# ARE CRITICS RIGHT ABOUT QUARTERLY EARNINGS GUIDANCE? AN EXAMINATION OF QUARTERLY EARNINGS GUIDANCE AND MANAGERIAL MYOPIA

by

CLAIRE STRATTON QUINTO

# A DISSERTATION

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#### DISSERTATION APPROVAL PAGE

Student: Claire Stratton Quinto

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This dissertation has been accepted and approved in partial fulfillment of the requirements for the Doctor of Philosophy degree in the Department of Accounting by:

Steven Matsunaga Chairperson
Angela Davis Core Member
Kyle Peterson Core Member

Trudy Cameron Institutional Representative

and

Kate Mondloch Interim Vice Provost and Dean of the Graduate School

Original approval signatures are on file with the University of Oregon Graduate School.

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DISSERTATION ABSTRACT

Claire Stratton Quinto

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Title: Are Critics Right About Quarterly Earnings Guidance? An Examination of Quarterly Earnings Guidance and Managerial Myopia

I examine the claim that managers who issue quarterly earnings guidance sacrifice long-term value to enhance short-term performance, i.e., that quarterly earnings guidance encourages myopic behavior. I find that quarterly guiders are more likely to meet quarterly earnings expectations and tend to use more short-term language in their corporate disclosures, supporting the view that quarterly earnings guidance shifts a manager's attention to the short term. However, quarterly earnings guidance does not appear to have a negative impact on a firm's long-term performance. Using an entropy-balanced sample, I find that quarterly guiders outperform non-guiders over the next three and five years across a variety of performance measures. Also inconsistent with the claims of critics, I find no evidence that quarterly earnings guidance is associated with more earnings management or underinvestment. Taken together, my results do not support the view that quarterly earnings guidance leads to managerial myopia. Instead, it appears that among the firms that choose to provide it, the benefits of quarterly earnings guidance outweigh the costs.

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#### **CURRICULUM VITAE**

NAME OF AUTHOR: Claire Stratton Quinto

### GRADUATE AND UNDERGRADUATE SCHOOLS ATTENDED:

University of Oregon, Eugene Southern Utah University, Cedar City

# **DEGREES AWARDED:**

Doctor of Philosophy, Accounting, 2020, University of Oregon Master of Accountancy, 2011, Southern Utah University Bachelor of Science, Accounting, 2009, Southern Utah University

#### AREAS OF SPECIAL INTEREST:

Financial Accounting Corporate Disclosures

# PROFESSIONAL EXPERIENCE:

Graduate Employee, Department of Accounting, University of Oregon, Eugene, Oregon, 2015-2020

Accountant II, City of Boulder, Boulder, Colorado, 2015

Senior Audit Associate/Audit Associate/Audit Intern, Piercy Bowler Taylor & Kern CPAs & Business Advisors, Las Vegas, Nevada, 2010-2013

Tax Intern, HintonBurdick CPAs & Advisors, Cedar City, Utah, 2010

### GRANTS, AWARDS, AND HONORS:

Graduate Teaching Fellowship, Department of Accounting, University of Oregon, 2015-2020

Financial Accounting and Reporting Section Excellence in Reviewing Award, American Accounting Association, 2020

- Robin and Roger Best Research Award, Disclosure Policies in Quarterly Earnings Guidance, Lundquist College of Business, University of Oregon, 2019
- Robin and Roger Best Research Award, CEO of the Year Awards and Financial Disclosure Quality, Lundquist College of Business, University of Oregon, 2019
- Financial Accounting and Reporting Section Doctoral Consortium Fellowship, American Accounting Association, 2019
- Robin and Roger Best Teaching Award, Lundquist College of Business, University of Oregon, 2018
- Robin and Roger Best Teaching Award, Lundquist College of Business, University of Oregon, 2017

Summa cum Laude, Southern Utah University, 2009

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# **CHAPTER I**

#### INTRODUCTION

The practice of issuing quarterly earnings guidance has generated controversy for more than a decade. Whereas economic theory suggests that quarterly earnings guidance can benefit a firm by decreasing information asymmetry (Ajinkya and Gift 1984; Coller and Yohn 1997), signaling high managerial ability (Trueman 1986; Baik, Farber, and Lee 2011), and reducing litigation risk (Skinner 1994; Field, Lowry, and Shu 2005), critics argue that quarterly earnings guidance encourages managers to sacrifice long-term value to meet short-term earnings expectations (e.g., Buffett 2000; Fink 2016). Embodying the latter view, CEOs Warren Buffett and Jamie Dimon write in a recent letter, "... we are encouraging all public companies to consider moving away from providing quarterly earnings-per-share guidance. In our experience, quarterly earnings guidance often leads to an unhealthy focus on short-term profits at the expense of long-term strategy, growth, and sustainability," (Buffett and Dimon 2018). In this study, I provide evidence on the issue by examining whether firms that provide quarterly earnings guidance appear to be more concerned with short-term financial results and exhibit lower long-term performance than their non-guiding counterparts.

Although prominent business leaders have popularized the view that quarterly earnings guidance leads to a myopic focus on short-term performance—and have urged public companies to forgo the practice of providing quarterly earnings guidance based on that view—there is little empirical evidence to support their claims. Houston, Lev, and Tucker (2010) examine the consequences of stopping quarterly earnings guidance and find no evidence that firms that abandon the practice increase their investments in R&D

or capital expenditures. In a related study, Call, Chen, and Miao (2014) find that the provision of quarterly earnings guidance is associated with *less* accrual-based earnings management. Each of these findings is inconsistent with the claim that quarterly earnings guidance leads to managerial myopia. However, the strategies that a myopic manager uses to shift value from the long term to the short term may not be detected by the measures used in these studies. More importantly, it is unclear based on these studies whether the provision of quarterly earnings guidance is value-decreasing in the long term, as prominent business leaders contend.

