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### **Seasoned Equity Offerings**

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#### Abstract

This study examines the effect of accounting flexibility on managers' forecasting behavior prior to seasoned equity offerings (SEO). While SEO firms have strong incentives to convey optimistic information to boost the pre-SEO stock price, they also face enhanced litigation risk arising from SEO-related regulations. Thus, I hypothesize that managers of SEO firms will release optimistic forecasts prior to an SEO only if they have the accounting flexibility to manage subsequent reported earnings to meet or exceed their forecasts. I find that managers with greater accounting flexibility are more likely to issue a forecast prior to the SEO and their forecasts are more optimistic and more specific. Further, I find that accounting flexibility has no effect on managers' forecasting behavior either for non-SEO control firms or for non-SEO periods. My results suggest that, when managers face a tension between incentives to report optimistically and high litigation risk, accounting flexibility is an important factor that determines their forecasting behavior.

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#### 1. Introduction

This study examines the effect of accounting flexibility on managers' forecasting behavior prior to seasoned equity offerings (SEO). Prior studies predict that firms that plan to raise capital through SEOs have an incentive to increase their voluntary disclosures to reduce information asymmetry and/or to provide optimistic information in order to lower their cost of equity and boost the stock price (e.g., Frankel et al., 1995; Lang and Lundholm, 2000; and Jo and Kim, 2007). However, a competing factor that dampens the incentive for voluntary disclosure is the increased threat of litigation around equity offerings due to the provisions of Section 11 of the Securities Act of 1933, in addition to the general provisions of Section 10b-5 of the 1934 Act.<sup>1</sup> In view of the high litigation risk, managers would voluntarily disclose optimistic information prior to an SEO only if they can subsequently issue earnings reports that deliver their expectations. One way of achieving this is to manage subsequent reported earnings to make up any shortfall relative to their forecasts (see Kasznik, 1999). In this paper, I hypothesize that managers of SEO firms would be more likely to make voluntary disclosures and issue optimistic forecasts when they have sufficient accounting flexibility to achieve realized earnings that meet or beat their forecasts.

The literature on SEOs examines whether managers' voluntary disclosures and earnings management behavior around SEOs reflect attempts to increase the proceeds from equity offerings. Frankel et al. (1995) show that, relative to other firms, firms that frequently access equity and debt markets have a higher tendency to issue management forecasts; however, these

<sup>&</sup>lt;sup>1</sup> Firms with equity offerings face additional threat of litigation under Section 11 of the Securities Act of 1933. Unlike Section 10b-5 of the Securities Exchange Act of 1934, in lawsuits brought under Section 11, plaintiffs do not have to prove that they relied on false or misleading information provided by the offering firms. In fact, a decline in stock price between the offering date and the lawsuit date can be taken as initial evidence of damage and the defendant firms have the burden to prove that other factors contributed to the stock price decline. In addition, Section 5(c) of the 1933 Securities Act, so called "gun-jumping" law, regulates SEO firms' disclosure activity for the purpose of preventing any attempt to "condition the market" prior to the equity offering regardless of the intent of such disclosures.

firms are not more likely to forecast just before an offering. Similarly, Lang and Lundholm (2000) find no change in the frequency of management forecasts over a period of six months preceding an SEO. These results suggest that, on average, incentives to disclose additional information prior to an SEO are overshadowed by the threat of litigation faced by these firms.

On the other hand, Lang and Lundholm (2000) find that SEO firms that issue management forecasts earn higher pre-announcement returns, suggesting that the disclosure activity may have been efforts to "hype" the stock to obtain high valuations from investors. In contrast, Frankel et al. (1995) show that management forecasts prior to SEOs are not systematically higher than analysts' existing expectations, implying that legal liability in fact effectively deters overly optimistic forecasts. I argue that managers would be likely to issue optimistic forecasts even in the face of litigation risk, if they believe they could achieve subsequent earnings that will meet or exceed their forecasts.<sup>2</sup> Managers' ability to meet or beat their forecasts can be enhanced if they have the accounting flexibility to manage earnings by inflating accruals. Hence, I hypothesize that managers of firms with greater accounting flexibility for managing earnings would be more likely to issue forecasts and to issue more optimistic forecasts compared to the prevailing analysts' consensus prior to an SEO.

By accounting flexibility, I mean the extent to which managers can manage reported earnings to achieve a desired level of earnings. Barton and Simko (2002) argue that due to the articulation between the income statement and the balance sheet, upward earnings management in previous periods would be partly reflected in a high level of net operating assets on the balance sheet, constraining managers' ability to optimistically bias the reported earnings of the current period. These authors show that the beginning balance of net operating assets scaled by

<sup>&</sup>lt;sup>2</sup> In fact, prior evidence shows that firms increase their reported earnings by using discretionary accruals around SEOs either to temporarily increase stock prices (Teoh et al., 1998; Rangan, 1998) or to maintain prior overvaluation (Chen et al., 2009).

sales (NOA), a proxy for the accumulation of managers' previous earnings management efforts, is negatively related to the likelihood of meeting or beating analyst consensus forecasts. Based on Barton and Simko (2002), I measure accounting flexibility available for earnings management by the negative of NOA.<sup>3</sup> Furthermore, in order to focus on firm-specific accounting choice and to control for industry effects, I use the industry-adjusted variable as an empirical measure of accounting flexibility.<sup>4</sup>

To examine the effect of accounting flexibility on managers' forecasting behavior prior to the announcement of SEOs, this study specifically considers three aspects of management earnings forecasts: (i) issuance, (ii) news content, and (iii) specificity (e.g., point or range). For my empirical tests, I collect a sample of 480 SEO firms from 1997 to 2005, along with a size and industry-matched control sample of non-SEO firms. I use the matched control sample design to test whether the hypothesized effect of accounting flexibility on managers' forecasting behavior is more prevalent in SEO firms given their incentive structure.

Note that managers in general (i.e., not only those with an imminent SEO) could utilize accounting flexibility in their forecasting behavior. Managers may try to benefit from a boost in their stock price by issuing an overly optimistic forecast for reasons other than equity offerings, such as stock price-based incentives when compensation and wealth are tied to the firm's share price (Nagar et al., 2003) or insider trading incentives (Noe, 1999; and Cheng and Lo, 2006).

<sup>&</sup>lt;sup>3</sup> Accounting flexibility can also be interpreted as the extent to which net assets on the balance sheet are *conservatively* stated; that is, the negative of NOA captures the degree of understatement in net asset values due to conservative accounting. To the extent that more conservatively stated balance sheets can provide managers with greater opportunity to manage reported earnings toward a benchmark, this variable captures firms' accounting flexibility for earnings management.

<sup>&</sup>lt;sup>4</sup> Similar to Barton and Simko (2002), I measure the size of net operating assets by normalizing them with respect to sales, i.e., I use the inverse of the net operating asset turnover to reflect higher or lower accumulation of net operating assets relative to the normal level required to achieve reported sales. Since there are likely to be systematic differences in NOA across industries that are unrelated to over- or under-statement of net assets, I control for industry effects as recommended by DeFond (2002).

While prior studies do not consider accounting flexibility in examining the effect of these incentives on management forecasts, such incentives could lead to managers being more likely to issue a forecast and to issue more optimistic forecasts when they have greater accounting flexibility even in non-SEO periods. Given this possibility, I examine managers' forecasting behavior for both SEO firms and matched non-SEO firms in the main analysis. However, since SEO firms face a tension between strong incentives to boost stock price and high litigation risk, I expect that accounting flexibility has a stronger effect on managers' forecasting behavior for SEO firms relative to non-SEO firms.<sup>5</sup>

The empirical results show that accounting flexibility has an impact on managers' forecasting decisions. First, I find evidence that accounting flexibility is significantly positively related to the probability of issuing management forecasts over a nine-month period prior to the SEO announcement. Moreover, this relation is significant for the SEO firms, but not for the non-SEO firms. This implies that, given the strong incentive to maximize the offering proceeds, managers of SEO firms appear to take into account their ability to manage subsequent reported earnings when making their forecast issuance decisions.

Second, I provide evidence that managers with higher accounting flexibility issue more optimistic forecasts relative to the analyst consensus prior to the SEO. Thus, while Frankel et al. (1995) find no optimism in management forecasts for their overall sample of public offerings, I find that managers of SEO firms do issue optimistic forecasts when they have the ability to manage subsequent earnings if they fall short of their forecasts. In contrast, I find no significant effect of accounting flexibility on the news content of management forecasts for non-SEO firms, consistent with weaker incentives relative to SEO firms.

<sup>&</sup>lt;sup>5</sup> Consistent with my expectation, Kasznik (1999) suggests that, in general, managers of firms with greater accounting flexibility may not need to release earnings forecasts, since they can still achieve their earnings targets by using their accounting flexibility and at the same time avoid legal costs associated with forecast errors.

