value of equity as of the calendar quarter preceding the SEO filing date. *QMTB* is market to book ratio of equity measured at the calendar quarter end immediately preceding the SEO filing date. *QROA* is return on asset measured at the calendar quarter end immediately preceding the SEO filing date. *QABRET* is the mean of *ABRET* for the forecast announcements in the 180 days before SEO filing. *QPDA* is the performance-adjusted discretionary accrual measured at the calendar quarter before the SEO filing date.

Panel A: Matching Criteria

Matching Variables	SEO Firm Sample	Matched Firm Sample	Difference	t-Statistic
<i>QSIZE</i>	6.811	6.990	-0.179	-1.610
<i>QMTB</i>	4.590	4.015	0.575	1.220
<i>QROA</i>	0.012	0.009	0.003	0.860
<i>QABRET</i>	0.148	0.120	0.028	1.420
N	389	389		

Panel B: Sample used in Pre-SEO Forecast Announcement Analyses

Variables	Mean	Stdev	P25	Median	P75	N
SEO Firm Sample						
<i>GN</i>	0.520	0.500	0.000	1.000	1.000	8,395
<i>SRET</i>	-0.001	0.086	-0.035	0.003	0.041	8,395
<i>SEO</i>	0.075	0.263	0.000	0.000	0.000	8,395
<i>LSIZE</i>	7.134	1.437	6.153	7.046	7.970	8,395
<i>MTB</i>	3.112	2.694	1.530	2.211	3.540	8,395
<i>ROA</i>	0.012	0.020	0.004	0.011	0.021	8,395
<i>ABRET</i>	0.016	0.198	-0.090	0.008	0.108	8,395
Matched Firm Sample						
<i>GN</i>	0.502	0.500	0.000	1.000	1.000	9,983
<i>SRET</i>	-0.004	0.084	-0.037	0.000	0.037	9,983
<i>SEO</i>	0.074	0.261	0.000	0.000	0.000	9,983
<i>LSIZE</i>	7.426	1.638	6.344	7.364	8.515	9,983
<i>MTB</i>	3.249	2.686	1.598	2.416	3.868	9,983
<i>ROA</i>	0.013	0.021	0.005	0.012	0.023	9,983
<i>ABRET</i>	0.018	0.193	-0.084	0.009	0.110	9,983

TABLE 2 - continued

Panel C: Sample used in Post-SEO Abnormal Returns Analyses

Variables	Mean	Stdev	P25	Median	P75	N
<u>SEO Firm Sample</u>						
<i>AR</i>	0.016	0.324	-0.188	0.002	0.196	206
Sum of <i>GN</i>	1.218	0.892	1.000	1.000	2.000	206
Sum of <i>SRET</i>	0.056	0.109	-0.014	0.032	0.096	206
<i>QABRET</i>	0.135	0.221	-0.003	0.082	0.245	206
<i>QSIZE</i>	7.023	1.214	6.164	6.946	7.674	206
<i>QMTB</i>	3.282	1.799	1.938	2.851	4.070	206
<i>QROA</i>	0.012	0.027	0.005	0.011	0.022	206
<i>QPDA</i>	-0.006	0.036	-0.010	0.000	0.004	206
<u>Matched Firm Sample</u>						
<i>AR</i>	0.024	0.383	-0.217	-0.025	0.200	206
Sum of <i>GN</i>	1.083	0.837	0.000	1.000	2.000	206
Sum of <i>SRET</i>	0.021	0.119	-0.040	0.016	0.083	206
<i>QABRET</i>	0.043	0.158	-0.040	0.028	0.107	206
<i>QSIZE</i>	6.806	1.330	5.962	6.612	7.640	206
<i>QMTB</i>	2.989	1.955	1.697	2.418	3.408	206
<i>QROA</i>	0.011	0.021	0.004	0.010	0.020	206
<i>QPDA</i>	-0.005	0.043	-0.012	0.000	0.005	206