By definition, managerial myopia exists when a manager sacrifices long-term value to meet short-term goals (Porter 1992). Quarterly earnings guidance, in particular, has been described as leading to an "unhealthy" focus on meeting short-term earnings expectations (e.g., Buffett 2000; Buffett and Dimon 2018). Critics argue that this short-term focus leads to a value-decreasing allocation of resources. Accordingly, to improve our understanding of the relationship between quarterly earnings guidance and managerial myopia, I examine (1) whether quarterly earnings guidance heightens a manager's focus on short-term earnings, and (2) whether quarterly earnings guidance detracts from a firm's long-term performance. In supplementary tests, I also examine the claims of prominent business leaders that quarterly earnings guidance increases earnings management and underinvestment. My research therefore provides evidence on the effects of quarterly earnings guidance that is relevant to regulators, investors, and the academic research community.

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<sup>&</sup>lt;sup>1</sup> For instance, Buffett and Dimon (2018) write, "[Quarterly guiders] frequently hold back on technology spending, hiring, and research and development to meet quarterly earnings forecasts that may be affected by factors outside the company's control, such as commodity-price fluctuations, stock-market volatility, and even the weather."

The provision of quarterly earnings guidance could, in theory, have opposing effects on a manager's focus and a firm's long-term performance. On the one hand, quarterly earnings guidance could lead to managerial myopia, as is argued by critics of the practice. A manager who issues quarterly earnings guidance must expend considerable time and resources to generate a high-quality forecast (Hui and Matsunaga 2015). The resulting fixation on quarterly earnings could implicitly shift a manager's focus to the short term, at the cost of developing profitable long-term strategies (Ocasio 1997). In addition, managers maintain that the consequences of missing the analyst consensus forecast are worse when they issue earnings guidance (Graham, Harvey, and Rajgopal 2005). There is also evidence that inaccurate earnings guidance increases the probability of CEO turnover (Lee, Matsunaga, and Park 2012) and lowers CEO compensation (Hui and Matsunaga 2015). As a result of these agency conflicts, quarterly guiders may be more willing to take actions to avoid missing short-term earnings expectations, even when those actions entail a loss of firm value (e.g., Buffett and Dimon 2018).

On the other hand, quarterly earnings guidance could alleviate managerial myopia. By allowing a manager to influence analysts' forecasts of the firm's future earnings (Matsumoto 2002), quarterly earnings guidance may relieve the pressure on a manager to meet analysts' (unguided) short-term earnings expectations. For instance, using quarterly earnings guidance to walk the analyst consensus forecast down to a beatable level may enable a manager to apply her limited attention to developing strategies that improve the firm's long-term performance, rather than managing the firm's quarterly earnings to meet analysts' expectations. Thus, managers who issue quarterly

earnings guidance may actually be more focused on long-term earnings and report better long-term performance.

It is also possible that quarterly earnings guidance could increase a manager's focus on short-term financial results without detracting from the firm's long-term value. For example, even if quarterly earnings guidance leads a manager to fixate on the firm's quarterly earnings, the benefits that the practice adds to firm value may still outweigh the costs. There is evidence that earnings guidance decreases information asymmetry (e.g., Ajinkya and Gift 1984), signals high managerial ability (e.g., Trueman 1986), and reduces litigation risk (e.g., Skinner 1994). Each of these effects should contribute positively to a firm's long-term performance. By reducing information asymmetry, quarterly earnings guidance may decrease a firm's cost of capital (Diamond and Verrecchia 1991; Lambert, Leuz, and Verrecchia 2007). This could improve a firm's long-term performance by expanding the set of profitable investment opportunities available to the firm. Signaling high managerial ability could likewise improve a firm's long-term performance by enabling the firm to attract capital at a lower rate. Last, reducing litigation risk could improve a firm's long-term performance by preventing expensive lawsuits and settlements, and enabling the firm to take on riskier projects. Quarterly earnings guidance may therefore induce a short-term focus while simultaneously *improving* the firm's long-term performance.

To examine whether quarterly guiders exhibit signs of managerial myopia, I use data from 2001 to 2018 to generate a sample of 62,856 firm-quarter observations that spans the period from 2003 to 2015. I use entropy balancing to improve the similarity of

the covariate distributions between the quarterly guiders and non-guiders in my sample.<sup>2</sup> This procedure does not resolve self-selection bias that arises from unobservable differences; however, similar to matching methods, it should address self-selection bias that is driven by observable factors, and reduce model dependency in the OLS regressions that I use to test my hypotheses (Hainmueller 2012; Shipman, Swanquist, and Whited 2017). After reweighting my sample via entropy balancing, quarterly guiders and non-guiders are statistically indistinguishable across a broad array of firm characteristics, including size, analyst following, and institutional ownership. To further reduce endogeneity concerns, I focus my analyses on firms that provide earnings guidance for a minimum of twelve consecutive quarters (quarterly guiders), and firms that do not provide earnings guidance for a minimum of twelve consecutive quarters (non-guiders). To the extent that these firms establish their earnings guidance policies in advance (Quinto, Matsunaga, and Tang 2019), their past decision to issue quarterly earnings guidance is decoupled from events in the current quarter. Collectively, this research design should help to mitigate concerns that my results are driven by correlated omitted variables.<sup>3</sup>

I begin by investigating the claim that quarterly earnings guidance increases a manager's focus on short-term performance. Consistent with this view, I find that relative

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<sup>&</sup>lt;sup>2</sup> Entropy balancing is a preprocessing procedure that involves a reweighting scheme. Specifically, a scalar weight is assigned to each observation such that differences in the covariate distributions of treatment and control groups are reduced or eliminated over a (potentially large) set of variables (Hainmueller 2012).