Third, I show that accounting flexibility is positively related to the specificity of management forecasts. Given the findings of Baginski et al. (1993) and Baginski et al. (2007) that more specific management forecasts are associated with greater price reaction and analyst forecast revisions, this result suggests that managers with higher accounting flexibility choose more specific forecasts to obtain a favorable market valuation prior to an SEO.<sup>6</sup>

To better control for differential incentives to boost stock prices, I also use the SEO firm as its own control. I compare SEO firms' management forecasts issued during the nine-month period preceding the SEO announcement with forecasts issued during the corresponding ninemonth period in the year prior to the SEO year. Consistent with my results using the matched control-firm approach, I also observe that the effect of accounting flexibility on the issuance, news content, and specificity of management forecasts is significantly more pronounced just prior to the SEO relative to the pre-SEO year.

This paper contributes to the accounting literature in several ways. First, this study provides evidence that accounting flexibility, by facilitating earnings management, serves as an important determinant of managers' forecasting behavior. My findings complement the results of Kasznik (1999) which suggest that, once managers issue optimistic forecasts, they manage reported earnings toward their forecasts to lower forecast errors. My results suggest that managers issue optimistic forecasts when they have a strong incentive to provide good news and, in addition, have the ability to manage reported earnings to avoid costly litigation. Second, this paper adds to the literature on voluntary disclosures around SEOs. While Frankel et al. (1995) find that on average managers do not issue optimistic forecasts prior to external financing events possibly because of greater legal liability, my work provides new evidence that managers of SEO

<sup>&</sup>lt;sup>6</sup> All of the above results are robust to (a) using a rank variable of accounting flexibility, and (b) examining the current and non-current components of accounting flexibility separately.

firms do issue optimistic forecasts if they have the accounting flexibility to manage earnings. Third, this paper also provides evidence on the role of accounting flexibility as a determinant of the specificity of management forecasts. While previous studies on management forecasts have focused on the issuance decision, my paper responds to the call for a better understanding of the determinants of forecast characteristics, one of which is the specificity of forecasts (Baginski et al., 2004; Hirst et al., 2008).

The organization of the paper is as follows. Section 2 reviews relevant previous studies and develops the hypotheses. Section 3 provides details of the research design. Section 4 shows the results of empirical tests. Section 5 concludes the paper by summarizing the findings and discussing limitations and future research.

#### 2. Literature Review and Hypotheses Development

#### 2.1 Accounting Flexibility and Issuance of Management Forecasts Prior to SEOs

This paper is related to studies of voluntary disclosure and earnings management in the SEO setting. Previous studies document that SEO firms tend to provide more voluntary disclosures in general in order to achieve a lower cost of capital. Frankel et al. (1995) show that, relative to firms with no external financing, firms that raise external capital from debt and equity markets provide management forecasts more frequently in order to reduce information asymmetry and lower their cost of capital. However, these authors do not find any evidence of an *increase* in the frequency of management forecasts prior to the offering, in particular, over the nine-month pre-offering period, most likely due to increased legal liability exposure.<sup>7</sup> Therefore, while these firms in general issue management forecasts more frequently, the enhanced threat of

<sup>&</sup>lt;sup>7</sup> Frankel et al. (1995) choose the nine-month pre-offering period as the event window, since it is close enough to the offering so that management forecasts issued in the event window can affect investors' information available at the offering date, but not so close as to overlap with the "quiet period" when disclosure activity is not allowed.

litigation due to securities laws related to public offerings seems to dampen their incentive to temporarily increase voluntary disclosures just before the offering.

While Frankel et al. (1995) examine frequent issuers of debt and equity, the subsequent studies focus only on seasoned equity offerings. Marquardt and Wiedman (1998) find that, when managers sell their own stock in a secondary offering, they are more likely to issue forecasts prior to the offering announcement with a view to maximizing the proceeds from the sale of their shares. In addition, using a broader measure of voluntary disclosure based on details of press releases, Lang and Lundholm (2000) and Jo and Kim (2007) show that firms do increase their voluntary disclosures in general (i.e., all disclosures excluding management forecasts) prior to an SEO to obtain favorable valuations from investors. Lang and Lundholm (2000) also find that SEO firms that issue a greater number of management forecasts earn higher pre-announcement returns but experience larger price declines at the announcement of the SEO, suggesting that the disclosure activity may have been used to "hype" the stock.

Collectively, prior studies suggest that SEO firms have a strong incentive to provide voluntary disclosures to obtain higher stock valuations prior to SEOs. While some SEO firms temporarily increase their overall voluntary disclosure activity as an attempt to "hype" the stock, there is no evidence that SEO firms on average increase the frequency of management forecasts since they are subject to a higher level of litigation risk associated with equity offerings. However, these studies do not take into account reporting flexibility that could play a role in managers' forecasting decisions. Even in the face of litigation threat, managers of SEO firms would be likely to issue forecasts if they believed that they could deliver subsequent earnings that would meet or exceed their forecasts. In turn, managers' ability to meet or beat their forecasts can be enhanced if they have more accounting flexibility to manage reported earnings

toward their forecasts. Therefore, I argue that, given the tension between a strong incentive to provide voluntary disclosure for favorable stock valuation and the high level of SEO-related litigation risk, accounting flexibility can influence managers' forecast behavior by facilitating future earnings management.<sup>8</sup> While previous results suggest that, on average, the incentive to disclose additional information before equity offerings is overshadowed by the threat of litigation, I predict that managers of firms with greater accounting flexibility would be more likely to issue forecasts prior to an SEO. Thus, my first hypothesis is stated in alternative form as follows. **H1**: Controlling for other factors, managers with greater accounting flexibility are more likely to issue earnings forecasts prior to an SEO announcement.

It should be noted that the effect of accounting flexibility on the forecast issuance decision is not necessarily limited to the period just prior to an SEO announcement. It is also conceivable that managers would consider the accounting flexibility available for earnings management for their forecast decisions even under general circumstances. In other words, even in the absence of an imminent equity offering, managers can benefit from a boost in stock price by issuing an earnings forecast and later reporting earnings that meet or beat the forecast when they have greater accounting flexibility. Furthermore, previous studies suggest that other incentives such as stock price-based incentives (Nagar et al., 2003) or insider trading incentives (Noe, 1999; and Cheng and Lo, 2006) affect management forecasts. While these studies do not consider accounting flexibility in examining the effect of these incentives on management forecasts, such incentives could lead to a higher likelihood of managers issuing forecasts even in non-SEO periods when they have greater accounting flexibility. Given such a possibility, I examine whether accounting flexibility has a stronger effect on managers' forecasting behavior

<sup>&</sup>lt;sup>8</sup> Kasznik (1999) provides evidence on the relationship between voluntary disclosure and earnings management in the general cross-section of firms. He finds that once managers issue optimistic forecasts, they manage reported earnings toward their forecasts as a way of reducing litigation costs associated with ex post inaccurate forecasts.

prior to an SEO announcement *relative to* that under non-SEO circumstances.

#### 2.2 Accounting Flexibility and News Content of Management Forecasts

Previous studies on management forecasts provide evidence that the market responds to the news conveyed by management forecasts. Good (bad) news forecasts are found to be associated with positive (negative) price reaction, where forecast news is defined relative to the prevailing market expectation of future earnings (Patell, 1976; and Penman, 1980). In addition, analysts are found to revise their forecasts consistent with the direction of the news conveyed by management forecasts (Ajinkya and Gift, 1984; Williams, 1996; and Cotter et al., 2006). Linking these findings to equity offerings, one would expect managers to be more likely to provide a good-news forecast in order to increase stock prices prior to SEO announcements. However, prior research does not find such optimism in management forecasts. Frankel et al. (1995) show that management forecasts, issued prior to public offerings, are not systematically higher than prevailing analysts' expectations. Similarly, Lang and Lundholm (2000) find that, while SEO firms release optimistic information in their other disclosures, they do not provide more optimistic management forecasts. Thus, these studies suggest that the higher level of litigation risk may effectively dampen firms' incentives to provide optimistic forecasts prior to SEOs, thus leading to no optimism on average.

I argue that all SEO firms may not be equally restrained by the legal liability constraint. Managers of SEO firms can mitigate their litigation concerns through the use of accounting flexibility by making their forecasts more accurate ex post via earnings management. Thus, similar to the forecast issuance decision, I expect that managers would be likely to issue more optimistic forecasts even in the face of litigation risk if they can meet or beat their forecasts by managing earnings. Thus, **H2**: Controlling for other factors, managers with greater accounting flexibility are likely to issue more optimistic forecasts relative to the analyst consensus prior to the announcement of an SEO.

Given the possibility that accounting flexibility could affect managers' forecasting behavior for non-SEO firms as well, I compare the two groups in examining news content. Although I expect a positive effect of accounting flexibility on management forecast optimism for both groups, I predict the effect to be stronger for SEO firms than for non-SEO firms.

#### 2.3 Accounting Flexibility and Specificity of Management Forecasts

In practice, managers issue earnings forecasts with various levels of specificity. Based on King et al. (1990), the specificity of forecasts is calibrated as follows: a point forecast (e.g., "earnings per share of \$1.00") is most specific and a forecast with a narrower range is more specific than one with a wider range. For example, a forecast of "earnings per share between \$0.90 and \$1.10" is considered as more specific than a forecast of "earnings per share between \$0.50 and \$1.50" even though the two forecasts have the same midpoint of "earnings per share of \$1.00". Open-ended forecasts such as a minimum forecast (e.g., "earnings per share of at least \$1.00") or a maximum forecast (e.g., "earnings per share of at least \$1.00") or a maximum forecast. Qualitative statements such as "earnings may not meet expectations" are considered to be the least specific forecasts.

