Why do firms Disclose their Analyst Following on their Corporate Websites?

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Abstract: We examine the firm practice of disclosing analyst following on their corporate websites and find that about two-thirds of our sample firms make such disclosures. Disclosers are on average smaller in size than non-disclosers with higher institutional ownership and leverage. This suggests that the decision to disclose is associated with greater demand for information. Further analyses reveal that more than half of the disclosers selectively include analysts who, on average, carry more favorable recommendations. Our analyses show selective disclosers to be less-profitable than non-selective disclosers with larger financing needs and subject to lower level of external monitoring. Selective disclosers also exhibit higher income smoothing and lower accrual quality, future performance and future valuation. Taken together, our evidence is consistent with firms exploiting the unregulated practice of voluntarily disclosing analyst following on corporate websites to possibly mislead investors.

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1. Introduction

In this study, we investigate the practice of firms disclosing analyst following on their corporate websites (hereafter referred to as disclosers). Using data collected in July 2014 from websites of firms in the Standard and Poor's 500 Index (S&P500), we find that 69% of our sample firms disclose the names of analysts that follow them. We also find evidence that firms making such voluntary disclosures tend to be smaller with higher institutional ownership and higher leverage. This evidence is consistent with firms responding to a greater demand for information and supports firms' claim that this information is provided as a service to their stakeholders. However, we don't find that performance or financing incentives explain the decision to provide this information nor that the future performance of disclosers differs from that of non-disclosers.

We posit that not all firms disclose this information with the objective to enhance their information environment and argue that some firms may actually use this disclosure to mislead investors. We examine this conjecture by first matching the names of analysts reported on firm websites to analyst following obtained from IBES and then retrieving stock recommendations for all IBES analysts. This provides us with two sets of analyst recommendations for each firm, one

from analysts included on firm websites and the other from excluded analysts. We then divide our sample of disclosers into two sub-samples – selective and non-selective disclosers. We define selective (non-selective) disclosers as those firms whose mean recommendation of included analysts is better (worse) than the mean recommendation of excluded analysts.

Univariate findings show a significant difference in average recommendations between selective and non-selective disclosers for both included and excluded analysts, with included (excluded) analysts for selective disclosers carrying a higher (lower) recommendation than the included (excluded) analysts for non-selective disclosers. Multivariate analyses show selective disclosers to be subject to less monitoring by external stakeholders than non-selective disclosers. Selective disclosers are also less profitable, have a lower book to market ratio and greater financing needs. We validate these results by providing evidence that selective disclosers also exhibit lower accrual quality and greater income smoothing. Finally, our analysis suggests that both future return performance and future firm valuations are lower for selective than non-selective disclosers. These findings are consistent with the conjecture that the omission of certain analysts from corporate websites is not always random with some firms possibly using this disclosure to mislead investors.

The trend to disclose analyst following on corporate websites is fairly recent and the decision to do so is completely voluntary. In our first research question we identify firm characteristics associated with the disclosure of analyst following on corporate websites. Prior research has documented the importance of analysts as information intermediaries. According to the SEC, analysts promote "the efficiency of our markets by ferreting out facts and offering valuable insights on companies and industry trends." (Securities and Exchange Commission,

2010).[1] Academic research finds that analyst recommendations, one of the most important components of analyst research output, elicit strong market reactions around their release (Stickel 1995; Womack 1996; Barber, Lehavy, McNichols, Trueman 2001, 2003, 2006; Jegadeesh and Kim 2006; Chen and Cheng 2005, Howe, Unlu, and Yan, 2009). This remains true even in the period after twelve of the largest investment banks settled with the SEC on grounds of biased analyst research (Kadan, Madureira, Wand and Zach, 2009).

Firms choosing to voluntarily provide information arguably do so in anticipation of the net benefits associated with this decision. First, related literature suggests that increased disclosure reduces the information risk firms bear (Barry and Brown 1995), increasing investor recognition (Merton 1987) and consequently decreasing firm cost of capital (Diamond and Verrechhia, 1991; Lambert, Leuz and Verrecchia, 2007). Admittedly, disclosing analyst following on corporate websites, even though voluntary, does not readily fall within the realms of voluntary disclosure theory as it does not reflect the disclosure of firm private information. Yet, such disclosure can still be beneficial to investors as it provides additional information sources available to investors, reducing in turn, their information acquisition costs and enabling them to gain a better understanding of the firm's overall information environment. This is clearly stated in a number of such website disclosures: *"Gap Inc. is providing this listing as a service to its shareholders, and does not by listing these firms, imply its endorsement of or concurrence with such information, conclusions or recommendations."* We thus expect disclosers to face a poorer overall information environment and a greater demand for new information that accompanies such an environment.

[1] https://www.sec.gov/tm/reportspubs/investor-publications/investorpubsanalystshtm.html

Our results provide support for this conjecture. Specifically, we find that firm tendency to disclose analyst coverage is positively related to institutional ownership and financial leverage and negatively related to firm size. Institutional investors demand more information and are attracted to firms with enhanced information environments (Healy, Hutton and Palepu, 1999) while high levels of leverage reflect a greater demand for more reliable information by debtholders in order to more effectively monitor firm management (Jensen 1986).

The second benefit of voluntary disclosure is that it enables firms to signal their high value. For example, Jovanovic (1982) and Verrecchia (1983) provide analyses in which disclosure has a fixed cost and show that this fixed disclosure cost creates a threshold level of disclosure so that only firms with sufficiently high values will disclose. Lang, Lins and Miller (2003) provide empirical evidence consistent with this expectation and document that cross-listed firms have better information environments and, therefore, higher market valuations. To the extent that the decision to disclose analyst following is sticky[2] disclosing analyst coverage on the firm's website can be a signal of value since only firms that are optimistic about their future prospects will be likely to disclose this information. Low type firms can't easily mimic the better type firms if they anticipate poor future performance that will be reflected in a decrease in their average recommendation rating or even a reduction in their analyst following. In contrast, our results do not provide evidence that disclosers exhibit higher valuations or better future performance than non-disclosers.

[2] Our sample consists of firms that did or did not disclose their analyst coverage in July of 2014. We have also collected the information on analyst coverage disclosure two years after our initial collection, i.e., in July of 2016. Our evidence suggests that the decision to disclose or not to disclose analyst following on corporate websites is indeed sticky, given that only 4 firms started reporting analyst coverage, and 5 firms stopped disclosing this information in the period between July 2014 to July 2016.

This latter finding is inconsistent with both theoretical and empirical evidence that links voluntary disclosures to firm value. We posit that even though the incentive to reduce information asymmetry may explain the decision to disclose analyst following on the firm's corporate website, the existence of agency conflicts may actually prompt firms to do so untruthfully. In their seminal paper, Jensen and Meckling (1976) argue that separation of ownership and control results in information asymmetries and conflicts of interest between managers and the firm's outside stakeholders. Watts and Zimmerman (1986, 1990) examine this issue in the context of accounting choice and similarly argue that managers choose accounting methods in response to the compensation, contractual and political incentives they face. This positive view of accounting choice has been further developed in a number of later studies which show that disclosure quality is affected by the contractual, market and regulatory incentives managers face (Healy and Wahlen, 1999; Fields, Lys and Vincent, 2001; Walker, 2013). According to Leuz, Nanda and Wysocki (2003), for example, managers manage financial information in order to conceal their private control benefits and to deter outside stakeholders from increasing their level of monitoring on firm management. In a similar vein, related literature also asserts that the incentive to mislead can arise from contractual motivations, or from the need to influence external parties (Walker, 2013; Fields et al., 2001). We expect the latter, i.e. the attempt to influence shareholders or other stakeholders to obtain better financing terms, to be a significant factor influencing the firms' decision to mislead about the analysts who follow them (Teoh, Welch and Wong, 1998a, 1998b; Beneish, Miller and Lombardi Yohn, 2015).