TABLE 3*Analyses of Forecast Announcements before SEOs in the Pre-SOX period*

This table presents the results from a regression of forecast announcement news on indicator variables for SEO firms, the pre-SEO period, an interaction between the two, and control variables (i.e., equation 1). *SRET* is the cumulative abnormal returns over the three-day window [-1, 1] around the forecast announcement, where abnormal return is the firm's return minus the return of the CRSP value weighted index. *GN* is an indicator variable that equals one if *SRET* is positive, and zero otherwise. *SEO* is an indicator variable that equals one for forecast announcements made in the 180 days before the SEO filing date, and zero otherwise (see Figure 1). *SEOFIRM* is an indicator variable that equals one for the SEO firm sample, and zero for the matched firm sample. *LSIZE* is natural logarithm of market value of equity measured at the fiscal quarter end immediately preceding the forecast announcement date. *MTB* is market to book ratio of equity measured at the fiscal quarter end immediately preceding the forecast announcement date. *ROA* is return on asset measured as income before extraordinary items scaled by total assets at the fiscal quarter end immediately preceding the forecast announcement date. *ABRET* is cumulative abnormal returns in the three months ending before the 3-day forecast announcement window, where abnormal return is the firm's return minus the return of the CRSP value weighted index. *Year Indicators* are indicator variables for all but one of the years in our sample. *Industry Indicators* are indicator variables for all but one of the 48 industries in Fama and French [1997]. The standard errors are clustered at the firm-quarter level. ***, **, and * denote statistical significance at the two tailed 1%, 5%, and 10% levels, respectively.

<i>Dependent Variable:</i>	<i>GN</i>		<i>SRET</i>	
	Coefficient	<i>t</i> -Statistic	Coefficient	<i>t</i> -Statistic
<i>SEOFIRM</i>	0.013	0.91	-0.001	-0.31
<i>SEO</i>	0.024	0.61	0.013	1.61
<i>SEOFIRM</i> × <i>SEO</i>	0.378 ***	7.89	0.054 ***	5.49
<i>LSIZE</i>	0.003	0.67	0.001	0.73
<i>MTB</i>	-0.003	-0.86	-0.001 **	-2.07
<i>ROA</i>	2.271 ***	6.85	0.569 ***	6.80
<i>ABRET</i>	0.056	1.66	0.032 ***	4.13
<i>Year Indicators</i>	Included		Included	
<i>Industry Indicators</i>	Included		Included	
R-Square	3.9%		6.1%	
No. of Observations	6,222		6,222	

TABLE 4*Analyses of Abnormal Returns following SEOs in the Pre-SOX period*

This table presents the results from a regression of post-SEO abnormal returns on the pre-SEO disclosure activity and control variables (i.e., equation 2). *AR* is the abnormal returns in the 18 months following the SEO issuance date. *DISC* is equal to *Sum of GN* or *Sum of SRET*, where *Sum of GN* is the number of good-news forecast announcements in the 180 days before the SEO filing date and *Sum of SRET* is the sum of the abnormal returns in forecast announcement windows in the 180 days before the SEO filing date. *SRET* is the cumulative abnormal returns over the three-day window [-1, 1] around the forecast announcement, where abnormal return is the firm's return minus the return of the CRSP value weighted index. *GN* is an indicator variable that equals one if *SRET* is positive, and zero otherwise. *SEOFIRM* is an indicator variable that equals one for the SEO firm sample, and zero for the matched firm sample. *QABRET* is the mean of *ABRET* for the forecast announcements in the 180 days before SEO filing, where *ABRET* is cumulative abnormal returns in the three months ending before the 3-day forecast announcement window, where abnormal return is the firm's return minus the return of the CRSP value weighted index. *QSIZE* is natural logarithm of market value of equity as of the calendar quarter preceding the SEO filing date. *QMTB* is market to book ratio of equity measured at the calendar quarter end immediately preceding the SEO filing date. *QROA* is return on asset measured as income before extraordinary items scaled by total assets at the calendar quarter end immediately preceding the SEO filing date. *QPDA* is the performance-adjusted discretionary accrual measured at the calendar quarter before the SEO filing date. ***, **, and * denote statistical significance at the two tailed 1%, 5%, and 10% levels, respectively.

<i>Dependent Variable:</i> <i>Disclosure Measure (DISC):</i>	18 Month Abnormal Returns (AR)			
	<i>Sum of GN</i>		<i>Sum of SRET</i>	
	Coefficient	<i>t</i> -Statistic	Coefficient	<i>t</i> -Statistic
<i>INTERCEPT</i>	0.072	0.37	0.099	0.53
<i>SEOFIRM</i>	0.247 **	2.00	0.063	0.76
<i>DISC</i>	0.097 *	1.81	0.883 **	2.39
<i>SEOFIRM</i> × <i>DISC</i>	-0.202 ***	-2.67	-1.253 **	-2.19
<i>QABRET</i>	0.471 **	2.45	0.401 **	2.12
<i>QSIZE</i>	-0.010	-0.42	-0.004	-0.17
<i>QMTB</i>	-0.038 ***	-3.13	-0.035 ***	-2.93
<i>QROA</i>	1.439	0.86	1.367	0.81
<i>QPDA</i>	-1.596	-1.56	-1.186	-1.13
R-Square	18.1%		17.7%	
No. of Observations	122		122	