<sup>&</sup>lt;sup>3</sup> As a robustness test, I repeat my analyses using a propensity-score matched sample of quarterly guiders and non-guiders to examine whether my results are sensitive to the use of entropy balancing. I also estimate difference-in-difference specifications to examine the impact of *initiating* quarterly earnings guidance. This alternative specification controls for factors that are stable within a firm over time, but it is subject to biases generated by the economic factors associated with the decision to initiate quarterly earnings guidance, and it is limited to a small sample of initiators.

to non-guiders, quarterly guiders are more likely to meet the *final* analyst consensus forecast than the *initial* analyst consensus forecast for the quarter. Quarterly guiders are also more likely than non-guiders to just *meet* the final analyst consensus forecast than to just *miss* it. Together, these results suggest that quarterly guiders are more likely to take actions that increase the likelihood of meeting short-term expectations, which is consistent with a greater focus on quarterly financial results. I also find that quarterly guiders tend to use more short-term language in their corporate disclosures. Specifically, using Python to analyze the language in firms' 10-K filings and conference call transcripts, I find that the 10-Ks and conference calls of quarterly guiders include a higher ratio of short-term words to long-term words (Brochet, Loumioti, and Serafeim 2015). Therefore, my textual analysis supports an association between the provision of quarterly earnings guidance and greater attention to short-term performance.

Nevertheless, my results do not support the claim that the provision of quarterly earnings guidance has a negative impact on a firm's long-term performance. I find that quarterly guiders outperform non-guiders, both over the next three and five years, with regard to their size- and industry-adjusted returns, industry-adjusted asset turnover, and industry-adjusted operating cash flows. The differences in industry-adjusted return on assets and industry-adjusted sales growth between quarterly guiders and non-guiders are statistically insignificant. Thus, my results do not support the claim that quarterly earnings guidance leads to a sacrifice of long-term value. Instead, they are more consistent with the view that quarterly earnings guidance benefits a firm's long-term performance by reducing information asymmetry, signaling managerial talent, and decreasing litigation risk (e.g., Ajinkya and Gift 1984; Trueman 1986; Skinner 1994).

Quarterly earnings guidance could also improve a firm's long-term performance to the extent that it enables the manager to meet short-term earnings expectations without engaging in value-decreasing earnings management. Specifically, issuance of quarterly earnings guidance could provide the manager with the opportunity to walk analysts' earnings expectations down to a beatable level (Matsumoto 2002), thereby enabling the manager to meet quarterly earnings expectations without resorting to strategic management of the firm's earnings.

In additional analyses, I document evidence that is consistent with several of these explanations. First, I find that the positive relationship between quarterly earnings guidance and long-term performance is stronger when there is greater analyst forecast dispersion, suggesting that firms with higher information asymmetry benefit more from the provision of quarterly earnings guidance. I also find that firms with higher-ability managers benefit more from the provision of quarterly earnings guidance, as the relationship between quarterly earnings guidance and long-term performance is stronger when managers issue earnings guidance that is more accurate (Baik et al. 2011). I do not find evidence of a significant difference in the effect of quarterly earnings guidance on long-term performance based on a firm's inclusion in a high litigation-risk industry (Francis, Philbrick, and Schipper 1994; Kim and Skinner 2012). These cross-sectional results are consistent with the notion that quarterly earnings guidance improves a firm's long-term performance by reducing information asymmetry and signaling high managerial ability, thereby lowering the firm's cost of capital.

Second, supporting the view that quarterly earnings guidance reduces the need to manage earnings, I find that quarterly guiders report more discretionary R&D expenses

than non-guiders. The difference in discretionary SG&A expenses between quarterly guiders and non-guiders is statistically insignificant. Unlike Call et al. (2014), I do not find a significant difference in the magnitudes of discretionary accruals between quarterly guiders and non-guiders. Overall, these results tend to refute the claim that quarterly guiders are more likely to engage in earnings management (e.g., Buffett 2000). I also investigate the claim that quarterly guiders are more likely to underinvest (e.g., Buffett and Dimon 2018). I find evidence that quarterly guiders are *less* likely to underinvest in R&D, whereas there is no significant difference in underinvestment in capital assets or M&A between quarterly guiders and non-guiders. These results suggest that quarterly guiders may be able to invest more freely as a result of their ability to influence the analyst consensus forecast. Collectively, these additional analyses insinuate that quarterly guiders may also perform better in the long term because they are able to meet short-term earnings expectations without relying on real earnings management.

Last, I perform tests to examine whether quarterly earnings guidance is detrimental to long-term performance when it coincides with other short-term pressures. I do not find a significant difference in the impact of quarterly earnings guidance on long-term performance based on (1) transient institutional ownership, (2) analyst coverage, or (3) management's stock-based compensation. Overall, my results suggest that these factors are unlikely to diminish the benefits of quarterly earnings guidance.

Taken as a whole, my findings are inconsistent with the view that quarterly earnings guidance leads a manager to sacrifice long-term value to enhance short-term performance. Although I find evidence that quarterly earnings guidance increases a manager's focus on short-term earnings, there is little evidence that the practice detracts

from a firm's long-term performance. In fact, my results suggest that, on average, firms that choose to provide quarterly earnings guidance generate *better* performance in the long term. The idea that quarterly earnings guidance is value-increasing among the firms that choose to provide it is consistent with the theory of voluntary disclosure proposed by Dye (2001). He describes voluntary disclosure as, "... a special case of game theory with the following central premise: any entity contemplating making a disclosure will disclose information that is favorable to the entity, and will not disclose information unfavorable to the entity," (Dye 2001, p. 184).