Our second research question examines this possibility. Specifically, we argue that not all disclosers will make this information available to enhance the firm's information environment;

rather some firm managers may exploit this opportunity to mislead investors by disclosing their analyst following selectively, i.e., by omitting to disclose analysts who are more pessimistic about their firm's prospects (selective disclosers). The importance of analyst output in the capital markets has created incentives for analysts to optimistically bias their research reports, two of which stem directly or indirectly from the firms they follow. First, analysts may compromise the objectivity of their research reports in response to investment banking incentives. The underlying assumption is that firms will direct their investment banking business only to those investment banks that issue favorable recommendations on their stock. This, in turn, leads to pressures from investment banks on their analyst employees to be optimistic in order to initiate, retain and/or strengthen their investment banking relationships. (Dugar and Nathan, 1995; Lin and McNichols, 1998; Michaely and Womack, 1999; O'Brien *et al*., 2005). Second, related research also suggests that analysts optimistically bias their forecasts to ensure access to the firm's private information (Francis and Philbrick, 1993; Das *et al*., 1998; Lim, 2001; Mest and Plummer, 2003; Barber *et al*., 2006). Consistent with this expectation, using data from conference calls Maydew (2008) finds that managers allow greater management access to more favorable analysts.

If firms put pressure on analysts to optimistically bias their reports, then it follows that their listing of analyst following may also be biased towards analysts that are more optimistic, especially given the unregulated nature of internet reporting that alleviates any significant repercussions from inaccurate disclosures. To provide evidence on this conjecture, we rely on economic theory and prior accounting literature and posit that firm reporting incentives explain this tendency. Under this assumption, we expect the likelihood of selectively disclosing analyst

following to be greater for smaller and less profitable firms, firms with larger financing needs and less sophisticated investors. Our results are in line with these expectations.

We next provide supporting evidence to our findings by first comparing the earnings quality and future performance of selective and non-selective disclosers. Specifically we find that selective disclosers exhibit higher industry-adjusted accruals and greater income smoothing, as captured by the ratio of the standard deviation of net income to the standard deviation of cash flows from operating activities (Leuz, Nanda and Wysocki, 2003), than non-selective disclosers. We then examine the future performance and valuation of the two groups. Controlling for self-selection, we find that selective disclosers exhibit lower return profitability and lower valuations, a result that is stronger over longer horizons.

Second, we further validate our results by comparing the characteristics and future performance of non-selective disclosers and non-disclosers. If what prompts firms to non-selectively disclose their analyst coverage is a greater demand for information while non-disclosers don't provide this information because the demand for this information is low, then variables that are associated with the quality of the information environment and the need to better monitor the firm should be significantly different between the two groups. Consistent with this expectation we find that non-disclosers are larger firms with lower levels of both institutional ownership and leverage. In addition, if signaling is another factor that induces firms to truthfully disclose their analyst following, the long-run performance of non-selective disclosers should be higher than that of non-disclosers. Results are consistent with this expectation too.

Our study makes two important contributions to the literature. First we contribute to the relatively recent stream of literature that relates internet financial reporting to significant financial benefits, (Ashbaugh, Johnstone and Warfield, 1999; Ettredge, Richardson and Scholz, 2002; Trabelsi, Labelle and Dumontier, 2008), by documenting the heterogeneity both in the incentives to make such disclosures on corporate websites and also in their future valuation effects. Second, we contribute to the literature on voluntary disclosure by identifying a new means of disclosing information about the firm and by showing that the credibility of voluntary disclosures in largely unregulated environments can be especially affected by firm reporting incentives. Our study should thus be of particular interest both to investors, who rely on the information on corporate websites to make their investment decisions, and to policy makers as our results suggest that firms exploit the lack of attention to this voluntary type of disclosure to provide incomplete information that, in turn, reduces investor protection.

The rest of the paper is organized as follows. Section 2 describes our sample selection procedure and outlines the research design. Section 3 discusses our results while section 4 presents additional validation analyses. Concluding remarks are offered in section 5.

2. Research Method

2.1 Sample Selection

Our base sample comprises of all firms belonging to the S&P500 at the beginning of July 2014. We begin by excluding from our base sample 46 firms belonging to regulated industries (utilities and financial institutions). We then search firm websites for a listing of analyst following. Typically, there is a link on the left side menu which leads to the page that includes the listing, and most often that link is under the *Investor Relations* category. Some firms include

the list under *Corporate Profile* or *SEC Filings and Financial Reports*. To make sure that we do not miss this information, we also search the firm's website using keywords such as "analyst", "following" or "coverage". Financial data were retrieved from COMPUSTAT while IBES provided the information on analyst following and stock recommendations. Matching our initial sample to IBES analyst data and applying financial data requirements yields our final sample of 383 firms.

Of the 383 firms, 264 (69%) are disclosers. This high percentage of disclosers reflects favorably on how this practice has evolved over time. To our knowledge, the only other study that investigated this practice is Ettredge et al. (2002) that included disclosure of analyst following in their summary measure of the quality of voluntary disclosure on firm websites. Comparing to our finding of 69% in July 2014, only 10% of corporate websites provided this information during Ettredge et al.'s sample period of late 1997 to early 1998.

As an example of what a typical disclosure looks like, Exhibit A provides a screenshot of The Coca-Cola Company's list of analyst coverage that includes 18 brokerages/analysts. Some companies provide only brokerage firm names (no analyst names), others like Coca-Cola provide both firm and analyst names, while a few include two separate listings of analyst following – one for equity and the other for fixed income/debt securities. The listings are followed by a typical disclaimer that the listing is solely provided for information purposes and in no way reflects the opinion of and/or endorsement by management.

2.2 Association of Firm Characteristics with the Propensity of being a Discloser

Our first research question examines the association between disclosure of analyst following on corporate websites and firm-specific variables. Since we do not know the point in

time at which a given firm became a discloser, our investigation is limited to an association test as opposed to a causation analysis. We equate the probability of being a discloser (*AF_DISC*) to a number of variables that capture a) the firm's incentives to disclose information which we further categorize in performance and financing incentives, and b) demand for information that stems either from the firm's overall information environment or from the more specific need to provide information that will enable external constituents to more effectively monitor the firm.

$$\Pr(AF\_DISC) \sim f(\textit{Performance incentives, Financing incentives, Quality of information environment, External monitoring mechanisms, Industry Fixed Effects}) \quad (1)$$

From a valuation perspective, less information asymmetry lowers a firm's cost of capital that, in turn, leads to higher stock prices. Maintaining corporate websites that provide a host of supplementary value-relevant information reduces information asymmetry. We argue that this reduction in information asymmetry is more beneficial to firms whose prior performance is poor (performance incentives) or those that expect to tap the external financing markets (financing incentives).