TABLE 5*Analyses of Forecast Announcements before SEOs in the Pre- and Post- SOX Periods*

This table presents the results from a regression of forecast announcement news on indicator variables for SEO firms, the pre-SEO period, the post-SOX period, interactions between the three indicator variables, and control variables (i.e., equation 3). *SRET* is the cumulative abnormal returns over the three-day window [-1, 1] around the forecast announcement, where abnormal return is the firm's return minus the return of the CRSP value weighted index. *GN* is an indicator variable that equals one if *SRET* is positive, and zero otherwise. *SEO* is an indicator variable that equals one for forecast announcements made in the 180 days before the SEO filing date, and zero otherwise (see Figure 1). *SEOFIRM* is an indicator variable that equals one for the SEO firm sample, and zero for the matched firm sample. *POSTSOX* is an indicator variable that equals one for both the firm making SEO and its matched firm if the SEO filing date is after 2002, and zero otherwise. *LSIZE* is natural logarithm of market value of equity measured at the fiscal quarter end immediately preceding the forecast announcement date. *MTB* is market to book ratio of equity measured at the fiscal quarter end immediately preceding the forecast announcement date. *ROA* is return on asset measured as income before extraordinary items scaled by total assets at the fiscal quarter end immediately preceding the forecast announcement date. *ABRET* is cumulative abnormal returns in the three months ending before the 3-day forecast announcement window, where abnormal return is the firm's return minus the return of the CRSP value weighted index. *Year Indicators* are indicator variables for all but one of the years in our sample. *Industry Indicators* are indicator variables for all but one of the 48 industries in Fama and French [1997]. The standard errors are clustered at the firm-quarter level. ***, **, and * denote statistical significance at the two tailed 1%, 5%, and 10% levels, respectively.

<i>Dependent Variable:</i>	<i>GN</i>		<i>SRET</i>	
	Coefficient	<i>t</i> -Statistic	Coefficient	<i>t</i> -Statistic
<i>SEOFIRM</i>	0.015	1.08	-0.001	-0.25
<i>SEO</i>	0.014	0.35	0.009	1.13
<i>POSTSOX</i>	0.022 *	1.77	0.004 *	1.85
<i>SEOFIRM</i> × <i>SEO</i>	0.386 ***	8.15	0.057 ***	5.85
<i>SEOFIRM</i> × <i>POSTSOX</i>	-0.016	-0.95	0.000	-0.10
<i>SEO</i> × <i>POSTSOX</i>	0.019	0.43	-0.002	-0.25
<i>SEOFIRM</i> × <i>SEO</i> × <i>POSTSOX</i>	-0.332 ***	-5.81	-0.040 ***	-3.73
<i>LSIZE</i>	-0.002	-0.53	-0.001	-1.06
<i>MTB</i>	-0.001	-0.79	-0.001 ***	-3.97
<i>ROA</i>	1.945 ***	8.97	0.503 ***	9.93
<i>ABRET</i>	0.014	0.64	0.016 ***	3.28
F-Test:	Coefficient	<i>p</i> -Value	Coefficient	<i>p</i> -Value
(<i>SEOFIRM</i> × <i>SEO</i>) + (<i>SEOFIRM</i> × <i>SEO</i> × <i>POSTSOX</i>)	0.053	0.103	0.017 ***	0.003
<i>Year Indicators</i>	Included		Included	
<i>Industry Indicators</i>	Included		Included	
R-Square	2.5%		4.4%	
No. of Observations	18,378		18,378	