My results are important because prominent business leaders' claims that quarterly earnings guidance leads to managerial myopia have received significant attention in the business press, and appear to be accepted as conventional wisdom by journalists and practitioners (e.g., Pearlstein 2018). A better understanding of the link between quarterly earnings guidance and managerial myopia is imperative in light of recent policy debates (Rajgopal 2019). In 2018, President Donald Trump proposed that the reporting of quarterly earnings be abolished in the United States, spurring a review by the SEC of quarterly reporting and quarterly earnings guidance (Rubin 2018; Henderson and Edgecliffe-Johnson 2019). Evidence that quarterly earnings guidance appears *not* to lower long-term performance is therefore timely, and has the potential to influence the decisions of securities regulators.

My research also contributes to the earnings guidance literature (Hirst, Koonce, and Venkataraman 2008). While a number of studies investigate the benefits of earnings guidance (e.g., Ajinkya and Gift 1984; Trueman 1986; Skinner 1994; Williams 1996), there is relatively little research that investigates its costs. By providing empirical

evidence on the existence of managerial myopia among quarterly guiders, my study provides insights for researchers who seek to understand the consequences of quarterly earnings guidance. Research in this area is becoming increasingly relevant, as the frequency with which firms issue quarterly earnings guidance appears to be on the rise (Grocer 2018).

Finally, my study contributes to an emerging literature related to the real effects of corporate disclosures (Kanodia and Sapra 2016). This research explores how the public disclosure of information (that is already known privately by a manager) affects her decision-making. Thus, by examining whether issuance of quarterly earnings guidance leads a manager to exchange long-term value for short-term performance, my research adds to this literature by extending our understanding of the ways in which corporate disclosures influence the allocation of a firm's resources.

As is common with empirical research, my study is subject to limitations. Most importantly, I am unable to observe the counterfactual of how a firm would have performed had the manager not decided to provide quarterly earnings guidance. Care must therefore be taken in interpreting my results. I also cannot say how issuance of quarterly earnings guidance would affect the firms that do not choose to provide it; for example, my results do not suggest that all firms should be required to provide quarterly earnings guidance because it would improve their long-term performance. However, I am able to document how U.S. firms that choose to issue quarterly earnings guidance behave relative to an observably similar group of non-guiders. In my main tests, I use entropy balancing to ensure that quarterly guiders and non-guiders are comparable with regard to their observable features. Cross-sectional tests corroborate my primary findings.

Robustness tests reveal that, overall, my inferences remain unchanged when I employ a propensity-score matching method, or when I perform a difference-in-difference analysis around instances when firms *initiate* quarterly earnings guidance. Therefore, despite its limitations, my research should provide novel evidence that informs the debate surrounding quarterly earnings guidance.

#### **CHAPTER II**

#### PRIOR LITERATURE AND HYPOTHESIS DEVELOPMENT

#### **Prior Literature**

Stein (1989) develops a model of myopic corporate behavior, in which a manager derives utility from both current and future earnings due to her compensation plan. There is an increasing marginal cost of borrowing against future earnings to boost the firm's short-term profits, as it is assumed that the least value-decreasing strategies will be pursued first to increase income in the current period. When borrowing costs are zero, the firm's long-term value is maximized. Stein (1989) predicts that a utility-maximizing manager will shift value from the long term to the short term when there is capital market pressure on current-period earnings (e.g., a takeover threat). To do so, she increases the investment hurdle rate and forgoes profitable investment opportunities. For instance, she may expend fewer resources to develop customer loyalty. The model of Stein (1989) highlights the idea that managerial myopia stems from an agency conflict, where the actions that a manager rationally takes to maximize her utility are inconsistent with the actions that maximize firm value. Applying the model of Stein (1989) to my setting, the question becomes whether quarterly earnings guidance constitutes a source of short-term pressure that leads a manager to derive greater utility from current-period earnings. If so, it should increase a manager's willingness to sacrifice long-term value for short-term financial results.

There are several studies that explore the relationship between quarterly earnings guidance and managerial myopia. First, Houston et al. (2010) examine a sample of firms that discontinue the practice of providing quarterly earnings guidance. The authors argue

that if quarterly earnings guidance leads to managerial myopia, then firms should increase their investments in capital assets and R&D after suspending the practice. However, counter to this prediction, the authors find no evidence that firms increase their investments in the two years after giving up quarterly earnings guidance. Instead, Houston et al. (2010) find evidence of a deterioration in the information environments of quarterly guiders after earnings guidance is discontinued. Specifically, they find that guidance "stoppers" experience a decrease in analyst coverage, an increase in analyst forecast dispersion, and an increase in analyst forecast errors. In a related study, Chen, Matsumoto, and Rajgopal (2011) document a significantly negative market reaction to the cessation of quarterly earnings guidance, which suggests that investors view discontinuance of the practice as value-decreasing. Taken together, the findings of Houston et al. (2010) and Chen et al. (2011) do not support the claim that quarterly earnings guidance leads to managerial myopia.

Call et al. (2014) contribute to the debate by examining whether quarterly guiders engage in more accrual-based earnings management. Using a propensity-score matched sample of guiders and non-guiders, the authors find that quarterly guiders record fewer discretionary accruals and discretionary revenues than non-guiders. They also find that a firm's discretionary accruals and discretionary revenues decrease with the frequency that a firm issues quarterly earnings guidance. The results of Call et al. (2014) are therefore inconsistent with prominent business leaders' claims that quarterly earnings guidance promotes the use of accrual-based earnings management (e.g., Buffett 2000).