Poor financial performance is positively correlated with the need to provide more information to the market as it is often associated with greater firm uncertainty (Beyer, Cohen, Lys and Walther, 2010). Consequently, we expect current performance to be negatively correlated with the probability of being a discloser. As current performance deteriorates, ceteris paribus, the demand for information increases as stakeholders attempt to figure out the reasons behind the declining performance. We capture current performance using both book- and market-based measures, by relating the probability of disclosing analyst following to the firm's

return on assets (*ROA*) and one-year stock price return (*RET*), respectively. Both variables are measured for the last fiscal year ending before the disclosure date. [3]

Following Christensen et al. (2015) who find that firms issuing debt or stock are more likely to increase the quality of their reporting, we argue that the incentive to disclose analyst following on corporate websites should similarly be related to the firms' access to external debt and/or equity markets. Consequently, we expect the likelihood of firms being disclosers to be positively correlated with new debt (*NEW_DEBT*) or equity (*NEW_SHARES*) issued within the year preceding the disclosure date. Given the small fluctuations in both the debt and share values over time, we assume that the firm issued debt or equity if the percentage change of the corresponding variable is greater than the median value of all sample firms. The median is based on the initial sample, after eliminating firms in the financial industry, for which this information is available and equals 0 and 0.001 for the issuance of equity and new debt, respectively.[4]

Our second group of variables expected to explain the decision to disclose analyst following on corporate websites relate to the demand for information. We argue that firms will more likely be disclosers if their information environment is poor (quality of information environment) and when there is a greater need for information to monitor the firm (External monitoring mechanisms). With respect to the former, we posit that when the firm's information environment is poor, the benefits that accrue to the firm from enhanced disclosures are greater, thereby prompting firms to make this disclosure. Academic literature has used a number of proxies that capture the quality of the firm's information environment, following which we

[3] For expositional simplicity, our reference to disclosure date reflects the time the data was collected (July 2014) and not when the firms actually made such disclosure since the latter can't be determined.
[4] Appendix A provides details on the measurement of all variables used in this study.

measure it using the total number of analysts following the firm as reported by IBES (*AF*), firm size (*SIZE*) and growth opportunities. Larger firms with greater analyst following are less likely to be disclosers since they have better information environments than smaller firms with fewer analysts (Lang and Lundholm, 1996). In addition, high growth firms solicit greater interest from investors, which in turn leads to greater demand for information (Daske, Hail, Leuz and Verdi, 2013). We capture firm growth opportunities by the one-year change in sales growth (*SALESGR*) and the market-to-book ratio. To circumvent the small denominator problem associated with measuring the market-to-book ratio, we include its reciprocal, book-to-market (*B_M*), in our empirical models.

Finally, a firm's need to provide information that enhances the monitoring ability of stakeholders is positively related to institutional ownership (*IO*) and leverage (*LEV*). Related literature documents that institutional ownership is an important firm-monitoring mechanism that can be attributed to institutions' more sophisticated backgrounds (Walther, 1997; Jiambalvo, Rajgopal and Venkatachalam, 2002) and their use of securities class actions as one way of effectively enforcing this monitoring (Cheng, Huang, Li and Lobo, 2010). In addition, institutions prefer to hold stocks with greater information transparency (O'Brien and Bhushan, 1990; Healy, Hutton and Palepu, 1999; D'Souza, Ramesh and Shen, 2010), imposing a strong incentive for firm managers to reduce information asymmetry. Similarly, highly levered firms are under more scrutiny from debt holders than their less levered counterparts. Thus, to the extent that debtholders demand more information to better monitor firms (Jensen, 1986; Beneish, Miller and Yohn, 2015), *LEV* should be positively related to the decision to disclose.

2.3 Differences between Selective and Non-Selective Disclosers

To test our second research question, we focus exclusively on our sample of disclosers and classify them into two categories, selective and non-selective disclosers, using IBES stock recommendations. We use analyst stock recommendations to ascertain whether analysts have a favorable or unfavorable view of the company since they depict the analyst's overall valuation. Prior research shows that analyst recommendations elicit a strong market reaction around their release (Barber, Lehavy, McNichols and Trueman, 2001, 2003, 2006; Chen & Cheng, 2006; Howe, Unlu, & Yan, 2009; Stickel, 1995; Womack, 1996), and that recommendations are on average more informative than earnings forecasts (Feldman, Livnat and Zhang, 2012).[5] We compare the mean recommendation from analysts listed on corporate websites to the mean recommendation of excluded analysts. We classify firms as selective (non-selective) disclosers if the mean recommendation of included analysts is better (worse) than the mean recommendation of excluded analysts.[6] To achieve our objective of identifying differing incentives for providing this information among the two groups of disclosers, we equate the probability of being a selective versus being a non-selective discloser using the same variables as those used in (1).

$$\Pr(SEL\_DISC) \sim f(\textit{Performance incentives, Financing incentives, Quality of Information Environment, External Monitoring Mechanisms, Industry Fixed Effects}) \quad (2)$$

[5] Relative to earnings forecasts, stock recommendations do not change as often. Related literature shows that the average time period between two recommendations is more than one year. To ensure that we include all analysts that follow a given firm, we assume that an analyst follows the firm if that analyst has issued a recommendation within a two-year period prior to our disclosure date. Results are not changed if we only retain recommendations issued within the last year.

[6] Recommendations span a scale of 1 to 5, where 1 represents a Strong Buy and 5 a Strong Sell. Therefore, better recommendations translate to lower numerical values.

where *SEL_DISC* takes the value 1 if the disclosure of analyst following is selective, i.e., the mean recommendation of excluded analysts is lower than that of included analysts, and 0 otherwise.

If the exclusion of pessimistic analysts is unintentional, firm reporting incentives should not be able to explain the classification of the firm as a selective or non-selective discloser. In other words, this model allows us to use the significance of independent variables to infer the reasons associated with selective disclosure. We argue that the presence of performance and financing incentives will prompt firms to selectively disclose their analyst following. Poor financial performance and/or the firm's involvement in accessing external markets puts pressure on firm management to provide an optimistic outlook that, in turn, leads to the selective disclosure of analysts who carry more favorable recommendations. In a similar vein, the selective disclosure of analyst following will be effective and hence more likely when the firm's information environment is poor. Conversely, even though the presence of institutional investors and high levels of leverage act as an incentive to disclose analyst following on firm websites, the monitoring role of institutional investors and debt holders will deter firms from disclosing selectively.

2.4 Selective Disclosers and Future Performance

Finally, we base our third research question on the conjecture that if firms selectively disclose their analyst following, the beneficial effects of such voluntary disclosure should be mitigated. We thus argue that the decision to provide this information in a non-selective manner should be associated with higher valuations and performance. We base this expectation on the literature documenting the valuation effects of increased disclosure. According to Merton's

(1987) investor recognition hypothesis, voluntary disclosure reduces the cost of following the firm. Similarly, Barry and Brown (1985) suggest that cost of capital is a function of estimation risk; increased disclosure enables investors to better assess the firm's prospects, thereby reducing its cost of capital. Based on this research, we expect that firm valuations will be higher for non-selective disclosers, *ceteris paribus*.

The literature also suggests that providing this information non-selectively may serve as a signal of the firm's high value. Thus, firms that non-selectively disclose their following on their websites do so to reveal their true type and their positive expectations about the firm's future performance. To the extent that the decision to disclose analyst following is sticky[7] disclosing analyst coverage on the firm's website can be a strong signal of value since only firms that are optimistic about their future prospects will be likely to disclose this information. Low type firms can't easily mimic high type firms since their poor future performance will be reflected in a decrease in their average recommendation rating or even in a reduction in their analyst following. We thus expect that non-selective disclosers will exhibit higher return performance than selective disclosers. Conversely, firms that disclose analyst following selectively do so possibly in an attempt to mislead investors. As the market gradually becomes aware of the firm's real prospects, both future firm valuations and return performance will be negatively adjusted.

[7] Our sample consists of firms that did or did not disclose their analyst coverage in July of 2014. We have also collected the information on analyst coverage disclosure two years after our initial collection, i.e., in July of 2016. Our evidence suggests that the decision to disclose or not to disclose analyst following on corporate websites is indeed sticky, given that only 4 firms started reporting analyst coverage, and 5 firms stopped disclosing this information in the period between July 2014 to July 2016.