TABLE 6

Analyses of Abnormal Returns following SEOs in the Pre- and Post- SOX Periods

This table presents the results from a regression of post-SEO abnormal returns on the pre-SEO disclosure activity, an indicator variable for the post-SOX period, an interaction between the two, and control variables (i.e., equation 4). *AR* is the abnormal returns in the 18 months following the SEO issuance date. *DISC* is equal to *Sum of GN* or *Sum of SRET*, where *Sum of GN* is the number of good-news forecast announcements in the 180 days before the SEO filing date and *Sum of SRET* is the sum of the abnormal returns in forecast announcement windows in the 180 days before the SEO filing date. *SRET* is the cumulative abnormal returns over the three-day window [-1, 1] around the forecast announcement, where abnormal return is the firm's return minus the return of the CRSP value-weighted index. *GN* is an indicator variable that equals one if *SRET* is positive, and zero otherwise. *SEOFIRM* is an indicator variable that equals one for the SEO firm sample, and zero for the matched-firm sample. *POSTSOX* is an indicator variable that equals one for both the firm making SEO and its matched firm if the SEO filing date is after 2002, and zero otherwise. *QABRET* is the mean of *ABRET* for the forecast announcements in the 180 days before SEO filing, where *ABRET* is cumulative abnormal returns in the three months ending before the 3-day forecast announcement window, where abnormal return is the firm's return minus the return of the CRSP value weighted index. *QSIZE* is natural logarithm of market value of equity as of the calendar quarter preceding the SEO filing date. *QMTB* is market to book ratio of equity measured at the calendar quarter end immediately preceding the SEO filing date. *QROA* is return on asset measured as income before extraordinary items scaled by total assets at the calendar quarter end immediately preceding the SEO filing date. *QPDA* is the performance-adjusted discretionary accrual measured at the calendar quarter before the SEO filing date. ***, **, and * denote statistical significance at the two tailed 1%, 5%, and 10% levels, respectively.

<i>Dependent Variable:</i> <i>Disclosure Measure (DISC):</i>	18 Month Abnormal Returns (AR)			
	<i>Sum of GN</i>		<i>Sum of SRET</i>	
	Coefficient	<i>t</i> -Statistic	Coefficient	<i>t</i> -Statistic
<i>INTERCEPT</i>	-0.013	-0.09	0.053	0.41
<i>SEOFIRM</i>	0.271 **	2.24	0.092	1.15
<i>DISC</i>	0.131 **	2.52	1.104 ***	3.16
<i>POSTSOX</i>	0.052	0.53	0.018	0.28
<i>SEOFIRM</i> × <i>DISC</i>	-0.201 ***	-2.70	-1.365 **	-2.47
<i>SEOFIRM</i> × <i>POSTSOX</i>	-0.218	-1.51	-0.062	-0.67
<i>DISC</i> × <i>POSTSOX</i>	-0.062	-0.91	-0.774	-1.62
<i>SEOFIRM</i> × <i>DISC</i> × <i>POSTSOX</i>	0.195 **	2.06	1.606 **	2.23
<i>QABRET</i>	0.078	0.71	0.048	0.43
<i>QSIZE</i>	-0.012	-0.75	-0.006	-0.40
<i>QMTB</i>	-0.016 **	-2.18	-0.016 **	-2.17
<i>QROA</i>	2.336 ***	2.74	2.399 ***	2.83
<i>QPDA</i>	0.028	0.05	0.147	0.28
F-Test:	Coefficient	<i>p</i> -Value	Coefficient	<i>p</i> -Value
<i>(SEOFIRM</i> × <i>DISC</i>) + <i>(SEOFIRM</i> × <i>DISC</i> × <i>POSTSOX</i>)	-0.006	0.920	0.241	0.598
R-Square	6.8%		7.1%	
No. of Observations	412		412	

TABLE 7

Analyses of Forecast Announcements before SEOs in the Pre- and Post- the 2005 Reform

This table presents the results from a regression of forecast announcement news on indicator variables for SEO firms, the pre-SEO period, the post-Reform period, interactions between the three indicator variables, and control variables (i.e., equation 5). The sample period is restricted to the post-SOX period from 2003 to 2008 to minimize confounding effects due to changes in the information environment. *SRET* is the cumulative abnormal returns over the three-day window [-1, 1] around the forecast announcement, where abnormal return is the firm's return minus the return of the CRSP value weighted index. *GN* is an indicator variable that equals one if *SRET* is positive, and zero otherwise. *SEO* is an indicator variable that equals one for forecast announcements made in the 180 days before the SEO filing date, and zero otherwise (see Figure 1). *SEOFIRM* is an indicator variable that equals one for the SEO firm sample, and zero for the matched firm sample. *POSTREFORM* is an indicator variable that equals one for both the firm making SEO and its matched firm if the SEO filing date is after 2005, and zero otherwise. *LSIZE* is natural logarithm of market value of equity measured at the fiscal quarter end immediately preceding the forecast announcement date. *MTB* is market to book ratio of equity measured at the fiscal quarter end immediately preceding the forecast announcement date. *ROA* is return on asset measured as income before extraordinary items scaled by total assets at the fiscal quarter end immediately preceding the forecast announcement date. *ABRET* is cumulative abnormal returns in the three months ending before the 3-day forecast announcement window, where abnormal return is the firm's return minus the return of the CRSP value weighted index. *Year Indicators* are indicator variables for all but one of the years in our sample. *Industry Indicators* are indicator variables for all but one of the 48 industries in Fama and French [1997]. The standard errors are clustered at the firm-quarter level. ***, **, and * denote statistical significance at the two tailed 1%, 5%, and 10% levels, respectively.