Although these existing studies provide evidence on the link between quarterly earnings guidance and managerial myopia, they do not directly address whether quarterly

guiders sacrifice long-term value to meet short-term earnings expectations. It is therefore unclear whether quarterly earnings guidance is problematic in that it detracts from a firm's long-term performance, as is asserted by critics. In addition, these studies may not find evidence of managerial myopia if managers shift resources from long-term growth to short-term profitability using strategies that are not detected by traditional earnings management measures. To this point, Stein (1989, p. 664) predicts, "It is precisely those investments that are most easily and accurately summarized on an accounting statement—e.g., expenditures on plant and equipment—which are least likely to be sacrificed in the quest for higher stock prices." To expand our understanding of the relationship between quarterly earnings guidance and managerial myopia, I therefore consider how the provision of quarterly earnings guidance impacts a firm's long-term performance, as well as a manager's focus on short-term financial results. 4.5

# **Hypothesis Development**

Prior literature suggests that earnings guidance has the potential to yield a number of benefits for a firm and its managers. Ajinkya and Gift (1984) find that earnings

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<sup>&</sup>lt;sup>4</sup> Several unpublished studies report additional evidence that is inconsistent with the claim that quarterly earnings guidance leads to managerial myopia; however, these studies are subject to the same limitations as other prior research. They include Acito (2011), who finds no statistical relation between quarterly earnings guidance and accounting restatements; Chen, Huang, and Lao (2015), who find that quarterly earnings guidance is associated with more innovation (more patents and patent citations); and Call, Chen, Esplin, and Miao (2016), who find no statistical difference in investment levels between firms that issue short-term earnings guidance and firms that issue long-term earnings guidance. One notable exception is Cheng, Subramanyam, and Zhang (2005), who find support for the claim that quarterly earnings guidance leads to managerial myopia. The authors report that relative to "infrequent" guiders, "frequent" guiders invest less in R&D, meet or beat the analyst consensus forecast more frequently, and have lower long-term earnings growth rates. However, their sample is limited to the period of 2001 to 2003, when fewer firms provided quarterly earnings guidance and the earnings guidance databases contained more errors (Chuk, Matsumoto, and Miller 2013).

<sup>&</sup>lt;sup>5</sup> Kim, Su, and Zhu (2017) take a somewhat different approach by examining whether quarterly earnings guidance leads to short-termism among *investors*. The authors find evidence that stopping the practice of providing quarterly earnings guidance reduces investors' short-termism, e.g., their results suggest that investors put more weight on long-term earnings in firm valuations after the cessation of quarterly earnings guidance.

guidance aligns the market's earnings expectations with those of the manager, as the market responds positively (negatively) to earnings guidance that contains good (bad) news. In a related study, Coller and Yohn (1997) find evidence that earnings guidance decreases a firm's bid-ask spread. These studies suggest that by aligning the market's earnings expectations with those of the manager, earnings guidance reduces information asymmetry. Earnings guidance may therefore increase firm value by lowering the firm's cost of capital, either by improving the liquidity of the firm's stock (Diamond and Verrecchia 1991), or by decreasing the expected covariance between the firm's cash flows and market-wide cash flows (Lambert et al. 2007).

Trueman (1986) provides a different view, arguing that because the firm's actual earnings are reported at the end of the period, the temporary corrections of mispricing provided by earnings guidance may not have a significant effect on a firm's cost of capital. Instead, he proposes that managers issue earnings guidance to signal high managerial ability. To generate an accurate forecast of the firm's future earnings, a manager must have the ability to accurately anticipate future economic events and assess their impact on the firm's earnings. The same ability is fundamental to successful management of the firm's operations. Thus, issuance of earnings guidance may function as a credible signal of managerial ability, as a low-ability manager is unable to mimic the signal. Trueman (1986) concludes that quarterly earnings guidance may therefore be issued to increase firm value through its signaling capabilities.

Skinner (1994) predicts that *bad-news* earnings guidance is beneficial in that it reduces litigation costs by revealing negative information prior to the earnings announcement date. This prevents large declines in stock price on earnings

announcement days (which could prompt lawsuits), and makes it more difficult for a plaintiff to argue that the manager withheld unfavorable information from investors.

Consistent with his prediction, Skinner (1994) finds that earnings guidance precedes large negative earnings announcements about 25 percent of the time, whereas earnings guidance precedes other earnings announcements less than ten percent of the time. This evidence suggests that earnings guidance can increase firm value by warding off expensive lawsuits and settlements. It may also enable the firm to pursue riskier projects, as there is less concern that a negative outcome will trigger litigation.

Despite these potential benefits, issuance of quarterly earnings guidance remains highly controversial. Prominent business leaders have urged public companies to discontinue the practice, asserting that quarterly earnings guidance leads managers to sacrifice long-term value in exchange for short-term profits (e.g., Buffett 2000; Fink 2016). It could be the case that quarterly earnings guidance increases a manager's focus on short-term financial results at the cost of long-term value, as issuance of a forecast requires a substantial investment of time and resources (Hui and Matsunaga 2015). The effort a manager dedicates to producing a high-quality forecast could increase her interest in the firm's short-term performance, and contemporaneously decrease the attention she devotes to crafting profitable long-term strategies. Such a shift in focus may therefore detract from the firm's long-term performance. This is consistent with research in the management literature, which describes a manager's focus as being selective, where attention to one activity necessarily subtracts from the attention available for another (e.g., Ocasio 1997). Quarterly guiders may also be more likely to give up long-term value to meet short-term earnings expectations because they believe that the consequences of

missing the analyst consensus forecast are worse when they issue earnings guidance. For example, executives surveyed by Graham et al. (2005) indicate that they are more likely to be questioned about missing the analyst consensus forecast during the conference call when they have issued earnings guidance. Last, Lee et al. (2012) and Hui and Matsunaga (2015) find that managers face career concerns when the firm's actual earnings deviate from their earnings guidance. Specifically, Lee et al. (2012) find a positive relationship between management forecast errors and CEO turnover when the firm's performance is poor, and Hui and Matsunaga (2015) find a positive relationship between management forecast accuracy and CEO compensation. This suggests that managers can bear substantial costs when they issue inaccurate earnings guidance, including turnover and lower pay. These career concerns may contribute to agency conflicts where quarterly guiders are overly focused on meeting short-term earnings expectations.