To empirically test our conjectures, we relate the firm's future return performance and valuation to *SEL_DISC*. We run the following model to examine whether future return performance is associated with being a selective discloser:

$$CAR \sim f(SEL\_DISC, SIZE, B\_M, RET, LEV, LAMDA, Industry\ Fixed\ Effects) \quad (3)$$

where CAR is cumulative abnormal returns based on the market model and measured over a one- or two-year period following the disclosure date (cumulation period starts on August 1, 2014). A negative coefficient on our variable of interest (*SEL_DISC*) indicates that selective disclosers exhibit poorer return performance than non-selective disclosers. Our model controls for factors that have been shown to be associated with market returns, such as the book to market ratio and firm size (Fama and French, 1993). Carhart (1997) and Jegadeesh and Titman (1993) find that firms that performed well in the past are likely to continue to perform well in the future. We capture this momentum effect by including in the model the annual firm return for the fiscal year that ended before the disclosure date. The model also includes leverage to control for the firm's ability to repay its debt obligations based on research documenting a relation between financing risk and future returns. Such relation, however, is not consistently positive as asset pricing theory would predict. Dichev (1998) for example finds that high bankruptcy risk is associated with lower than average returns. Vassalou and Xing (2004) find that default risk is priced but that high default risk earns higher future returns only in small firms with high book-to-market ratios. Penman, Richardson and Tuna (2007) decompose the book-to-market and controlling for systematic risk document a negative relation between leverage and future returns. Based on this finding, Caskey Hughes and Liu (2012) hypothesize and find that leverage can explain future returns only if measured in relation to the firm's optimal capital structure. Based

on these studies it is evident that leverage can be an important factor that explains future returns but the sign of such association is less evident.

Finally, we include *LAMBDA* (the inverse Mills ratio) obtained from (2) to account for the endogenous nature of the disclosure decision that, in turn, introduces correlation between the explanatory variables and the disturbance term in (3) and makes the OLS estimates of the coefficient on *SEL_DISCL* biased and inconsistent. Following Greene (1997), we address this issue of self-selection bias using the Heckman (1979) correction that is based on the estimation of (2) as the first step in a two-step estimation procedure.

Using Tobin's Q (*TOBINSQ*), we run the following model to examine whether firm values at the end of the first and second fiscal years following the disclosure date are lower for selective than non-selective disclosers:

$$TOBINSQ \sim f(SEL\_DISC, SIZE, SALESGR, RET, LEV, LAMDA, Industry\ Fixed\ Effects) \quad (4)$$

We use the same explanatory variables as those in (3), except we replace B_M with *SALESGR* as Tobin's Q is a very similar measure to the market-to-book ratio and prior research finds that sales growth is a significant driver of firm value (Doidge, Karolyi and Stulz, 2004).

3. Empirical Results

Table 1 provides descriptive statistics for the full sample, including statistical significance of the difference in means and medians. Mean *REC* from analysts following the disclosers (*AF_DISC* = 1) is insignificantly different from that of non-disclosers (*AF_DISC* = 0). Panel A provides descriptive statistics for all explanatory variables, separately for disclosers and non-disclosers. As stated earlier, 264 of the 383 firms in our sample are disclosers. The two

statistically significant differences between the two groups are firm size (*SIZE*) and institutional ownership (*IO*), suggesting that disclosers are smaller in size but with a higher percentage of institutional ownership. Panel B of the same table shows descriptive statistics for the one- and two-year ahead future performance as captured by *CAR* and *TOBINSQ*. Surprisingly and contrary to accounting theory that links disclosure to firm value, the evidence does not suggest that the two groups differ in their future performance.[8]

Table 2 shows the results of our logistic model where we equate the probability of being a discloser to firm incentives and the demand for information, controlling for industry fixed effects. Consistent with our univariate findings, we find that the likelihood of disclosure is positively related to institutional ownership (*IO*) and leverage (*LEV*) and negatively related to firm size (*SIZE*). Our results thus provide support to the conjecture that firms disclose analyst following in response to a greater demand for information. However, results do not indicate that firm reporting incentives are related to the disclosure decision and (untabulated) regression results linking the firm's future performance and value to the decision to disclose, similarly, do not provide evidence of a significant difference between the two groups.

We next examine whether the ability of our model to effectively distinguish between disclosers and non-disclosers is confounded by differing incentives behind the decision to disclose. To do so, we split the sample of disclosers into selective and non-selective disclosers by comparing the recommendation levels of IBES analysts disclosed on the corporate websites to those that are not. [9] We compute the mean recommendation as reported by IBES for both groups

[8] Untabulated regression results corroborate this evidence.

[9] Only the IBES recommendation file includes the identification information of both the investment bank and the analyst. Effective October 2018, however, IBES stopped the practice of disclosing the names of contributors and analysts in their detailed estimates file for a number of their key contributors, due to regulatory compliance concerns.

based on the most recent recommendation issued by each analyst before the disclosure date. *SEL_DISC* takes the value 1 if the mean recommendation of excluded analysts is less favorable (numerically higher) than that of included analysts. Of the 264 disclosers, 137 are classified as selective and 127 as non-selective disclosers.

Panel A of Table 3 provides descriptive statistics on mean and median recommendations for the two groups of selective and non-selective disclosers. For selective disclosers, the mean (median) recommendation of analysts included on the corporate website is 2.32 (2.27), which by construction is numerically smaller (i.e. better) than the mean (median) recommendation of 2.79 (2.75) from excluded analysts. The opposite is the case for non-selective disclosers. What is interesting and not an artifact of variable construction is that the mean and median recommendations from included (excluded) analysts are significantly better (worse) for the selective disclosers when compared to those of non-selective disclosers. This evidence is consistent with our conjecture that the exclusion of certain analysts from corporate websites is opportunistically determined by selective disclosers.

Panel B of Table 3 presents the univariate results for independent variables included in (2). Results suggest that selective disclosers have significantly lower book-to-market ratios (B_M), i.e., higher growth opportunities, and have issued more debt. Univariate results also provide some evidence that selective disclosers exhibit lower levels of leverage. Panel C of table 3 provides descriptive statistics on firm one- and two-year ahead future return performance and Tobin's Q valuations. These tests do not indicate differences that are strongly significant between the two groups. We next report regression results that distinguish between the characteristics of selective and non-selective disclosers and link this practice to future firm return performance and firm valuation.

Table 4 presents logistic results explaining the likelihood of being a selective discloser. Consistent with the univariate evidence presented in Table 3, logistic results provide strong evidence that financing incentives and a poor information environment induce firms to selectively disclose their analyst following. Specifically, we find that firms that have issued debt and those with high growth opportunities, captured by lower book-to-market ratios, are more likely to be selective disclosers. The negative and significant coefficient on ROA provides evidence that lower firm profitability also imposes an incentive to selectively disclose analyst following. Finally, results suggest that the tendency to selectively disclose analyst following is decreasing with institutional ownership and leverage. This evidence provides further support to extant research results that highlight the important monitoring role of debt holders and sophisticated investors. Together these findings are consistent with selective disclosers exhibiting opportunistic behavior.

In Table 5 we examine the relation between disclosers and future return performance and valuation. The first two columns present analysis explaining the firm's return performance over one- and two-year periods beginning August 1, 2014 while the last two columns present the findings when the dependent variable is Tobin's Q. Results provide evidence that disclosers experience lower future cumulative abnormal returns. Specifically, selective disclosers exhibit cumulative abnormal returns that are 19.6% lower (p-value < 10%) over the one-year and 36% lower (p-value < 5%) over the two-year period than those of non-selective disclosers. Similarly, we find weak evidence that firm values of selective disclosers (*TOBINSQ*) *are* lower than those of non-selective disclosers (p-value <10%) one year after the disclosure date. The evidence is stronger (p-value <1%) if firm values are measured at the end of the two-year period following

the disclosure. The coefficient on *LAMBDA* is positive and significant in all four models, a finding consistent with the existence of, and correction for, self-selection bias.