<i>Dependent Variable:</i>	<i>GN</i>		<i>SRET</i>	
	Coefficient	<i>t</i> -Statistic	Coefficient	<i>t</i> -Statistic
<i>SEOFIRM</i>	0.007	0.56	-0.001	-0.28
<i>SEO</i>	0.049	1.58	0.005	1.16
<i>POSTREFORM</i>	0.015	1.14	0.002	1.04
<i>SEOFIRM</i> × <i>SEO</i>	0.023	0.54	0.015 **	2.47
<i>SEOFIRM</i> × <i>POSTREFORM</i>	-0.022	-1.05	-0.001	-0.38
<i>SEO</i> × <i>POSTREFORM</i>	-0.045	-0.97	0.003	0.43
<i>SEOFIRM</i> × <i>SEO</i> × <i>POSTREFORM</i>	0.073	1.11	0.004	0.43
<i>LSIZE</i>	-0.005	-1.16	-0.001 **	-2.14
<i>MTB</i>	-0.001	-0.41	-0.001 ***	-3.31
<i>ROA</i>	1.719 ***	6.28	0.457 ***	7.50
<i>ABRET</i>	-0.017	-0.63	0.006	0.93
F-Test:	Coefficient	<i>p</i> -Value	Coefficient	<i>p</i> -Value
(<i>SEOFIRM</i> × <i>SEO</i>) + (<i>SEOFIRM</i> × <i>SEO</i> × <i>POSTREFORM</i>)	0.096 *	0.057	0.020 **	0.020
<i>Year Indicators</i>	Included		Included	
<i>Industry Indicators</i>	Included		Included	
R-Square	2.0%		4.0%	
No. of Observations	12,156		12,156	

TABLE 8

Analyses of Abnormal Returns following SEOs in the Pre- and Post- the 2005 Reform

This table presents the results from a regression of post-SEO abnormal returns on the pre-SEO disclosure activity, an indicator variable for the post-Reform period, an interaction between the two, and control variables (i.e., equation 6). The sample period is restricted to the post-SOX period from 2003 to 2008 to minimize confounding effects due to changes in the information environment. *AR* is the abnormal returns in the 18 months following the SEO issuance date. *DISC* is equal to *Sum of GN* or *Sum of SRET*, where *Sum of GN* is the number of good-news forecast announcements in the 180 days before the SEO filing date and *Sum of SRET* is the sum of the abnormal returns in forecast announcement windows in the 180 days before the SEO filing date. *SRET* is the cumulative abnormal returns over the three-day window [-1, 1] around the forecast announcement, where abnormal return is the firm's return minus the return of the CRSP value weighted index. *GN* is an indicator variable that equals one if *SRET* is positive, and zero otherwise. *SEOFIRM* is an indicator variable that equals one for the SEO firm sample, and zero for the matched firm sample. *POSTREFORM* is an indicator variable that equals one for both the firm making SEO and its matched firm if the SEO filing date is after 2005, and zero otherwise. *QABRET* is the mean of *ABRET* for the forecast announcements in the 180 days before SEO filing, where *ABRET* is cumulative abnormal returns in the three months ending before the 3-day forecast announcement window, where abnormal return is the firm's return minus the return of the CRSP value weighted index. *QSIZE* is natural logarithm of market value of equity as of the calendar quarter preceding the SEO filing date. *QMTB* is market to book ratio of equity measured at the calendar quarter end immediately preceding the SEO filing date. *QROA* is return on asset measured as income before extraordinary items scaled by total assets at the calendar quarter end immediately preceding the SEO filing date. *QPDA* is the performance-adjusted discretionary accrual measured at the calendar quarter before the SEO filing date. ***, **, and * denote statistical significance at the two tailed 1%, 5%, and 10% levels, respectively.