However, one could also argue that quarterly earnings guidance *alleviates* managerial myopia. Quarterly guiders tend to be large firms with sizeable analyst followings and high institutional ownership (e.g., Ajinkya, Bhojraj, and Sengupta 2005). Such firms are likely to be under considerable pressure to meet short-term earnings expectations. Thus, the ability to issue quarterly earnings guidance could provide the manager with the opportunity to walk earnings expectations down to a beatable level (Matsumoto 2002), thereby enabling the manager to meet quarterly earnings expectations *without* resorting to strategic management of the firm's earnings. Quarterly earnings guidance may therefore improve a firm's long-term performance to the extent that it enables the manager to meet short-term earnings expectations without engaging in value-decreasing earnings management. It may also allow management to adopt more of a long-

term focus, as the managers of quarterly guiders may have greater latitude to take valuemaximizing actions without concern that those actions will cause the firm to miss shortterm earnings expectations.

It is also possible that quarterly earnings guidance could increase a manager's attention to short-term financial results while also *improving* the firm's long-term performance. This could occur if quarterly earnings guidance increases a manager's focus on short-term performance, but the benefits that the practice adds to firm value exceed the costs. As discussed in the preceding paragraph, quarterly earnings guidance may improve a firm's long-term performance by enabling the manager to meet short-term earnings expectations without indulging in value-decreasing earnings management. In addition, quarterly earnings guidance may improve long-term performance due to its capacity to reduce information asymmetry, signal high managerial ability, and decrease litigation risk (e.g., Ajinkya and Gift 1984; Trueman 1986; Skinner 1994). Reducing information asymmetry or signaling high managerial ability could improve long-term performance by allowing the firm to attract capital at a lower rate, thereby expanding the firm's set of profitable investment opportunities. Decreasing litigation risk may also improve long-term performance by lowering the firm's litigation-related expenses and enabling the firm to take on riskier projects. Due to these benefits, the choice to issue quarterly earnings guidance could be value-enhancing, even if the practice leads to a greater focus on short-term earnings.

These arguments lead me to delineate two hypotheses related to quarterly earnings guidance and managerial myopia. First, I hypothesize that there is no difference in the extent to which quarterly guiders and non-guiders focus on short-term earnings.

Second, I hypothesize that there is no difference in long-term performance between quarterly guiders and non-guiders. I state each of my hypotheses in null form because the preceding arguments illustrate that the relationship between quarterly earnings guidance and managerial myopia is theoretically ambiguous.

H1: There is no difference in the extent to which quarterly guiders and non-guiders focus on short-term earnings.

H2: There is no difference in long-term performance between quarterly guiders and non-guiders.

#### **CHAPTER III**

#### RESEARCH DESIGN

# **Sample Selection**

My sample selection procedure is summarized in Table 1. I begin with 306,701 firm-quarter observations obtained from the merged CRSP-Compustat database, spanning the period from 2003 to 2015.<sup>6</sup> CRSP supplies stock return data and Compustat provides accounting data. I obtain analyst and management forecast data from the I/B/E/S database, and I collect institutional ownership data from Thomson Reuters. Utility firms (SIC 4900-4949) and financial services firms (SIC 6000-6999) are excluded from my sample because the earnings management incentives for these types of firms are likely to differ from those for other firms (e.g., Call et al. 2014). I also exclude observations that are missing variables necessary to perform my tests.

As a final exclusion criterion, I remove from my sample all observations that do not satisfy either my "quarterly guider" or "non-guider" definitions, resulting in an unbalanced panel dataset consisting of 62,856 firm-quarter observations. I define a "quarterly guider" as a firm that provides earnings guidance for every quarter over a minimum of twelve consecutive quarters. Conversely, a "non-guider" is a firm that does not provide earnings guidance for any quarter over a minimum of twelve consecutive quarters. Effectively, this eliminates firms that provide quarterly earnings guidance sporadically (for some quarters but not others) from my sample. Quinto et al. (2019) find

<sup>6</sup> I require additional data from 2001 to 2003 and 2016 to 2018 to identify quarterly guiders and non-guiders, estimate control variables, and measure long-term performance. Data prior to 2001 is omitted from my sample to avoid the influence of Regulation Fair Disclosure, which was passed in October 2000.

<sup>&</sup>lt;sup>7</sup> In recent years, about 75 percent of quarterly earnings guidance is provided by firms that issue earnings guidance for every quarter over a minimum of twelve consecutive quarters (Quinto et al. 2019); thus, I retain the majority of quarterly earnings guidance observations by imposing this restriction.

evidence that some firms follow predetermined earnings guidance policies, while other firms make individual earnings guidance decisions on a quarter-to-quarter basis.

Focusing on the former group is advantageous in my setting because, for these firms, the decision to issue quarterly earnings guidance is largely decoupled from the current quarter. This helps to reduce the risk that my results are driven by quarter-specific earnings guidance incentives. For example, Quinto et al. (2019) find that sporadic quarterly guiders tend to issue forecasts in quarters when the firm's actual earnings fall short of analysts' initial expectations. One could therefore argue that sporadic quarterly guiders are more likely to underinvest in earnings guidance quarters because they tend to issue earnings guidance in the quarters when performance is poor—not because quarterly earnings guidance makes them myopic. It is more difficult to make such arguments with respect to firms that issue earnings guidance for every quarter, as it suggests that their earnings guidance decisions are less sensitive to conditions that prevail in a particular quarter.

If quarterly earnings guidance leads to managerial myopia, the effect should be stronger for firms that provide regular earnings guidance for every quarter. An executive interviewed by Graham et al. (2005) likens the establishment of such a disclosure policy to "getting on a treadmill" that you cannot get off (Graham et al. 2005, p. 59).