Overall our results indicate that firm reporting incentives are associated with the exclusion of more pessimistic analysts from the firm's website. The fact that the effects of this decision are more negative in longer horizons lend further support to this conjecture as the incentive to mislead can be more effective the longer it takes investors to correct their expectations. We conclude that firms exploit the lack of regulation regarding corporate websites to paint a more optimistic view of the company's prospects. Our results are thus in line with research documenting that firms put pressure on analysts to issue optimistic research reports and should be of interest to investors who rely on the information on corporate websites to make their investment decisions. Our results should also be of interest to policy makers as they ponder the need for appropriate regulation of internet disclosures.

4. Additional Analyses

In this section we validate our classification of selective and non-selective disclosers by first examining the association between *SEL_DISC* and earnings quality. We argue that if indeed the exclusion of pessimistic analysts is opportunistic, i.e., it reflects an attempt to mislead investors, then selective disclosers should also engage in other types of nefarious activities that serve the same objective. Specifically, we link the decision to selectively disclose analyst following to earnings quality, as captured by the industry adjusted level of accruals (Daske et al., 2013) and the industry adjusted level of earnings smoothing (Leuz et al., 2003). Given that the aim of this analysis is to provide evidence on other types of behavior firms use to mislead

investors, we measure these variables contemporaneously with the timing of the analyst disclosure.

Accruals equal the difference between the firm's net income and its cash flows from operations scaled by total assets. We then subtract the industry mean, derived from our sample and defined by the one-digit SIC code, to yield our empirical measure, *ACCRUALS.* Results presented in Table 6 show that the mean value of *ACCRUALS* for selective disclosers is positive and significantly higher than the mean value of *ACCRUALS* for non-selective disclosers. In other words, selective disclosers exhibit significantly higher accruals than non-selective disclosers.

We find similar results for income smoothing (*SMOOTH*), which we derive from dividing the standard deviation of the firm's net income over the past four years by the standard deviation of its operating cash flows in the same period minus the ratio's industry mean. Under the assumption that over a period of time the business cycle of net income will resemble that of operating cash flows, lower values of this measure imply less variation in earnings relative to cash flows and are therefore indicative of higher earnings smoothing and lower earnings quality. Our results show that the mean and median values of *SMOOTH* for selective disclosers are negative (i.e., less than the industry averages) and significantly smaller than the comparable statistics for the non-selective disclosers. These results provide support to our claim that the exclusion of pessimistic analysts from websites of selective disclosers is not random.

In our second set of analyses, we examine whether non-selective disclosers (*SEL_DISC* = 0) differ from non-disclosers (*AF_DISC* = 0). Recall that our initial analysis that attempted to differentiate between disclosers and non-disclosers offered evidence that the decision to disclose

is related to increased demand for information but neither the future return performance nor subsequent valuations differed between the two groups. We explained this result by positing that not all disclosing firms provide this information with the objective of enhancing their information environment and thus the inclusion of selective disclosers in the sample may be confounding results. If the decision not to disclose analyst following is the result of weak demand for this information and the decision to non-selectively disclose is mainly driven by the need to provide more and unbiased information to the market, then variables capturing the quality of the information environment and the need for external monitoring should be able to differentiate between the two groups. Results provided in Table 7 lend support to our claim. Specifically, the evidence in table 7 suggests that non-selective disclosers provide analyst following in response to a stronger demand for information as evidenced by strongly significant coefficients on both of our external monitoring variables (*IO* and *LEV*) and firm size that proxies for the quality of the information environment. In addition, if what drives the decision to disclose analyst coverage is to signal the firm's high type we expect that non-selective disclosers should also exhibit better future performance. Consistent with this expectation, table 8 shows that non-selective disclosers exhibit higher future valuations and better future return performance compared to non-disclosers.

5. Conclusion

Using data collected in July 2014 from the websites of S&P500 firms, we examine the relative recent practice of some firms to disclose their analyst following on their corporate websites. We first document that approximately 69% of our sample firms provide this information on their websites. When compared to non-disclosers, we find disclosers to be smaller with higher institutional ownership and financial leverage, suggesting that they provide

this information in response to higher demand from external stakeholders. However, and contrary to what voluntary disclosure literature would predict, we don't find the future performance of disclosers differing significantly from that of non-disclosers.

We then argue that not all firms disclose this information with the objective to enhance their information environment and that some firms may actually use this disclosure to mislead investors. We examine this conjecture by dividing our disclosers sample into selective and non-selective disclosers. Selective disclosers are those who exclude analysts that provide relatively more unfavorable recommendations from the list of analysts covering the firm. This analysis reveals that firm reporting incentives explain the probability that excluded analysts are more pessimistic, suggesting in turn that such omissions are more likely to be intentional. We validate these results by providing evidence that selective disclosers also exhibit lower accrual quality and more income smoothing as well as poorer future return performance and lower firm valuations. Finally, we show that non-selective disclosers, when compared to non-disclosers, provide analyst following in response to a stronger demand for information and exhibit higher valuations and return performance in the two-year period following the disclosure.

We conclude that some firms exploit the lax regulatory environment regarding corporate websites to paint a more optimistic picture of the company's future prospects. Our results are in line with research documenting firms putting pressure on analysts to issue optimistic research reports and should be of interest to investors who rely on the information provided on corporate websites to make their investment decisions. Our results should also be of interest to policy makers as they point to the need to pay more attention to the reliability of internet disclosures.

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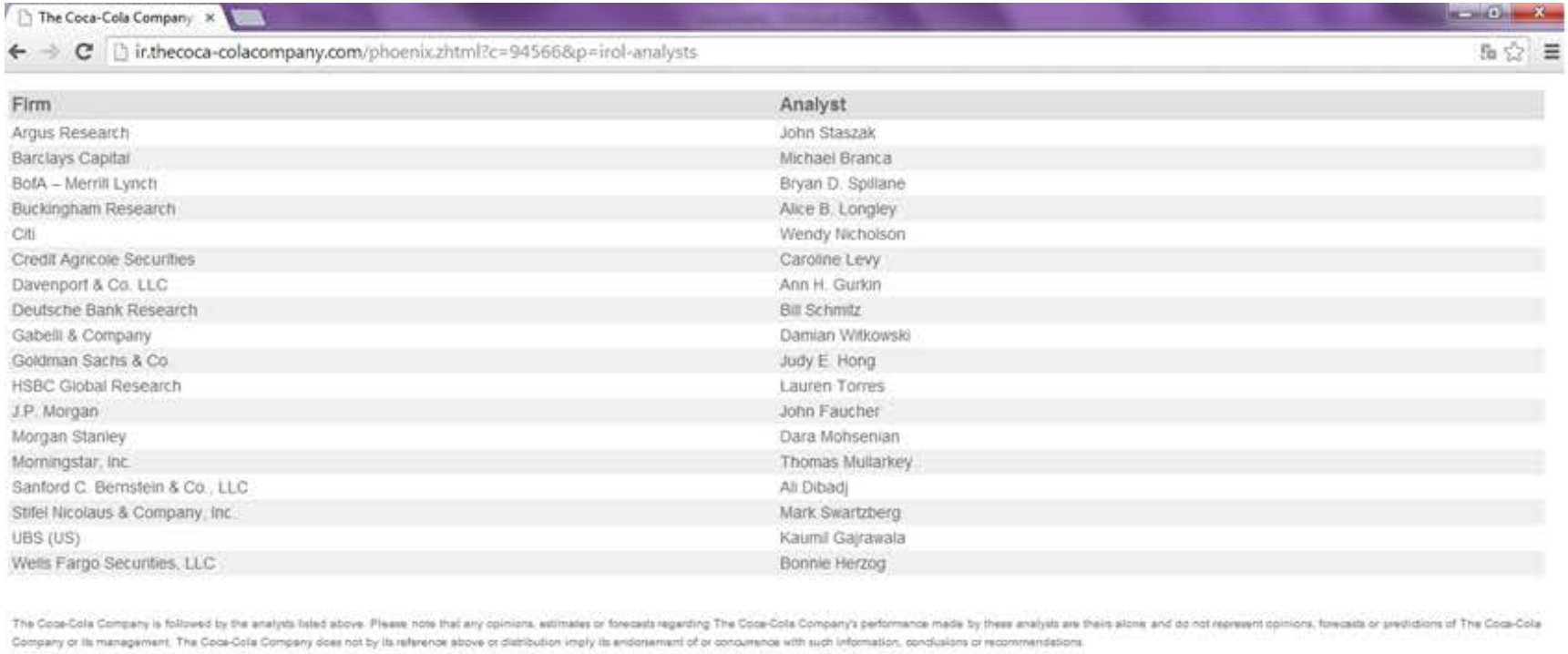
Exhibit A