Previous studies on management forecasts show that a more specific forecast can trigger greater stock price reaction and analyst forecast revision for a given level of news conveyed by the forecast (Baginski et al., 1993; and Baginski et al., 2007). These findings are consistent with the theoretical prediction that price informativeness of the unexpected portion of a disclosure increases with the degree of disclosure precision (Kim and Verrecchia, 1991) and with the Bayesian adjustment model's prediction that the magnitude of belief revision becomes smaller

for more uncertain disclosures (Hirst et al., 1999). These studies suggest that the specificity of management forecasts affects the reactions of investors and analysts to the news contained in the forecasts and thus managers would strategically choose the level of specificity.

Thus, I can expect that managers of SEO firms issue more specific forecasts to obtain more favorable stock price reactions to their forecasts. However, a competing factor is a higher level of litigation risk associated with more specific forecasts. This is because the likelihood that a more specific forecast is construed as overly optimistic or inaccurate is higher, leading investors to sue managers for misleading information.<sup>9</sup> Given such a trade-off in issuing more specific forecasts, I argue that accounting flexibility would affect the manager's choice of forecast specificity by mitigating the litigation threat related to more specific forecasts. Thus, H3: Controlling for other factors, managers with greater accounting flexibility are likely to issue more specific earnings forecasts prior to the announcement of an SEO.

In testing H3, I examine both SEO and non-SEO firms. Although I expect managers of non-SEO firms with greater accounting flexibility to issue more specific forecasts, I predict the effect to be stronger for SEO firms than for non-SEO firms.

#### 3. Research Design

#### 3.1 Data and Sample Selection

I obtain a sample of SEO firms from the Security Data Corporation's (SDC) Global New Issues database over the period from 1997 to 2005. Following prior studies, I include primary and secondary common stock offerings and exclude units and warrant offerings. The sample is limited to U.S. firms listed on NYSE, AMEX, and NASDAQ. To be included in the sample, an

<sup>&</sup>lt;sup>9</sup> Consistent with this concern, King et al. (1990) find that managers issue less specific forecasts when they expect the forecast accuracy to be lower.

SEO must satisfy the following conditions: 1) the equity offering is made after two years of the initial public offering to avoid the confounding effect of IPO performance; 2) only the first equity offering is included when a firm has multiple offerings over the sample period; 3) offerings made by companies in the utilities industry (SIC 4900 – 4999) and financial industry (SIC 6000 – 6999) are excluded due to differences in their regulatory environment and accounting methods; 4) the issuing firm has the required financial statement data on Compustat and stock price/return data on CRSP; and 5) the issuing firm has a matched non-SEO firm of similar size in the same industry. I obtain management forecast data from First Call, analyst coverage from I/B/E/S, and securities class action lawsuit filings to measure the probability of litigation from Stanford Law School's Securities Class Action Clearinghouse.

After applying these criteria, I obtain a final sample of 480 SEOs. Table 1 reports a summary of sample characteristics of SEO firms. Panel A of Table 1 shows that equity offerings are not clustered in any year(s) of the sample period. Panel B of Table 1 reveals that the sample of equity offerings is obtained from various industries. Chemicals and pharmaceuticals (14%) and electronics (14%) account for a larger portion of the issues relative to other industries. Panel C of Table 1 displays the size and offering characteristics of the SEO sample where size is measured at the beginning of the equity offering announcement quarter. The mean and median total assets equal \$631 million and \$191 million, respectively. The mean and median offer amounts are \$130 million and \$73 million, corresponding to 26% and 21% of market value. The mean and median increase in the number of shares outstanding due to equity issues are 21% and 18%, respectively. These descriptive statistics are similar to those reported in previous studies of SEOs (e.g., Jo and Kim, 2007; and Chen et al., 2009).

#### 3.2 Measurement of Variables

The main variable of interest in this study is accounting flexibility. By accounting flexibility, I mean the extent to which managers can manage reported earnings toward certain benchmarks (e.g., analyst consensus forecast and managers' own earnings forecast). Thus, when managers have the ability to report earnings that meet or beat their earnings forecasts by inflating accruals, I assume that managers have more accounting flexibility. Consistent with this view, Barton and Simko (2002) suggest a method of measuring accounting flexibility. They argue that due to the articulation between the income statement and the balance sheet, upward earnings management in the past would be partly reflected in a high level of net operating assets on the balance sheet. In turn, the level of net operating assets will constrain the manager's ability to optimistically bias the current period's earnings. They show that the likelihood of meeting or beating analyst forecasts is negatively related to the beginning balance of net operating assets scaled by sales (NOA).

Following Barton and Simko (2002), I measure accounting flexibility by the negative of NOA. That is, I measure the size of net operating assets by normalizing them with respect to sales, which is the inverse of the net operating assets turnover ratio, to reflect higher or lower accumulation of net operating assets relative to the normal level required to achieve reported sales. In addition, I adjust NOA by subtracting the industry median to focus on firm-specific accounting choice, as recommended by DeFond (2002). Since this study examines management forecasts issued before SEOs, I use quarterly data to measure accounting flexibility (Flexibility) at the beginning of the nine-month period prior to an SEO announcement. Variable measurements are explained in more detail in the appendix.

I obtain management forecasts from First Call database. I focus on forecasts issued over

a nine-month period prior to the announcement of an SEO, following Frankel et al. (1995) as explained earlier. I only include forecasts relating to reporting periods after the SEO announcement, since those are the forecasts that can influence investors' expectations of future earnings and thus the stock valuation prior to the offering. Using these forecasts, I measure three attributes of management forecasts: issuance, news content, and specificity.

MF is an indicator variable that takes a value of one if the SEO firm issues an earnings forecast during the event window and zero otherwise. To construct variables reflecting news content and specificity of management forecasts, I use only point and range forecasts.<sup>10</sup> In cases of multiple forecasts issued by a firm in the event window, only the last forecast issued before the SEO announcement is included because that is the most recent information available to investors. News\_MF is a proxy for news conveyed in a management forecast, measured as the management forecast less the prevailing median analyst consensus, scaled by stock price. Higher values of News\_MF imply more optimistic forecasts relative to the analyst consensus. Specificity\_MF, a proxy for the specificity of a forecast, is set to zero for a point forecast, and, for a range forecast, is calculated as the negative of the difference between the upper limit and lower limit of the forecast range, divided by stock price. Accordingly, a greater value of Specificity\_MF corresponds to a more specific forecast.

#### 3.2.1 Control Variables

In the empirical tests, I include as control variables other factors that are found by prior studies to be related to management forecasts. Previous research documents several firm characteristics as determinants of the issuance of management forecasts. For example, firm size

<sup>&</sup>lt;sup>10</sup> As shown by previous studies on management forecasts, the other two types of forecasts (open-ended forecasts and qualitative statements) account for only a small percentage of management forecasts, and moreover, it is difficult to measure the news content and specificity of these types of forecasts (see Choi et al., 2010).

is positively related to the issuance of management forecasts (Lang and Lundholm, 1993; and Bamber and Cheon, 1998). Log\_MVE is measured as the natural logarithm of market capitalization at the beginning of the SEO announcement quarter. Following Bamber and Cheon (1998), who show that proprietary cost is negatively related to a firm's voluntary disclosure decision, I calculate the industry sales concentration ratio, Ind\_Con, as the sales of the top five firms in the firm's industry divided by total industry sales during the quarter preceding the SEO announcement. Since previous studies provide evidence on the effect of litigation risk on management forecasts (Francis et al., 1994; Skinner, 1997; and Field et al., 2005), I include an ex ante probability of litigation as a proxy for litigation risk, Lit\_Prob, based on the model used by Rogers and Stocken (2005).<sup>11</sup>

Waymire (1985) and Lundholm (1993) examine the relation between voluntary disclosure and the level and variability of firm performance. Although these studies provide mixed evidence, I include Sales\_Growth and Cum\_Ret as measures of firm performance and Std\_Ret and Vol\_Earn as measures of uncertainty.<sup>12</sup> Sales\_Growth is calculated as sales of quarter t divided by sales of quarter t-4 (minus one), where quarter t is the quarter preceding the SEO announcement. Cum\_Ret equals cumulative returns and Std\_Ret is the standard deviation of daily returns over a period of 252 days ending one day before the SEO announcement. Vol\_Earn, earnings volatility, is measured as the absolute value of seasonally differenced EPS scaled by the beginning-of-quarter stock price for the quarter preceding the SEO announcement.

In addition, I include the market-to-book ratio, MB, measured at the beginning of the announcement quarter as a proxy for growth opportunities and information asymmetry.

<sup>&</sup>lt;sup>11</sup> Table A.1 in the appendix presents the results of the litigation probability model based on Rogers and Stocken (2005). The results are similar to those in Rogers and Stocken (2005).

<sup>&</sup>lt;sup>12</sup> It is particularly important to control for firm performance in the tests in order to show that the effects of accounting flexibility on management forecasts are not due to firm performance.