Consequently, the managers of firms that issue earnings guidance for every quarter are likely to feel compelled to issue forecasts even when earnings are highly uncertain, and be more willing to sacrifice long-term value to meet short-term earnings expectations as a result. A greater focus on short-term earnings would allow such managers to enhance their personal reputations (Lee et al. 2012; Hui and Matsunaga 2015) and reduce pressure

from analysts (Graham et al. 2005). In addition, issuance of earnings guidance for every quarter should consume more of a manager's attention than issuance of sporadic quarterly earnings guidance, leaving less of the manager's attention available other purposes, such as long-term planning. Thus, I consider my analyses to focus on the firms that are most subject to the claims of critics. This should increase the power of my tests to link the provision of quarterly earnings guidance to managerial myopia.<sup>8</sup>

# **Entropy Balancing**

Prior research shows that quarterly guiders differ from non-guiders along a number of dimensions. For example, quarterly guiders tend to be larger, more profitable firms with greater institutional ownership and analyst following (e.g., Ajinkya et al. 2005). Thus, any differences in myopic behavior between quarterly guiders and non-guiders could reflect factors that jointly determine the firm's provision of earnings guidance and the economic outcomes of interest. To reduce this bias, I apply entropy balancing to my sample of quarterly guiders and non-guiders. While this procedure does not correct for unidentified factors that contribute to a firm's earnings guidance decisions, it should reduce the influence of observable factors that are associated with the provision of quarterly earnings guidance, and make my results less sensitive to research design choices, i.e., reduce model dependency (Hainmueller 2012). In this sense, entropy balancing is similar to matching procedures (Shipman et al. 2017).

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<sup>&</sup>lt;sup>8</sup> In Appendix B, I present descriptive statistics that compare (1) quarterly guiders to sporadic quarterly guiders, and (2) quarterly guiders to non-guiders to illustrate the differences in firm fundamentals between the three groups of firms. The table generally depicts a gradient where the mean for sporadic quarterly guiders falls between the mean for quarterly guiders and the mean for non-guiders. For example, on average, there are about ten analysts following quarterly guiders, eight analysts following sporadic quarterly guiders, and six analysts following non-guiders.

<sup>&</sup>lt;sup>9</sup> Because quarterly guiders are significantly different from non-guiders across many fundamental firm characteristics, it is difficult to specify effective matching criteria. In contrast, entropy balancing enables

Hainmueller (2012) describes entropy balancing as a method of obtaining covariate balance between treatment and control observations. By reweighting the sampled observations, entropy balancing can be used to reduce or eliminate differences between treatment and control observations across a wide array of variables. Specifically, a set of scalar weights is chosen such that differences in the covariate distributions between quarterly guiders and non-guiders are minimized, where the weights are kept as close as possible to a set of uniform base weights to preserve efficiency (Hainmueller 2012).

I balance my sample of quarterly guiders and non-guiders on the first, second, and third moments of each of the firm characteristics listed in Panel A of Table 2, as well as industry (2-digit SIC code) and year-quarter. In addition to firm fundamentals such as market value of equity, book-to-market ratio, and leverage, I balance on factors that prior research has shown to predict the provision of earnings guidance. First, I include the bid-ask spread and analyst forecast dispersion because there is evidence that earnings guidance is issued to reduce information asymmetry (e.g., Coller and Yohn 1997). I include return volatility and an indicator variable for high-litigation risk industries because prior research suggests that earnings guidance is issued to lower litigation risk (e.g., Skinner 1994). I also include analyst following and institutional ownership because Ajinkya et al. (2005) show that these factors are positively related to the provision of earnings guidance. I partition a firm's institutional ownership by transient, quasi-indexer, and dedicated institutional investors because there is evidence that disclosure quality increases (decreases) with transient and quasi-indexer (dedicated) institutional ownership

me to retain my full sample of quarterly earnings guidance observations while achieving a high degree of covariate balance between quarterly guiders and non-guiders.

(Bushee and Noe 2000). I include managerial ability scores (Demerjian, Lev, and McVay 2012) because high-ability managers may be more likely to provide quarterly earnings guidance (e.g., Baik et al. 2011). Last, I balance on firm life cycle and several measures of profitability because Miller (2002) shows that firms' disclosure choices are linked to their financial performance. A number of these variables (e.g., market value of equity, life cycle) should address the concern that firms with better internal information environments are more likely to provide quarterly earnings guidance. <sup>10</sup>

After I perform entropy balancing, the quarterly guiders and non-guiders in my sample are statistically indistinguishable across each of the firm characteristics on which I balance. The weights generated by this entropy balancing procedure are applied to each of my subsequent regressions. I present the results of my entropy balancing procedure in Panel A of Table 2, and I provide descriptive statistics related to my entropy balancing weights in Panel E of Table 2.<sup>11</sup>

# **Model Specification and Measurement of Key Variables**

To test my first hypothesis, which states that there is no difference in the extent to which quarterly guiders and non-guiders focus on short-term earnings, I begin by estimating the following regression:

<sup>&</sup>lt;sup>10</sup> To gauge the effectiveness of these variables in distinguishing quarterly guiders from non-guiders, I estimate a logistic regression where the dependent variable is an indicator variable set equal to one (zero) for quarterly guiders (non-guiders), and the variables listed in Panel A of Table 2 are included as determinants. The results are reported in Table 3. The regression yields an area under the ROC curve of 0.83, suggesting that these variables are effective in predicting firms' quarterly earnings guidance decisions.

 $<sup>^{11}</sup>$  Each of the 11,494 quarterly guider observations included in my sample receives a weight of one. The 51,362 non-guider observations are weighted between 0.000 (1st percentile) and 1.591 (99th percentile) such that the sum of their weights is equal to 11,494. By design, the mean of the weights for non-guiders is  $11,494 \div 51,362 = 0.224$ . This follows the standard implementation of entropy balancing developed by Hainmueller (2012).