Firm	Analyst
Argus Research	John Staszak
Barclays Capital	Michael Branca
BofA – Merrill Lynch	Bryan D. Spillane
Buckingham Research	Alice B. Longley
Citi	Wendy Nicholson
Credit Agricole Securities	Caroline Levy
Davenport & Co. LLC	Ann H. Gurkin
Deutsche Bank Research	Bill Schmitz
Gabelli & Company	Damian Witkowski
Goldman Sachs & Co	Judy E. Hong
HSBC Global Research	Lauren Torres
J.P. Morgan	John Faucher
Morgan Stanley	Dara Mohsenian
Morningstar, Inc.	Thomas Mullarkey
Sanford C. Bernstein & Co., LLC	Ali Dibadj
Stifel Nicolaus & Company, Inc.	Mark Swartzberg
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Wells Fargo Securities, LLC	Bonnie Herzog

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Appendix A
Variable Definitions

AF	*AF* is the natural log of analyst following as reported by IBES based on the number of analysts that have issued at least one recommendation in the two-year period ending on June 30, 2014.
AF_DISC	Equals 1 if the firm disclosed analyst following on its website in July 2014, and 0 otherwise.
AF_NSDISC	Equals 1 if the firm is a non-selective discloser (*SEL_DISC* = 0), and 0 if the firm is a non-discloser (*AF_DISC* = 0)
SEL_DISC	Equals 1 if the mean recommendation of all excluded analysts from firm websites is less favorable than the mean recommendation of included analysts in July, 2014.
ACCRUALS	Net income minus operating cash flows divided by total assets measured at the last fiscal year end preceding June 30, 2014 minus the industry mean.
B_M	Book value of equity divided by market value of equity on the last fiscal year end before July, 2014.
CAR	Cumulative abnormal return over one (t+1) or two (t+2) calendar years starting August 1, 2014.
IO	Institutional ownership percentage measured on June 30, 2014.
LEV	Total liabilities divided by total assets on the last fiscal year end before July, 2014.
NEW_DEBT	Equals 1 if the change in long term debt for the fiscal year ending before July, 2014 is greater than the sample median, 0 otherwise.
NEW_SHARES	Equals 1 if the change in the number of new shares issued during the fiscal year ending before July, 2014 is greater than the sample median, 0 otherwise.
REC	Mean recommendation based on the last recommendation issued by all IBES analysts in the two-year period ending June 30, 2014.
REC_EXCL	Mean recommendation of analysts not included on a firm's website based on their last recommendation reported by IBES in the two-year period ending June 30, 2014
REC_INCL	Mean recommendation of analysts included on a firm's website based on their last recommendation reported by IBES in the two-year period ending June 30, 2014.
RET	Annual stock return for the period ending June 30, 2014.
ROA	Operating income divided by total assets on the last fiscal year end before July, 2014.
SALESGR	Percentage change in sales over the last two fiscal years ending before July, 2014.
SIZE	Natural logarithm of total assets on the last fiscal year end before July, 2014.
SMOOTH	Standard deviation of net income divided by the standard deviation of operating cash flows measured over the last four fiscal years ending prior to July, 2014 minus the industry mean.
TOBINSQ	Market value of equity plus total assets less book value of equity, divided by total assets measured at the end of one (t+1) or two (t+2) fiscal years starting after July, 2014.

Table 1
Descriptive Statistics – Full Sample

This table presents descriptive statistics for all variables for the full sample. We test for significant differences in the means and medians of each variable using the paired t-test and Wilcoxon rank sum test. Unless otherwise stated, variables are measured at the last fiscal year end preceding July, 2014. *AF_DISC* equals 1 if the firm disclosed analyst following on its website in July, 2014, 0 otherwise. *REC* is the mean recommendation from all IBES analysts following the firm. *RET* is the annual stock return (excluding dividends). *ROA* is operating income divided by total assets. *NEW_DEBT* equals 1 if the change in long term debt is greater than the sample median, 0 otherwise. *NEW_SHARES* equals 1 if the change in the number of new shares issued is greater than the sample median, 0 otherwise. *B_M* is book value of equity divided by market value of equity. *SALESGR* is the percentage change in sales. *AF* is the natural log of analyst following reported by IBES as of June 30, 2014. *SIZE* is the natural logarithm of total assets. *IO* is the institutional ownership percentage on June 30, 2014. *LEV* is total liabilities divided by total assets. *CAR* is cumulative abnormal return over one (t+1) or two (t+2) calendar years starting August 1, 2014. *TOBINSQ* is the market value of equity plus total assets less book value of equity, divided by total assets measured at the end of one (t+1) or two (t+2) fiscal years starting after July, 2014. *, **, *** denote two-tailed significance at the 0.10, 0.05 and 0.01 levels, respectively.

	Means			Medians		
	AF_DISC = 1 N=264	*AF_DISC* = 0 N=119	Difference	*AF_DISC* = 1 N=264	*AF_DISC* = 0 N=119	Difference
REC	2.47	2.51	-0.04	2.43	2.44	-0.01
Panel A: Explanatory variables						
			Performance Incentives			
RET	0.27	0.27	0.00	0.26	0.24	0.02
ROA	0.1191	0.1190	0.0001	0.1056	0.1057	-0.0001
			Financing Incentives			
NEW_DEBT	0.485	0.496	-0.011	0	0	0
NEW_SHARES	0.477	0.487	0.010	0	0	0
			Quality of Information Environment			
B_M	0.0359	0.3653	-0.0063	0.3132	0.3086	-0.0046
SALESGR	0.0194	0.0382	-0.0188	0.0371	0.0358	0.0013
AF	2.818	2.841	-0.023	2.833	2.890	-0.057*
SIZE	9.49	9.89	-0.40***	9.39	9.69	-0.30***
			External Monitoring Mechanisms			
IO	67.80	63.45	4.35***	69.62	63.62	6.00***
LEV	0.5899	0.5748	0.0151	57.37	56.63	0.74
Panel B: Future Performance						
CAR t+1	-0.0294 (N=256)	-0.0319 (N=117)	0.0025	0.0571 (N=256)	0.0182 (N=117)	3.89
CAR t+2	-0.0013 (N=256)	-0.0236 (N=117)	0.00223	0.0796 (N=256)	0.00371 (N=117)	4.25
TOBINSQ t+1	2.38 (N=264)	2.33 (N=119)	0.05	1.97 (N=264)	2.04 (N=119)	-0.07
TOBINSQ t+2	2.23 (N=251)	2.16 (N=118)	0.07	1.83 (N=251)	1.77 (N=118)	0.06