Consistent with Verrecchia (1990), I expect that firms with more growth opportunities and/or information asymmetry are more likely to issue a management forecast. Based on Lang and Lundholm (1993), I include Following, defined as the natural logarithm of one plus the number of *I/B/E/S* analysts following a firm during the quarter preceding the SEO announcement, as a proxy for investors' demand for information about a firm's prospects. I also include a dummy variable, Lag\_MF, to control for firm-specific factors that may be omitted in the model and the stickiness of forecast behavior (Brown et al., 2005). Based on the findings of Bailey et al. (2003) and Heflin et al. (2003) that management forecasts increase after the passage of Regulation Fair Disclosure, I include an indicator variable, Post\_FD, that equals one if the calendar quarter in which accounting flexibility is measured is the fourth quarter of 2000 or later, and zero otherwise.

I also include governance-related variables based on the previous finding that management forecasts are associated with the strength of corporate governance, proxied by institutional ownership and audit quality (McConomy, 1998; Clarkson, 2000; Ajinkya et al., 2005; Karamanou et al., 2005;). Inst\_Own is measured as the fraction of common shares held by institutional investors at the beginning of the announcement quarter, and Big\_N equals one if the firm's auditor is one of the Big-N auditors and zero otherwise.

In testing H2 and H3, I include additional controls. Following Brown et al. (2005), I include the inverse Mills ratio, Mills, to control for potential self-selection bias since news content and specificity can be measured only for firms issuing management forecasts. This variable is calculated from the probit regression estimating the likelihood of issuing a management forecast in the test of H1. In addition, I include the forecast horizon, Horizon, defined as the difference in days between the management forecast date and the end of the fiscal period for which the forecast is issued, since the news content and specificity of management

forecasts could be related to the timing of the forecasts (e.g., walk-down of market earnings expectations in Matsumoto, 2002). Finally, based on the prior finding that a bad-news forecast is less specific so as to dampen the adverse market reaction to upcoming bad news (Hughes and Pae, 2004; and Choi et al., 2007), I include an indicator variable, G\_News\_MF, that equals one for a good-news forecast, and zero otherwise. Following Anilowski et al. (2007), I classify a management forecast as good-news or bad-news relative to the prevailing analyst consensus.

#### 3.3 Research Design

I employ a matched-control sample approach to test (i) whether the hypothesized effect of accounting flexibility on management forecasts is observed both for SEO firms and for non-SEO firms, and (ii) whether the effect is stronger for SEO firms. To collect a sample of control firms, I identify a non-SEO firm for each SEO firm based on the following criteria. The matched firm (i) must have no equity offerings over a three-year period around the SEO announcement, (ii) must belong to the same industry as the SEO firm based on the two-digit SIC code, and (iii) is the closest to the SEO firm in market value of equity at the beginning of the SEO announcement quarter. After applying these criteria, I obtain a sample consisting of 480 SEO and 480 non-SEO firms from 1997 to 2005. To distinguish between the two samples, I use an indicator variable, SEO, that takes a value of one for SEO firms and zero otherwise.

To test H1, I estimate a probit regression model estimating the probability of issuing a management forecast using accounting flexibility and other control variables as explanatory variables. The dependent variable MF identifies a firm with a management forecast over the nine-month period prior to the SEO announcement. To examine the relative effect of accounting flexibility on the forecast issuance decision of SEO versus non-SEO firms, I include the variable Flexibility and an interaction variable, SEO×Flexibility. All continuous variables are winsorized

at the upper and lower one percentile to mitigate the effect of outliers. The probit model is specified as follows (for brevity, I omit the firm subscript).

 $Pr(MF=1) = G(\alpha_0 + \alpha_1 SEO + \alpha_2 Flexibility + \alpha_3 SEO \times Flexibility + control variables + \varepsilon)$  (1) where G(.) is the cumulative density function of a normal distribution and the control variables are explained in Section 3.2.1.

I expect  $\alpha_2$  to be positive if the managers of non-SEO firms with greater accounting flexibility are more likely to issue an earnings forecast. Furthermore, if the effect of accounting flexibility on forecast issuance is greater prior to the SEO, I expect  $\alpha_3$  to be positive. However, as stated in H1, if the hypothesized effect of accounting flexibility is observed for SEO firms but not for non-SEO firms, I expect ( $\alpha_2 + \alpha_3$ ) to be positive and significant but  $\alpha_2$  to be insignificant. Regarding the control variables, I predict a positive coefficient on Log\_MVE, MB, Following, Lag\_MF, Post\_FD, Big\_N, and Inst\_Own and a negative coefficient on Ind\_Con. I do not have a directional prediction for Lit\_Prob, Vol\_Earn, Sales\_Growth, Cum\_Ret, and Std\_Ret, given the mixed prior findings in relation to these variables.

To test H2, I estimate a multiple regression of the news content in management forecasts (News\_MF) on Flexibility and control variables using OLS estimation. As in the test of H1, in addition to Flexibility, the interaction variable SEO×Flexibility is included in the model. I include two additional variables to control for the timing of forecasts (Horizon) and self-selection bias (Mills). The OLS regression model is specified as follows.

News\_MF =  $\beta_0 + \beta_1$  SEO +  $\beta_2$  Flexibility +  $\beta_3$  SEO×Flexibility + control variables +  $\mu$  (2) If managers, even in the absence of an equity offering, are likely to issue more optimistic forecasts relative to the outstanding analyst consensus when their accounting flexibility is high, I expect  $\beta_2$  to be significantly positive. In addition, if the positive effect of accounting flexibility on the optimism in management forecasts is stronger for SEO firms, then  $\beta_3$  is expected to positive. However, if managers utilize accounting flexibility significantly only prior to SEOs when they have a stronger incentive to boost stock prices, I expect ( $\beta_2 + \beta_3$ ) to be positive and significant but  $\beta_2$  to be insignificant. I expect a positive coefficient on Horizon and negative on Log\_MVE, Ind\_Con, Lit\_Prob, Vol\_Earn, Following, Post\_FD, Big\_N and Inst\_Own.

To test H3, I estimate a multiple regression model of specificity of management forecasts. The dependent variable, Specificity\_MF, captures the extent to which a management forecast is specific. Besides the control variables that are used in the test of H2, I include an additional variable, G\_News\_MF. The OLS regression model is specified as follows.

Specificity\_MF =  $\gamma_0 + \gamma_1$  SEO +  $\gamma_2$  Flexibility +  $\gamma_3$  SEO×Flexibility + control variables + v (3) As in H1 and H2,  $\gamma_2$  and  $\gamma_3$  are predicted to be positive if a non-SEO manager issues a more specific forecast with greater accounting flexibility in order to trigger a greater market reaction to their earnings forecast and such positive effect of accounting flexibility is more prevalent for SEO firms. If the positive effect of accounting flexibility on the specificity of management forecast is significant only prior to the SEO announcement, I expect ( $\gamma_2 + \gamma_3$ ) to be positive and significant but  $\gamma_2$  to be insignificant. In the case of control variables, I expect a positive coefficient on G\_News\_MF, Following, Big\_N and Inst\_Own and a negative coefficient on Horizon, Ind Con, Lit Prob, and Vol Earn.

#### 4. Empirical Results

#### 4.1 Descriptive Statistics

Table 2 displays descriptive statistics of variables for 480 SEO firms and matched non-SEO firms. Several observations are worth noting. First, SEO and non-SEO firms are similar in accounting flexibility; the mean and median Flexibility for SEO firms are -1.09 and 0.01 and

those for non-SEO firms are -1.37 and -0.06, respectively. Second, by construction, the two groups are similar in size; the mean and median MVE of SEO firms are \$1070 million and \$345 million, respectively, while those of non-SEO firms are \$969 million and \$324 million, respectively. Third, consistent with previous findings that SEOs are undertaken by high growth firms and that stock prices run up before the equity offerings (Loughran and Ritter, 1997), the mean and median MB and Cum\_Ret are higher for SEO firms relative to non-SEO firms. Fourth, SEO firms have higher sales growth (Sales\_Growth) and higher volatility of stock returns (Std\_Ret). Fifth, relative to non-SEO firms, SEO firms are more likely audited by the Big-N auditors (Big\_N), while their institutional-holdings are lower (Inst\_Own). Finally, the two groups are similar in terms of Lit\_Prob, Vol\_Earn, and Num\_Analysts. In sum, SEO and non-SEO firms are similar in terms of several characteristics such as accounting flexibility and size, but different in terms of growth and stock return performance.

Table 3 presents descriptive statistics of management forecast attributes of SEO and non-SEO firms. Panel A shows the percentage of firms with a management forecast over the two nine-month periods, (-18, -10) and (-9, -1), where month 0 is the SEO announcement month.<sup>13</sup> From Panel A, I find that the two groups have a similar tendency to issue forecasts over the two nine-month periods. As suggested by Frankel et al. (1995), the litigation threat around equity offerings seems to dampen firms' incentives to disclose voluntarily just prior to SEOs. Note, however, that the focus of this paper is on the variation within the SEO sample, i.e., I predict that the degree of accounting flexibility can influence managers' forecast behavior prior to SEOs.