<i>Dependent Variable:</i> <i>Disclosure Measure (DISC):</i>	18 Month Abnormal Returns (AR)			
	<i>Sum of GN</i>		<i>Sum of SRET</i>	
	Coefficient	<i>t</i> -Statistic	Coefficient	<i>t</i> -Statistic
<i>INTERCEPT</i>	0.004	0.03	0.101	0.68
<i>SEOFIRM</i>	0.003	0.03	0.007	0.11
<i>DISC</i>	0.064	1.20	-0.202	-0.50
<i>POSTREFORM</i>	-0.123	-1.10	-0.112	-1.66
<i>SEOFIRM</i> × <i>DISC</i>	0.017	0.24	0.624	1.14
<i>SEOFIRM</i> × <i>POSTREFORM</i>	0.143	0.89	0.040	0.39
<i>DISC</i> × <i>POSTREFORM</i>	0.008	0.08	1.576 **	2.31
<i>SEOFIRM</i> × <i>DISC</i> × <i>POSTREFORM</i>	-0.075	-0.62	-1.266	-1.29
<i>QABRET</i>	-0.131	-0.97	-0.153	-1.12
<i>QSIZE</i>	-0.004	-0.17	-0.008	-0.37
<i>QMTB</i>	-0.003	-0.31	-0.002	-0.20
<i>QROA</i>	2.527 **	2.56	2.634 ***	2.64
<i>QPDA</i>	0.646	1.08	0.700	1.17
F-Test:	Coefficient	<i>p</i> -Value	Coefficient	<i>p</i> -Value
<i>(SEOFIRM</i> × <i>DISC</i>) + <i>(SEOFIRM</i> × <i>DISC</i> × <i>POSTREFORM</i>)	-0.058	0.557	-0.642	0.433
R-Square	6.9%		8.2%	
No. of Observations	290		290	

TABLE 9

Analyses of Forecast Frequency prior to SEOs

This table presents the results from regressions of forecast frequency on indicator variables for the pre-SEO period, the post-Reform period, an interaction between the two, and control variables. **Forecast Frequency** is the annualized number of forecasts made in the pre-SEO window (the 180-day window ending one day before the SEO filing date) and neighboring windows (the 730-day window prior to the pre-SEO window and the 730-day window after the issuance of an SEO). If there is no management forecast in the window, then the forecast frequency is set to zero. **SEO** is an indicator variable that equals one for forecasts made in the pre-SEO window, and zero otherwise. **POSTREFORM** is an indicator variable that equals one if the SEO filing date is after 2005, and zero otherwise. **MTB** is market to book ratio of equity as of the fiscal quarter preceding the SEO filing date. **ANALYST FOLLOWING** is the number of analysts following the firm in the quarter prior to the SEO filing quarter. **LSIZE** is natural logarithm of market value of equity as of the fiscal quarter preceding the SEO filing date. **ROA** is return on asset measured as income before extraordinary items scaled by total assets at the fiscal quarter end immediately preceding the SEO filing date. ***, **, and * denote statistical significance at the two tailed 1%, 5%, and 10% levels, respectively.

<i>Dependent Variable:</i> Sample Period:	<i>Forecast Frequency</i>			
	<i>pre-SOX (1993-2002)</i>		<i>post-SOX (2003-2008)</i>	
	Coefficient	<i>t</i> -Statistic	Coefficient	<i>t</i> -Statistic
<i>SEO</i>	-0.315 ***	-6.76	-0.392 ***	-3.41
<i>POSTREFORM</i>	----	----	-0.339 *	-1.81
<i>SEO × POSTREFORM</i>	----	----	0.437 **	2.52
<i>MTB</i>	-0.007	-0.92	-0.063 ***	-5.33
<i>ANALYST FOLLOWING</i>	0.020 **	2.00	0.026	1.33
<i>LSIZE</i>	0.115 ***	3.52	0.329 ***	4.94
<i>ROA</i>	1.696 **	2.40	6.555 ***	3.98
F-Test:	Coefficient	<i>p</i> -Value	Coefficient	<i>p</i> -Value
<i>SEO + (SEO × POSTREFORM)</i>	----	----	0.045	0.105
<i>Year Indicators</i>	Included		Included	
<i>Industry Indicators</i>	Included		Included	
R-Square	30.0%		23.3%	
No. of Observations	3,575		1,694	