Table 2
Association of Disclosers and Non-Disclosers with Firm-Specific Variables

This table presents logistic regression results using the full sample. Unless otherwise stated, variables are measured at the last fiscal year end preceding July, 2014. *AF_DISC* equals 1 if the firm disclosed analyst following on its website, 0 otherwise. *RET* is the annual stock return (excluding dividends). *ROA* is operating income divided by total assets. *NEW_DEBT* equals 1 if the change in long term debt is greater than the sample median, 0 otherwise. *NEW_SHARES* equals 1 if the change in the number of new shares issued is greater than the sample median, 0 otherwise. *B_M* is book value of equity divided by market value of equity. *SALESGR* is the percentage change in sales. *AF* is the natural log of analyst following reported by IBES as of June 30, 2014. *SIZE* is the natural logarithm of total assets. *IO* is the institutional ownership percentage on June 30, 2014. *LEV* is total liabilities divided by total assets. p-values are shown in parentheses underneath the coefficient estimates. *, **, *** denote one-tailed significance for independent variables (two-tailed significance for the intercept) at the 0.10, 0.05 and 0.01 levels, respectively.

	Expected Coefficient Sign	Dependent Variable = *AF_DISC*
Intercept	?	1.179 (0.54)
Performance Incentives		
RET	-	-0.025 (0.47)
ROA	-	-1.819 (0.20)
Financing Incentives		
NEW_DEBT	+	0.081 (0.37)
NEW_SHARES	+	-0.256 (0.86)
Quality of Information Environment		
B_M	-	0.353 (0.69)
SALESGR	+	-0.202 (0.62)
AF	-	0.058 (0.58)
SIZE	-	-0.317*** (0.01)
External Monitoring Mechanisms		
IO	+	1.854** (0.04)
LEV	+	1.224** (0.05)
Industry Effects		Yes
Number of Observations		383
R-Square (rescaled)		0.116

Table 3: Descriptive Statistics – Disclosers

This table presents descriptive statistics for all variables for the sample of disclosers. We test for significant differences in the means and medians of each variable using the paired t-test and Wilcoxon rank sum test. Unless otherwise stated, variables are measured at the last fiscal year end preceding July, 2014. *SEL_DISC* equals 1 if the mean recommendation of all excluded analysts from firm websites is less favorable than the mean recommendation of included analysts. *REC_Incl* is the mean recommendation of included analysts on June 30, 2014. *REC_Excl* is the mean recommendation of excluded analysts. *RET* is the annual stock return (excluding dividends). *ROA* is operating income divided by total assets. *NEW_DEBT* equals 1 if the change in long term debt is greater than the sample median, 0 otherwise. *NEW_SHARES* equals 1 if the change in the number of new shares issued is greater than the sample median, 0 otherwise. *B_M* is book value of equity divided by market value of equity. *SALESGR* is the percentage change in sales. *AF* is the natural log of analyst following reported by IBES as of June 30, 2014. *SIZE* is the natural logarithm of total assets. *IO* is the institutional ownership percentage on June 30, 2014. *LEV* is total liabilities divided by total assets. *CAR* is cumulative abnormal return over one (t+1) or two (t+2) calendar years starting August 1, 2014. *TOBINSQ* is the market value of equity plus total assets less book value of equity, divided by total assets measured at the end of one (t+1) or two (t+2) fiscal years starting after July, 2014. *, **, *** denote two-tailed significance at the 0.10, 0.05 and 0.01 levels, respectively.

Panel A: Stock Recommendations for Selective and Non-Selective Disclosers						
	Means			Medians		
	SEL_DISC = 1 N=137	*SEL_DISC* = 0 N=127	Difference	*SEL_DISC* = 1 N=137	*SEL_DISC* = 0 N=127	Difference
REC_Incl	2.32	2.62	-0.30***	2.27	2.57	-0.30***
REC_Excl	2.79	2.22	0.57***	2.75	2.03	0.72***
Panel B: Explanatory Variables						
			Performance Incentives			
RET	0.3007	0.2411	0.0599	0.4244	0.3513	0.0731*
ROA	0.1208	0.1172	0.0036	0.1091	0.0945	0.0146
			Financing Incentives			
NEW_DEBT	0.547	0.417	0.130**	1	0	1**
NEW_SHARES	0.4599	0.4961	-0.0362	0	0	0
			Quality of Information Environment			
B_M	0.3258	0.3947	-0.0689**	0.3094	0.3257	-1.63
SALESGR	0.0348	0.0027	0.0321	0.0313	0.0429	-0.0116
AF	2.817	2.818	-0.001	2.833	2.833	0.00
SIZE	9.42	9.56	-0.14	9.33	9.51	-0.18
			External Monitoring Mechanisms			
IO	0.6689	0.6879	-1.90	0.6892	0.6987	-0.0095
LEV	0.5675	0.6141	-0.0466*	0.5663	0.5839	-0.0176
Panel C: Future Performance						
CAR t+1	-0.0009 (N=132)	-0.0598 (N=124)	0.0589	0.0526 (N=132)	0.0990 (N=124)	-0.0464
CAR t+2	0.0185 (N=132)	-0.0225 (N=124)	0.0410	0.0796 (N=132)	0.0808 (N=124)	-0.0012
TOBINSQ t+1	2.46 (N=136)	2.29 (N=126)	0.17	2.01 (N=136)	1.89 (N=126)	0.12*
TOBINSQ t+2	2.33 (N=130)	2.13 (N=121)	0.20	1.90 (N=130)	1.70 (N=121)	0.20*

Table 4
Association of Selective and Non-Selective Disclosers with Firm-Specific Variables

This table presents logistic regression results using the sample of disclosers. Unless otherwise stated, variables are measured at the last fiscal year end preceding July, 2014. *SEL_DISC* equals 1 if the mean recommendation of all excluded analysts from firm websites is less favorable than the mean recommendation of included analysts. *RET* is the annual stock return (excluding dividends). *ROA* is operating income divided by total assets. *NEW_DEBT* equals 1 if the change in long term debt is greater than the sample median, 0 otherwise. *NEW_SHARES* equals 1 if the change in the number of new shares issued is greater than the sample median, 0 otherwise. *B_M* is book value of equity divided by market value of equity. *SALESGR* is the percentage change in sales. *AF* is the natural log of analyst following reported by IBES as of June 30, 2014. *SIZE* is the natural logarithm of total assets. *IO* is the institutional ownership percentage on June 30, 2014. *LEV* is total liabilities divided by total assets. p-values are shown in parentheses underneath the coefficient estimates. *, **, *** denote one-tailed significance for independent variables (two-tailed significance for the intercept) at the 0.10, 0.05 and 0.01 levels, respectively.

	Expected Coefficient Sign	Dependent Variable = *SEL_DISC*
Intercept	?	-5.498** (0.04)
Performance Incentives		
RET	-	0.318 (0.75)
ROA	-	-4.154** (0.04)
Financing Incentives		
NEW_DEBT	+	0.838*** (0.01)
NEW_SHARES	+	-0.164 (0.72)
Quality of Information Environment		
B_M	-	-2.213*** (0.01)
SALESGR	+	0.318 (0.25)
AF	-	-0.294 (0.24)
SIZE	-	-0.128 (0.23)
External Monitoring Mechanisms		
IO	-	-3.085*** (0.01)
LEV	-	-1.921*** (0.01)
Industry Effects		Yes
Number of Observations		264
R-Square (rescaled)		0.188

Table 5
Association of Selective and Non-Selective Disclosers with Future Performance

This table presents OLS regression results using the sample of disclosers. Unless otherwise stated, variables are measured at the last fiscal year end preceding July, 2014. The dependent variables are *CAR* and *TOBINSQ*. *CAR* is cumulative abnormal return over one (t+1) or two (t+2) calendar years starting August 1, 2014. *TOBINSQ* is the market value of equity plus total assets less book value of equity, divided by total assets measured at the end of one (t+1) or two (t+2) fiscal years starting after July, 2014. *SEL_DISC* equals 1 if the mean recommendation of all excluded analysts from firm websites is less favorable than the mean recommendation of included analysts. *SIZE* is the natural logarithm of total assets. *B_M* is book value of equity divided by market value of equity. *SALESGR* is the percentage change in sales. *RET* is the annual stock return (excluding dividends). *LEV* is total liabilities divided by total assets. *LAMBDA* is the inverse Mills ratio computed from the logistic regression model in table 4. p-values are shown in parentheses underneath the coefficient estimates. *, **, *** denote two-tailed significance at the 0.10, 0.05 and 0.01 levels, respectively.