Panel B through Panel D show two characteristics of management forecasts for SEO and non-SEO firms: news content and specificity. In Panel B, it is observed that SEO firms issue

<sup>&</sup>lt;sup>13</sup> Note that I consider only those forecasts by SEO and non-SEO firms for the reporting period ending after SEO announcements for the period, (-9, -1), while I include all of the forecasts issued for the period (-18, -10).

good-news forecasts more than non-SEO firms on average, in that around 60% (53%) of forecasts issued by SEO firms (non-SEO firms) convey good news. However, the difference between the two groups is not statistically different (p-value = 0.3650). Panel C shows that median News\_MF is greater for SEO firms than for non-SEO firms, and the difference is marginally significant (p-value = 0.0941). On the other hand, the means of News\_MF for the two groups are similar. Panel D contains summary statistics of specificity. Consistent with Choi et al. (2010), I find that the majority of management forecasts take the form of range estimates in the sample: 77% for SEO firms and 69% for non-SEO firms. Lastly, mean (median) Specificity\_MF is similar for the two groups: -0.0028 (-0.0015) for SEO firms and -0.0028 (-0.0013) for non-SEO firms. Thus, it appears that in general SEO firms and non-SEO firms do not differ much in news content and specificity of management forecasts. However, due to the unique tension faced by SEO firms, accounting flexibility may affect the manager's choice in determining these two forecast attributes for SEO firms to a larger extent than for non-SEO firms.

#### 4.2 Results of Hypotheses Tests

The results of testing H1, H2, and H3 are presented in Tables 4, 5 and 6 where the t-statistics are corrected for clustering of standard errors by year. Table 4 presents the results for H1. As shown in Model 1, while the estimated coefficient on Flexibility is not different from zero, the coefficient on (Flexibility + SEO×Flexibility) is significantly positive at the 5% level. In addition, the incremental effect of accounting flexibility on SEO firms (i.e., SEO×Flexibility) is significantly positive at the 1% level. These results are consistently obtained even after controlling for other variables that influence the forecast issuance decision in Model 2. In terms of economic significance, a one-standard-deviation increase in accounting flexibility is associated with an increase in the probability of issuing a management forecast by 5.30% for

SEO firms and 0.74% for non-SEO firms. While this effect for SEO firms is smaller than the 7.04% increase for a one-standard-deviation increase in Log\_MVE, it is much larger than that for other continuous explanatory variables.

The results support H1 that managers of SEO firms with greater accounting flexibility have a higher tendency to issue management forecasts prior to the SEO announcement. Given the strong incentive to provide voluntary disclosure to boost the offering proceeds, accounting flexibility seems to mitigate legal concerns associated with the disclosure and leads managers to issue more forecasts. However, accounting flexibility appears to have no impact for non-SEO firms, possibly due to weaker incentives to boost stock price relative to SEO firms. In Model 2, the coefficient estimates on Log\_MVE, Lag\_MF, and Post\_FD are positive and significant, while that on Vol\_Earn is negative and significant. I find insignificant coefficient estimates on the rest of the control variables.

Table 5 presents the results consistent with H2. Across the two model specifications, the coefficient estimates on SEO×Flexibility and (Flexibility + SEO×Flexibility) are significantly positive at the 5% significance level. These are consistent with H2 that managers of SEO firms with greater accounting flexibility provide the market with more optimistic news about future earnings. Again, the insignificant coefficient estimate on Flexibility in Model 2 implies that non-SEO firms' managers do not consider their accounting flexibility in providing optimistic forecasts to the same extent as the managers of SEO firms. Regarding control variables, the coefficient estimates on Horizon, Ind\_Con are significantly positive while those on Lit\_Prob and MB are significantly negative.

The results of tests of H3 are presented in Table 6. Consistent with H3, the coefficient estimates on (Flexibility + SEO×Flexibility) is significantly positive at the 5% significance level

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with or without the inclusion of other control variables in Models 1 and 2. Furthermore, the incremental effect of accounting flexibility on SEO firms (SEO×Flexibility) is found to be positive and (weakly) significant at the 10% level. The results suggest that in order to trigger greater market reaction to their forecasts before equity offerings, managers choose more specific forecasts when they have greater accounting flexibility. I also find that the coefficient estimate on Flexibility is positive and significant at the 5% significance level. Thus, accounting flexibility has a positive effect on forecast specificity for non-SEO firms as well, although the effect is weaker than that for SEO firms. From Model 2, I find that the coefficient estimates on most of the control variables have the expected sign, while only Horizon and Post\_FD have significant coefficient estimates.

In sum, the empirical results are consistent with all of the three hypotheses. By mitigating the litigation risk relating to disclosures around SEOs, accounting flexibility seems to help managers to (i) issue earnings forecasts, (ii) issue more optimistic forecasts relative to the prevailing analyst consensus, and (iii) issue more specific forecasts. Furthermore, the positive effect of accounting flexibility is not observed for the control sample of non-SEO firms that have weaker incentives for voluntary disclosures to boost stock prices relative to SEO firms.

#### 4.3 Robustness Checks

I conduct several robustness tests and obtain results consistent with those in the main analysis. First, to mitigate the effect of extreme observations for accounting flexibility, I reestimate the three regression models using a decile rank variable instead of a continuous variable. Untabulated results show that using a rank variable does not change my main results in that the coefficient estimate on (Flexibility + SEO×Flexibility) is significantly positive while that on Flexibility is insignificant.

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Second, I also check the sensitivity of the result of H2 by examining the effect of accounting flexibility on good-news versus bad-news forecasts instead of the continuous variable, News\_MF. I estimate a probit model of the likelihood of issuing a good-news forecast on accounting flexibility and other control variables. The results indicate that the greater the accounting flexibility, the higher the likelihood of issuing a good-news forecast prior to SEOs; but such an effect is not observed for non-SEO firms (untabulated).

Third, I decompose accounting flexibility into current and non-current components to examine whether these two components have differential impact on management forecasts. This test is based on Barton and Simko (2002) who show that the current portion of net operating assets has a stronger effect on the firm's ability to manage earnings than the non-current portion. Untabulated results show that the coefficient estimates on the two components of accounting flexibility are both significantly positive for SEO firms; for non-SEO firms these coefficient estimates are either negative or insignificant. Furthermore, similar to Barton and Simko (2002), I find that the current portion of accounting flexibility has a stronger effect on management forecasts of SEO firms than the non-current component.

#### 4.4 Alternative Research Design: Pre-SEO Period versus SEO Period Analysis

All of the above tests use a matched sample of non-SEO firms as a control group. If SEO firms experience tension between the incentive to provide voluntary disclosures and increased litigation threat only before equity offerings, the hypothesized effect of accounting flexibility should be observed in that time period alone, and not in other periods. To test this conjecture, I collect data on management forecasts and independent variables for the nine-month period in the previous year corresponding to the nine-month period just prior to the SEO announcement. All

of the variables in the previous year, including management forecasts and accounting flexibility, are measured either over the period of time or at the point in time corresponding to the SEO announcement date. Thus, by comparing the SEO year with the prior year, I use the firm as its own control. In this analysis, the dummy variable, SEO, takes a value of zero for all observations from the year prior to the SEO announcement year.

Using 411 SEO firms with available data in both these time periods, I test the three hypotheses by comparing the SEO year with the previous year. From Table 7, the coefficient estimates on (Flexibility + SEO×Flexibility) are significantly positive in relation to issuance, news content, and specificity of management forecasts, while those on Flexibility are insignificant. Thus, I find a significant effect of accounting flexibility on managers' forecasting behavior only for the SEO year consistent with the results reported in the previous section.

#### 4.5 Ex post Validation

Given the effect of accounting flexibility on managers' forecasting behavior, I next examine whether managers' forecasting decisions lead to the expected future outcomes based on the level of accounting flexibility for earnings management. Despite the implicit assumption that managers of SEO firms can mitigate litigation risk associated with their own forecasts by using accounting flexibility, whether accounting flexibility does in fact lead to lower forecast errors is an empirical question. When managers have high accounting flexibility, they first issue optimistic forecasts and then reduce forecast errors by managing reported earnings toward their forecasts. On the other hand, when managers have lower accounting flexibility, they first issue less optimistic forecasts and then report earnings that are close to the forecasts. Thus, it is possible that the level of accounting flexibility may not be able to differentiate the magnitude of forecast errors. After calculating the management forecast error as the absolute value of the forecast less the actual reported earnings, scaled by stock price, I estimate an OLS regression of forecast errors on accounting flexibility and other control variables. In Table 8, the significant negative coefficient estimate on (Flexibility + SEO×Flexibility) suggests that accounting flexibility helps managers of SEO firms to reduce forecast errors. In addition, the marginally significant negative coefficient on Flexibility indicates that managers of non-SEO firms are also able to reduce their forecast errors to some extent when they have accounting flexibility.<sup>14</sup>

#### 4.6 Effect of Accounting Flexibility on Market Reaction to Management Forecasts

I also examine whether the stock market reaction to management forecasts is influenced by the firm's accounting flexibility. Since the objective of SEO firms is to obtain favorable stock valuations by making optimistic forecasts, it is interesting to see if they are successful in achieving their objective. If investors understand the potential for earnings management via the firm's accounting flexibility, they may anticipate the optimism in management forecasts and discount the news conveyed by the forecasts. In unreported results, I find that the market reacts to the news in management forecasts issued by both SEO and non-SEO firms, and the difference in market reaction for the two samples is insignificant. Thus, it appears that investors do not fully understand the effect of accounting flexibility on the SEO firm's forecast behavior.