Dependent Variable	*CAR*		*TOBINSQ*	
	t+1	t+2	t+1	t+2
Intercept	0.401	0.776**	7.962***	6.835***
	(0.14)	(0.05)	(0.01)	(0.01)
SEL_DISC	-0.196*	-0.360**	-0.632*	-1.015***
	(0.08)	(0.03)	(0.09)	(0.01)
SIZE	-0.007	-0.043	-0.532***	-0.396***
	(0.77)	(0.21)	(0.01)	(0.01)
B_M	-0.102	-0.051		
	(0.38)	(0.77)		
SALESGR			0.144	0.011
			(0.58)	(0.97)
RET	-0.321***	-0.500***	0.118	0.052
	(0.01)	(0.01)	(0.64)	(0.84)
LEV	0.047	0.143	0.043	-0.063
	(0.69)	(0.41)	(0.91)	(0.88)
LAMBDA	0.125**	0.205***	0.369**	0.571***
	(0.02)	(0.01)	(0.03)	(0.01)
Industry Effects	Yes	Yes	Yes	Yes
N	256	256	262	251
Adjusted R^2	0.378	0.205	0.314	0.296

Table 6
Earnings Quality of Selective and Non-Selective Disclosers

This table presents industry-adjusted statistics for two measures of earnings quality, *ACCRUALS* and *SMOOTH*. We use our sample firms and the 1-digit SIC code to compute the industry adjusted numbers. *SEL_DISC* equals 1 if the mean recommendation of all excluded analysts from firm websites is less favorable than the mean recommendation of included analysts. *ACCRUALS* is the magnitude of accruals (net income minus operating cash flows) divided by total assets measured at the last fiscal year end preceding July, 2014. *SMOOTH* is the standard deviation of net income divided by the standard deviation of operating cash flows measured over the last four fiscal years ending prior to July, 2014. *, **, *** denote two-tailed significance at the 0.10, 0.05 and 0.01 levels, respectively.

	Means			Medians		
	SEL_DISC = 1	*SEL_DISC* = 0	Difference	*SEL_DISC* = 1	*SEL_DISC* = 0	Difference
ACCRUALS	0.006 (N=137)	-0.008 (N=127)	0.014**	0.002 (N=137)	-0.001 (N=127)	0.003
SMOOTH	-0.181 (N=126)	0.290 (N=117)	-0.471***	-0.446 (N=126)	-0.258 (N=117)	-0.188**

Table 7

Association of Non-Selective Disclosers and Non-Disclosers with Firm-Specific Variables

This table presents logistic regression comparing non-selective disclosers to non-disclosers. Unless otherwise stated, variables are measured at the last fiscal year end preceding July, 2014. *AF_NSDISC* equals 1 if the firm is a non-selective discloser (*SEL_DISC* = 0), 0 if the firm is a non-discloser (*AF_DISC* = 0). *RET* is the annual stock return (excluding dividends). *ROA* is operating income divided by total assets. *NEW_DEBT* equals 1 if the change in long term debt is greater than the sample median, 0 otherwise. *NEW_SHARES* equals 1 if the change in the number of new shares issued is greater than the sample median, 0 otherwise. *B_M* is book value of equity divided by market value of equity. *SALESGR* is the percentage change in sales. *AF* is natural log of analyst following as reported by IBES as of June 30, 2014. *SIZE* is the natural logarithm of total assets. *IO* is the institutional ownership percentage on June 30, 2014. *LEV* is total liabilities divided by total assets. p-values are shown in parentheses underneath the coefficient estimates. *, **, *** denote one-tailed significance for independent variables (two-tailed significance for the intercept) at the 0.10, 0.05 and 0.01 levels, respectively.

	Expected Coefficient Sign	Dependent Variable = *AF_NSDISC*
Intercept	?	-2.127 (0.35)
Performance Incentives		
RET	-	-0.207 (0.31)
ROA	-	0.048 (0.51)
Financing Incentives		
NEW_DEBT	+	-0.267 (0.82)
NEW_SHARES	+	-0.157 (0.71)
Quality of Information Environment		
B_M	-	1.586 (0.98)
SALESGR	+	-0.438 (0.73)
AF	-	0.220 (0.76)
SIZE	-	-0.257** (0.05)
External Monitoring Mechanisms		
IO	+	3.796*** (0.01)
LEV	+	2.362*** (0.01)
Industry Effects		Yes
Number of Observations		246
R-Square (rescaled)		0.152

Table 8

Association of Non-Selective Disclosers and Non-Disclosers with Future Performance

This table presents OLS regression results using the sample of disclosers. Unless otherwise stated, variables are measured at the last fiscal year end preceding June 30, 2014. The dependent variables are *CAR* and *TOBINSQ*. *CAR* is cumulative abnormal return over one (t+1) or two (t+2) calendar years starting August 1, 2014. *TOBINSQ* is the market value of equity plus total assets less book value of equity, divided by total assets measured at the end of one (t+1) or two (t+2) fiscal years starting after July, 2014. *AF_NSDISC* equals 1 if the firm is a non-selective discloser (*SEL_DISC* = 0), 0 if the firm is a non-discloser (*AF_DISC* = 0). *SIZE* is the natural logarithm of total assets. *B_M* is book value of equity divided by market value of equity. *SALESGR* is the percentage change in sales. *RET* is the annual stock return (excluding dividends). *LEV* is total liabilities divided by total assets. *LAMBDA* is the inverse Mills ratio computed from the logistic regression model in table 7. p-values are shown in parentheses underneath the coefficient estimates. *, **, *** denote two-tailed significance at the 0.10, 0.05 and 0.01 levels, respectively.

Dependent Variable	*CAR*		*TOBINSQ*	
	t+1	t+2	t+1	t+2
Intercept	0.564**	0.569	8.085***	6.365***
	(0.02)	(0.13)	(0.01)	(0.01)
AF_NSDISC	0.105	0.395**	1.531***	1.439***
	(0.42)	(0.05)	(0.01)	(0.01)
SIZE	-0.044	-0.084**	-0.717***	-0.549***
	(0.11)	(0.04)	(0.01)	(0.01)
B_M	-0.108	0.019		
	(0.35)	(0.91)		
SALESGR			-0.227	-0.271
			(0.39)	(0.29)
RET	-0.191***	-0.406***	0.149	0.271
	(0.01)	(0.01)	(0.50)	(0.22)
LEV	0.039	0.300	0.726*	0.774*
	(0.80)	(0.20)	(0.09)	(0.09)
LAMBDA	-0.060	-0.211**	-0.913***	-0.841***
	(0.38)	(0.04)	(0.01)	(0.01)
Industry Effects	Yes	Yes	Yes	Yes
N	241	241	245	239
Adjusted R^2	0.331	0.161	0.369	0.320