#### 5. Conclusion

This paper investigates the effect of accounting flexibility on managers' forecasting

<sup>&</sup>lt;sup>14</sup> Consistent with these results, I find that the accounting flexibility of SEO firms decreases by the end of the fiscal period for which the management forecast is issued. In particular, SEO firms with an optimistic forecast relative to the analyst consensus and with subsequent earnings that meet or beat an optimistic forecast experience a greater decrease in accounting flexibility (untabulated). Thus, my evidence suggests that managers make use of accounting flexibility to manage earnings announced after the SEO date and hence the remaining accounting flexibility becomes lower.

behavior prior to SEOs. I hypothesize that accounting flexibility facilitates management forecasts by mitigating the tension faced by SEO firms between a strong incentive to make voluntary disclosures to obtain higher stock valuations and an increased level of litigation risk due to the regulations associated with public offerings. The rationale behind this hypothesis is that managers with accounting flexibility can manage subsequent reported earnings to meet their own forecasts and avoid costly litigation associated with inaccurate forecasts.

The empirical results show that, before equity offerings, managers with higher accounting flexibility are more likely to (i) issue forecasts, (ii) issue forecasts that are more optimistic relative to the prevailing analyst consensus, and (iii) issue more specific forecasts. Thus, while previous studies suggest that the legal liability exposure around equity offerings effectively deters SEO firms' incentive to disclose additional information prior to an SEO, I provide new evidence suggesting that managers can mitigate the threat of litigation if they have sufficient ability to manage reported earnings. Furthermore, this effect of accounting flexibility is not observed for firms that are not undertaking an SEO, even though managers in general could have reasons other than equity offerings to utilize accounting flexibility in issuing management forecasts, such as stock price-based incentives and insider trading incentives. Additional ex post analysis provides evidence validating that accounting flexibility does help managers to successfully reduce subsequent forecast errors associated with their own forecasts.

I acknowledge that this study has some limitations. First, NOA, the measure of accounting flexibility I use, may not perfectly capture the construct. Second, while management forecasts are widely used as a parsimonious proxy for voluntary disclosure, I acknowledge that they are only a part of the overall disclosure activity. Thus, it is hard to generalize this paper's results to the overall disclosure behavior of managers.

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Future research can test the robustness of my results by employing different measures of accounting flexibility suggested by previous studies (e.g., "hidden reserves" on the balance sheet, and accumulated negative non-operating accruals). In addition, it is possible to extend the current study to settings other than equity offerings where accounting flexibility can influence managers' forecast behavior. For example, Cheng and Lo (2006) find no significant association between good-news forecasts and sale of shares by insiders, most likely because of the higher litigation risk faced by insiders. One could test my hypotheses in this setting, by examining whether managers with greater accounting flexibility are more likely to issue good-news forecasts when they plan to sell their personal shareholdings.

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### Appendix: Variable Description

Variable		Definition
MF	=	Indicator variable that equals one if the firm issues an earnings forecast for reporting periods after the SEO in the nine-month period prior to the announcement date of the SEO and zero otherwise
Lag_MF	=	Lagged value of MF that equals one if the firm issues an earnings forecast in the nine- month period ending in the tenth month prior to the announcement date of the SEO and zero otherwise
News_MF	=	News contained in management forecasts issued by the firm, measured as management forecast minus the prevailing analyst consensus forecast obtained from First Call, divided by the stock price on the day before the issuance of the management forecast
G_News_MF	=	Indicator variable that equals one if the news provided by the management forecast is good relative to the prevailing analyst consensus forecast and zero otherwise. Details of the classification can be seen in Anilowski et al. (2007).
Specificity_MF	=	A continuous variable for the specificity of management forecasts. This variable is set to zero for point forecasts, and measured as the negative of the absolute difference between the upper limit and lower limit of a range forecast, divided by the stock price on the day before the issuance of the management forecast
Horizon	=	Forecast horizon, measured as the difference in days between the management forecast date and the end of the fiscal year (quarter) for which the management forecast is issued
ForErr_MF	=	Forecast error related to a management forecast, measured as the absolute value of management forecast less actual reported earnings, divided by the stock price on the day before the issuance of the management forecast

#### **1. Management forecasts**

### 2. Financial statement data, stock returns, and analyst data

Variable		Definition
NOA	=	Net Operating Assets / Sales (#2), where Net Operating Assets equal Operating Assets less Operating Liabilities; Operating Assets = Total Assets (#44) - Cash and short-term investment (#36); Operating Liabilities = Total Assets (#44) - Debt included in current liabilities (#45) - Long-term debt (#51) - Minority interests (#53) - Preferred Stock (#55) - Common equity (#59)
Raw_Flexibility	=	The negative of NOA, measured at the beginning of the nine-month period prior to the announcement of the SEO by using quarterly financial statements
Flexibility	=	Flexibility measured as the Raw_Flexibility minus the industry median of Raw_Flexibility where industry is defined using the two-digit SIC code
R_Flexibility	=	Decile rank of Flexibility within the sample
MVE	=	Market value of equity in millions of dollars, measured as the number of shares outstanding $(\#61)$ times the share price $(\#14)$ at the end of the quarter prior to the announcement of the SEO
Log_MVE	=	Firm size measured as a natural logarithm of MVE at the end of the quarter prior to the announcement of the SEO
Ind_Con	=	Industry sales concentration ratio, measured as the sum of the sales of the top five firms in the industry divided by the total industry sales during the quarter prior to the announcement of the SEO using the two-digit SIC code

### Appendix: Variable Description (continued)

Variable		Definition
Lit_Prob	=	A measure of the ex ante probability of litigation, calculated as the average of the previous three quarters' probability that the firm will be subject to a class action securities lawsuit whose filing date ends during the following calendar quarter. The probability of litigation is estimated based on Rogers and Stocken (2005) litigation risk model.
Vol_Earn	=	Volatility of earnings, measured as the absolute value of the seasonally differenced EPS (#19) of the quarter prior to the SEO announcement deflated by the beginning stock price
MB	=	Market to book ratio, measured as the market value of equity ( $\#61 \times \#14$ ) divided by the book value of equity ( $\#59$ ) at the end of the quarter prior to the announcement of the SEO
Sales_Growth	=	Growth in sales, measured as the sales for quarter t divided by the sales for quarter t-4 (minus one). The variable is measured at the end of the quarter prior to the SEO announcement.
Cum_Ret	=	The cumulative returns over a 252-day period ending one day before the announcement of the SEO
Std_Ret	=	The standard deviation of the daily stock return of the firm over a 252-day period ending one day before the announcement of the SEO
Following	=	Analyst following, measured as a natural logarithm of the number of $I/B/E/S$ analysts following the firm during the quarter prior to the announcement of the SEO
Post_FD	=	An indicator variable that equals one if the nine-month-period prior to the announcement of the SEO is after 2000 and zero otherwise
Mills	=	The inverse Mills ratio based on the probit model of issuance of management forecasts reported in Table 4.
Big_N	=	An indicator variable that equals one if the firm's auditor is one of Big N audit firms, and zero otherwise
Inst_Own	=	The fraction of the firm's aggregated common stock held by institutional investors at the end of the quarter prior to the announcement of the SEO
WC_NOA	=	Working Capital / Sales (#2), where Working Capital equals (Current Assets (#40) - Cash and short-term investment (#36) ) minus (Current Liabilities (#49) – Debt included in current liabilities (#45) )
WC_Flexibility	=	Current portion of accounting flexibility, defined as the negative of WC_NOA minus the industry median of the negative of WC_NOA, measured at the beginning of the nine-month period prior to the announcement of the SEO by using quarterly financial statements
NWC_Flexibility	=	Non-current portion of accounting flexibility that equals Flexibility minus WC_Flexibility
CAR	=	Cumulative abnormal returns over three days surrounding the issuance date of management forecasts using value-weighted market returns

### Table A.1 Estimation of the probability of litigation

Variable	Sign	Coefficient	p-value
Intercept		-4.4184	<.0001
Log_MVE	+	0.1069	<.0001
Turn	+	0.0036	<.0001
Beta	+	0.0220	<.0001
Returns	_	-0.1388	<.0001
STD_Ret	+	0.1602	0.7118
Skewness	_	-0.0157	0.1487
Min_Ret	_	-2.6012	<.0001
Bio_Tech	+	-0.0100	0.8238
Computer Hardware	+	0.3022	<.0001
Electronics	+	0.1388	0.0006
Retailing	+	0.0853	0.0586
Computer Software	+	0.2826	<.0001
Ň		264,032	
N (Lawsuit = 1)		1,119	
Pseudo R <sup>2</sup>		0.1073	

 $Prob (Lawsuit = 1) = G (\delta_0 + \delta_1 Log_MVE + \delta_2 Turn + \delta_3 Beta + \delta_4 Returns + \delta_5 Std_Ret + \delta_6 Skewness + \delta_7 Min Ret + \Sigma LHigh Risk Industries + v)$ 

This table presents the result from a probit model of the probability of litigation based on Rogers and Stocken (2005). The sample period ranges from the first quarter of 1995 to the fourth quarter of 2005. Lawsuit is an indicator variable that equals one if a securities class action lawsuit was recorded by Stanford Law School's Securities Class Action Clearinghouse during a calendar quarter and zero otherwise. The following explanatory variables are measured over the calendar quarter. Log\_MVE is the natural logarithm of the average market value of equity. Turn is the average daily trading volume of shares divided by the average number of shares outstanding. Beta is the slope coefficient from the regression of daily returns on the CRSP equal-weighted index. Returns is the buy and hold returns over the calendar quarter. Std\_Ret is the standard deviation of daily returns. Skewness of daily returns. Min\_Ret is the minimum daily return.

## Table 1Sample characteristics of SEOs

Year	SEO frequency	% of tota	
1997	76	15.83 %	
1998	39	8.13 %	
1999	68	14.17 %	
2000	65	13.54 %	
2001	39	8.13 %	
2002	46	9.58 %	
2003	59	12.29 %	
2004	54	11.25 %	
2005	34	7.08 %	
Total	480	100.00 %	

#### Panel B: Industry distribution

Industry description	SIC codes	SEO frequency	% of total	
Agriculture, mining & construction	7, 13, 15, 16, 17	27	5.63 %	
Food, paper & finished goods	20, 22, 23, 25, 27	18	3.75 %	
Chemicals & pharmaceuticals	28, 29	68	14.17 %	
Rubber, leather and metal-works	30, 31, 32, 33, 34	19	3.96 %	
Machinery	35	38	7.92 %	
Electronics	36	68	14.17 %	
Other equipment & machinery	37, 38, 39	56	11.67 %	
Transportation	40, 42, 44, 47	20	4.17 %	
Communications	48	9	1.88 %	
Wholesales	50, 51	22	4.58 %	
Retailers	53, 55, 56, 57, 58, 59	33	6.88 %	
Entertainment services	70, 78, 79	13	2.71 %	
Business services	73	54	11.25 %	
Engineering & accounting & management services	87	14	2.92 %	
All others		21	4.38 %	
Total		480	100.00 %	

#### Panel C. Size characteristics

	<b>Total Assets</b>	tal Assets Market Value		<b>Proceeds Size</b>	Offer size	
	(\$ Millions)	(\$ Millions)	(\$ Millions)	(%)	(%)	
Mean	631.21	1069.95	129.82	26.27	21.06	
Median	190.59	344.96	73.20	21.01	17.86	
Std Dev	1304.51	2573.12	180.13	21.07	12.86	

This table displays the summary characteristics of 480 SEOs over the period 1997 to 2005. Total assets and market value of equity are measured at the end of the quarter prior to the announcement of the offering. Proceeds Size is calculated as the ratio of the offer amount to the total market capitalization. Offer size is measured as the number of shares offered divided by the number of shares outstanding prior to the SEO.

	SE	O firms (N=	480)	Non-S	SEO firms (1	p-value <sup>a</sup>	p-value <sup>b</sup>	
Variables	Mean	Median	STD	Mean	Median	STD	(t-test)	(Wilcoxon Test)
Flexibility	-1.09	0.01	5.36	-1.37	-0.06	5.66	0.4248	0.3624
MVE	1069.95	344.96	2573.12	969.20	323.97	2274.26	0.5205	0.7377
Log_MVE	5.98	5.84	1.26	5.94	5.78	1.23	0.6343	0.7377
Ind_Con (%)	44.79	40.67	14.51	44.79	40.67	14.51	-	-
Lit_Prob (%)	0.47	0.30	0.54	0.50	0.32	0.51	0.3995	0.0573
Vol_Earn	0.02	0.01	0.05	0.02	0.01	0.06	0.6031	0.7236
MB	5.29	3.63	5.47	3.79	2.27	4.57	<.0001	<.0001
Sales_Growth (%)	48.46	23.81	107.89	26.35	8.17	99.07	0.0010	<.0001
Cum_Ret	1.42	0.81	1.86	0.47	0.15	1.20	<.0001	<.0001
Std_Ret	0.04	0.04	0.02	0.04	0.04	0.02	0.0004	<.0001
Inst_Own (%)	41.39	39.51	22.25	49.56	50.52	25.77	<.0001	<.0001
Big_N	0.93	1.00	0.25	0.89	1.00	0.31	0.0238	-
Num_Analysts	4.74	3.00	4.69	4.95	3.00	4.91	0.4887	0.7954

 Table 2

 Descriptive statistics of SEO firms and non-SEO firms

This table shows descriptive characteristics of 480 SEO and 480 non-SEO firms over the period 1997 to 2005. Each SEO firm is matched with a firm that (i) has no equity offering over a three-year period around the SEO announcement, (ii) belongs to the same 2-digit SIC code as the SEO firm, and (iii) is the closest in market value of equity at the beginning of the announcement quarter. Flexibility is measured as the negative of the industry-adjusted net operating assets divided by sales (NOA), measured at the beginning of the nine-month period prior to the announcement of the SEO. MVE is the market value of equity in millions of dollars at the end of the quarter prior to the SEO. Ind Con is the industry sales concentration ratio, measured as the sum of the sales of the top five firms in the industry divided by the total industry sales during the quarter prior to the SEO. Lit Prob is an ex ante probability of litigation, calculated as the average of the previous three quarters' probability that a firm will be subject to a class action securities lawsuit based on the litigation risk model in Rogers and Stocken (2005). Vol Earn is the volatility of earnings, computed as the absolute value of seasonally differed EPS divided by the beginning-quarter stock price. MB is the ratio of market value to book value of equity at the end of the quarter prior to the SEO. Sales Growth is measured as the sales of quarter t divided by the sales of quarter t-4 (minus one). Cum Ret is cumulative returns over a 252-day period ending one day before the announcement of the SEO. Std\_Ret is the standard deviation of daily returns over a 252-day period ending one day before the announcement of the SEO. Big\_N is an indicator variable that equals one if the firm's auditor is one of the Big-N auditors and zero otherwise. Inst Own is the fraction of common shares held by institutional investors at the beginning of the announcement quarter. Num Analysts is the number of I/B/E/S analysts covering the firm during the quarter prior to the announcement of the SEO.

<sup>a</sup> Two-sided p-values of t-tests of difference in means of variables between SEO firms and non-SEO firms

<sup>b</sup> Two-sided p-values of non-parametric Wilcoxon tests of difference in distributions of variables between SEO firms and non-SEO firms

## Table 3 Descriptive statistics of management forecasts of SEO firms and non-SEO firms

Nine-month	1	SEO firms (N	N=480)	Non-SE	Non-SEO firms (N=480)			
period	# of	firms	% of total	# of firms % o		of total	p-va	lue"
(-9, -1	) 1	14	23.75	109	2	2.71	0.7027	
(-18, -10	) 1	.63	33.96	167	3-	34.79		360
Panel B: Good	-news foreca	sts						
	SE	O firms (N=4	80)	Non-S	SEO firms (l	N=480)		
:	# of	# of Good-ne forecasts	ws % of total	# of forecasts			p-value <sup>a</sup>	
	99	59	59.60	96	51	53.13	0	.3650
	SEO firms (N=4		30)		Non-SEO firms (N=480)		p-value <sup>b</sup>	
_	# of	Mean	Median	# of	Mean	Median	Mean	Mediar
	forecasts			forecasts				
News_MF	99	0.0034	0.0008	96	0.0042	0.0003	0.7850	0.0941
Panel D: Speci	ficity of fore	casts						
Tumor of Form	aata	SEO firms	(N=480)	Non-S	EO firms (N	<b>(=480)</b>		alue <sup>a</sup>
Types of Fore	# of t	forecasts	% of total	# of forec	asts %	of total	p-va	alue
Range forecast	5	76	76.77	66		68.75	0.2	110
Point forecasts		23	23.23	30		31.25	0.2	110
# of forecasts		99	100.00	96	1	00.00		
	SEO firms (N=480)		J=480)	Non-SEO firms (N=480)			p-value <sup>b</sup>	
	# of	Mean	Median	# of forecasts	Mean	Median	Mean	Mediar
	forecas	15						

This table displays the descriptive characteristics of management forecasts issued by 480 SEO and 480 non-SEO firms over the period 1997 to 2005. Panel A shows issuance of management forecasts in the two nine-month periods: (i) from the ninth month to one month prior to the SEO, (-9, -1) and (ii) from the 18<sup>th</sup> month to the 10<sup>th</sup> month prior to the SEO, (-18, -10). Panels B and C show news content of the last forecast that is issued during the nine-month period, (-9, -1), for reporting periods ending after the SEO announcement. A good-news forecast is a forecast whose news is good relative to the prevailing analyst consensus forecast from First Call and zero otherwise, based on Anilowski et al. (2007). News\_MF is the news contained in a management forecast, measured as management forecast. Panel D shows the frequency of forecast types and specificity of the last forecast that is issued over the nine-month period, (-9, -1), for the reporting periods ending after the SEO. Specificity\_MF is (i) set to zero for point forecasts, and (ii) for range forecasts, computed as the negative of the absolute difference between the upper limit and lower limit of the range, divided by the stock price on the day before the issuance of the forecast.

<sup>a</sup> Two-sided p-values of t-tests of difference in percentages between SEO firms and non-SEO firms.

<sup>b</sup> Two-sided p-values of tests of differences in variables between SEO firms and non-SEO firms. The p-values in the mean column are of t-tests of differences in means between the two groups and p-values in the median column are of non-parametric Wilcoxon tests of difference in distributions of variables between the two groups.

## Table 4 Effect of accounting flexibility on the issuance of management forecasts

Variable	Predicted	Mod	lel 1	Mod	el 2	
v al lable	Sign	Coefficient	p-value <sup>a</sup>	Coefficient	p-value*	
Intercept		-0.7485	<.0001	-2.9664	<.0001	
SEO	+	0.0615	0.4990	0.0715	0.6670	
Flexibility	?	0.0000	0.9990	0.0053	0.4090	
SEO × Flexibility	+	0.0423	0.0060	0.0497	0.0450	
Log_MVE	+			0.2251	0.0020	
Ind_Con	_			0.0987	0.7190	
Lit_Prob	+ / -			-1.8059	0.8490	
Vol_Earn	+ / -			-5.1617	<.0001	
MB	+			-0.0058	0.6270	
Sales_Growth	+ /			0.0551	0.2480	
Cum_Ret	+ /			-0.0011	0.9810	
STD_Ret	+ /			-0.9554	0.8590	
Following	+			0.0145	0.8850	
Lag_MF	+			1.0109	<.0001	
Post_FD	+			0.8061	<.0001	
Big_N	+			0.0201	0.9120	
Inst_Own	+			0.1339	0.5940	
Flexibility + SEO × Flexibility	+	0.0423	0.0130	0.0550	0.0147	
N		960		96	960	
N (MF=1)		22	23	22	3	
Pseudo R <sup>2</sup>		0.00	)64	0.25	92	

 $Prob(MF = 1) = G(\alpha_0 + \alpha_1 SEO + \alpha_2 Flexibility + \alpha_3 SEO \times Flexibility + control variables + \varepsilon)$ (1)

This table presents the results of a probit model estimating the probability of issuing a management forecast during the ninemonth period prior to the SEO using Flexibility and other control variables. SEO is a dummy variable that equals one for SEO firms and zero otherwise. The dependent variable is MF that equals one if a firm has issued at least one forecast for the reporting period after the announcement of the SEO during the nine-month period prior to the SEO and zero otherwise. Other variables are defined in the Appendix.

<sup>a</sup> p-values relate to t-statistics that are corrected for clustering of standard errors by year

## Table 5 Effect of accounting flexibility on the news content of management forecasts

Variable	Predicted	Mod	el 1	Mod	el 2
Variable	Sign	Coefficient	p-value <sup>a</sup>	Coefficient	p-value <sup>a</sup>
Intercept		0.0047	0.0240	0.0186	0.2860
SEO	+	-0.0006	0.8580	0.0009	0.8090
Flexibility	?	0.0003	0.0640	0.0002	0.2240
SEO × Flexibility	+	0.0051	0.0310	0.0046	0.0130
Horizon	+			0.0024	0.0600
Mills	?			-0.0053	0.3920
Log_MVE	_			-0.0005	0.8120
Ind_Con	_			0.0181	0.0540
Lit_Prob	_			-0.3981	0.0380
Vol_Earn	_			-0.0204	0.8880
MB	+ / -			-0.0014	0.0070
Following	_			-0.0006	0.8250
Post_FD	_			-0.0062	0.2550
Big_N	_			-0.0049	0.4470
Inst_Own	_			-0.0029	0.5810
Flexibility + SEO × Flexibility	+	0.0055	0.0274	0.0048	0.0100
N		19	5	19	5
Adj. R <sup>2</sup>		0.02	217	0.17	/21

 $News_MF = \beta_0 + \beta_1 SEO + \beta_2 Flexibility + \beta_3 SEO \times Flexibility + control variables + \mu$ (2)

This table presents results of the OLS regression of news content of management forecasts on Flexibility and other control variables. The regression model is estimated using the last forecast issued during the nine-month period prior to the SEO. The dependent variable is News\_MF that is measured as management forecast minus the prevailing analyst consensus forecast divided by the stock price on the day before the issuance of the forecast. Other variables are defined in the Appendix.

<sup>a</sup> p-values relate to t-statistics that are corrected for clustering of standard errors by year

## Table 6 Effect of accounting flexibility on the specificity of management forecasts

Specificity_ $MF = \gamma_0 + \gamma_1 SEO + \gamma_2 Flexibility + \gamma_3 SEO \times Flexibility + control variables + v$	$+ \nu$ (3)
--	-------------

Variable	Predicted Sign	Model 1		Model 2	
		Coefficient	p-value <sup>a</sup>	Coefficient	p-value <sup>a</sup>
Intercept		-0.0026	<.0001	0.0076	0.1150
SEO	+	-0.0001	0.9110	0.0009	0.2420
Flexibility	?	0.0001	0.0440	0.0001	0.0400
SEO × Flexibility	+	0.0011	0.0770	0.0008	0.0970
G_News_MF	+			-0.0010	0.0960
Horizon	_			-0.0009	0.0250
Mills	?			-0.0043	0.0190
Log_MVE	+ /			-0.0004	0.3970
Ind_Con	_			0.0013	0.4310
Lit_Prob	_			0.0072	0.8620
Vol_Earn	_			-0.0596	0.2160
MB	+			0.0000	0.5360
Following	+			0.0003	0.6080
Post_FD	_			-0.0041	<.0001
Big_N	+			0.0003	0.6940
Inst_Own	+			0.0003	0.7850
Flexibility + SEO × Flexibility	+	0.0013	0.0462	0.0010	0.0419
N		195		195	
Adj. R <sup>2</sup>		0.0674		0.2706	

This table presents results of the OLS regression of specificity of management forecasts on Flexibility and other control variables. The regression model is estimated using the last forecast issued during the nine-month period prior to the SEO. The dependent variable is Specificity\_MF that is (i) set to zero for point forecasts, and (ii) for range forecasts, computed as the negative of absolute difference between the upper limit and lower limit of the range, divided by the stock price on the day before the issuance of the forecast. Other variables are defined in the Appendix.

<sup>a</sup> p-values relate to t-statistics that are corrected for clustering of standard errors by year.

Variable	Predicted	Issuance		News Content		Specificity	
	Sign	Coefficient	p-value	Coefficient	p-value	Coefficient	p-value
Intercept		-2.0990	<.0001	0.0327	0.1561	-0.0036	0.2614
SEO	+	-0.0606	0.6186	0.0005	0.9173	0.0017	0.0072
Flexibility	?	0.0090	0.6732	0.0011	0.3313	0.0000	0.9918
SEO × Flexibility	+	0.0504	0.1515	0.0037	0.0744	0.0007	0.0094
Control Variables		Inclu	ded	Inclu	ded	Inclue	ded
Flexibility + SEO × Flexibility	+	0.0594	0.0339	0.0048	0.0075	0.0007	0.0026
٨		82	2	15	9	159	9
N (MF=1)		18	4	_		_	
Pseudo (or Adjusted) $R^2$		0.19	92	0.15	89	0.21	31

 Table 7

 Comparison of pre-SEO period with SEO period

This table presents the results of a probit model estimating the probability of issuing a management forecast during the nine-month period just prior to an SEO relative to the corresponding nine-month period in the year prior to the SEO year (columns 3 and 4). Columns 5 and 6 report results of the OLS regression of news content of management forecasts on accounting flexibility, and columns 7 and 8 report results of the OLS regression of specificity of management forecasts on accounting flexibility. SEO is a dummy variable that equals one for observations from the nine-month period just prior to the SEO announcement, and zero otherwise. Other variables are defined in the Appendix.

## Table 8 Management forecast errors and accounting flexibility

Variable	Predicted Sign	Coefficient	p-value		
Intercept		0.0028	0.7285		
SEO	_	-0.0044	0.0913		
Flexibility	?	-0.0005	0.1618		
SEO × Flexibility	-	-0.0017	0.1154		
News_MF	+ /	0.1797	0.0020		
Horizon	+	0.0049	<.0001		
Log_MVE	_	-0.0007	0.5582		
Ind_Con	+ /	0.0128	0.0975		
Lit_Prob	+ /	0.2488	0.2649		
Vol_Earn	+	0.1825	0.0003		
MB	+ / -	0.0007	0.0310		
Following	-	-0.0019	0.4035		
Big_N	-	0.0017	0.7091		
Inst_Own	_	-0.0068	0.2164		
Flexibility + SEO × Flexibility	_	-0.0022	0.0357		
N		195			
Adj. R <sup>2</sup>		0.2513			

 $For Err_MF = \theta_0 + \theta_1 SEO + \theta_2 Flexibility + \theta_3 SEO \times Flexibility + control variables + \zeta$ 

This table presents results of the OLS regression of management forecast errors on Flexibility and other control variables. SEO is a dummy variable that equals one for SEO firms and zero for non-SEO firms. The regression model is estimated using the last forecast issued during the nine-month period prior to the SEO. The dependent variable is ForErr\_MF, measured as the absolute value of management forecast less the actual reported earnings divided by the stock price on the day before the issuance of the forecast. Other variables are defined in the Appendix.