 $Outcome_{it} = \beta_0 + \beta_1 Guider_{it} + \sum \beta_j Controls + \gamma_s + \delta_t + \varepsilon_{it}$  (1) where i indexes firms, t indexes year-quarters, and s indexes 2-digit SIC industries. I first replace Outcome with MeetFinal, which is an indicator variable set equal to one when firm i's actual earnings meet or beat the final analyst consensus forecast for quarter t, and zero otherwise. Guider is an indicator variable set equal to one when firm i provides earnings guidance for every quarter over a minimum of twelve consecutive quarters, and zero when firm i does not provide earnings guidance for any quarter over a minimum of twelve consecutive quarters. I include controls for each of the firm characteristics listed in Panel A of Table 2. Additionally, I include industry (2-digit SIC) and year-quarter fixed effects, and cluster the standard errors by firm and year-quarter (Petersen 2009). I also apply the weights from my entropy balancing procedure. A positive coefficient on Guider would be consistent with quarterly guiders meeting the final analyst consensus forecast with greater frequency than non-guiders, supporting the view that quarterly

Next, I use Python to conduct a textual analysis of firms' 10-K filings as an alternative test of my first hypothesis. I begin by replacing the dependent variable in Equation (1) with the sum of short-term 10-K words divided by the sum of short- and long-term 10-K words (10-K:St÷Lt). I define short-term 10-K words as "short-term" and "short-run" as well as their derivatives. Long-term 10-K words are analogously defined. I also replace the dependent variable in Equation (1) with the sum of long-term view words divided by the total number of 10-K words (10-K:%LtView). I develop a dictionary of long-term view words based on the letters of Fink (2016) and Buffett and Dimon (2018). My dictionary includes words such as "firm value", "sustainability", and "environment".

earnings guidance leads to a greater fixation on short-term performance.

For complete details on the construction of these variables, see the variable definitions in Appendix A.

My textual analysis is inspired by Brochet et al. (2015), who use a sample of conference call transcripts to show that the language contained in a firm's corporate disclosures can be used to generate a reliable measure of managerial short-termism.

Based on their work, I expect that if quarterly earnings guidance leads a manager to focus on short-term financial results, the coefficient on *Guider* will be positive when the dependent variable is 10-K:St÷Lt, and negative when the dependent variable is 10-K:%LtView. This would be consistent with quarterly guiders providing more discussion about short-term performance, or less discussion about long-term strategy, in their corporate disclosures than non-guiders.

Last, I collect conference call transcripts from Capital IQ for the largest 100 firms in my sample (based on market value of equity at the end of each fiscal year). This hand-collection process yields a sample of 3,275 quarterly conference call transcripts. <sup>12</sup> I use Python to analyze these conference call transcripts and replicate the measure of short-termism developed by Brochet et al. (2015), denoted as *ConfCall:St÷Lt*. When this measure is used as the dependent variable in Equation (1), a positive coefficient on *Guider* would be consistent with quarterly guiders discussing more short-term matters during their conference calls than non-guiders. Although this analysis is limited to a smaller sample of firms, it is an informative supplementary test because of the extensive work that Brochet et al. (2015) have done to validate *ConfCall:St÷Lt* as a measure of managerial short-termism.

<sup>&</sup>lt;sup>12</sup> Conference calls are sometimes missing from the Capital IQ database. In particular, I find that very few conference calls are available in Capital IQ for years prior to 2007.

To test my second hypothesis, which states that there is no difference in long-term performance between quarterly guiders and non-guiders, I successively replace the dependent variable in Equation (1) with five alternative measures of long-term performance: size- and industry-adjusted returns, industry-adjusted return on assets, industry-adjusted asset turnover, industry-adjusted sales growth, and industry-adjusted operating cash flows. Each of these measures is calculated over quarters t to t+11. To calculate industry-adjusted performance, I subtract the median performance in firm i's 2digit SIC industry from firm i's performance over the same period. These five measures capture different facets of a firm's long-term performance. Return on assets and asset turnover are ex post accounting-based measures that signify a firm's ability to generate profits and operate efficiently. Operating cash flows are an alternative measure of accounting performance that is not influenced by accruals. In contrast, returns are an ex ante market-based measure that reflect changes in investors' perceptions of firm value. Last, sales growth captures the extent to which a firm grows over time. A negative coefficient on *Guider* would be consistent with critics' claims that quarterly earnings guidance leads to a sacrifice of long-term value, as it would suggest that quarterly guiders underperform relative to non-guiders in the long term.

#### **CHAPTER IV**

## **EMPIRICAL RESULTS**

## **Descriptive Statistics**

I tabulate descriptive statistics for my sample of quarterly guiders and non-guiders in Table 2. Consistent with prior research, in the first three columns of Panel A, I find that quarterly guiders are different from non-guiders with regard to many of their firm characteristics. However, none of these differences remain statistically significant after I reweight my sample using entropy balancing, as shown in the last three columns of Panel A. The descriptive statistics in Panels B and C are consistent with quarterly earnings guidance increasing a manager's attention to short-term earnings, as they show that quarterly guiders are more likely to meet the final analyst consensus forecast for the quarter, and tend to use more short-term language in their 10-Ks and conference calls. Last, Panel D shows that over the next three years, quarterly guiders outperform nonguiders with regard to their size- and industry-adjusted returns, industry-adjusted return on assets, industry-adjusted asset turnover, and industry-adjusted operating cash flows. There is no statistical difference in industry-adjusted sales growth between quarterly guiders and non-guiders. Overall, these descriptive statistics provide initial evidence that quarterly earnings guidance increases a manager's attention to short-term financial results; however, they do not support critics' claims that quarterly earnings guidance detracts from a firm's long-term performance.

## **Determinants of Quarterly Earnings Guidance**

In Table 3, I estimate a logistic regression to examine the determinants of quarterly earnings guidance. Specifically, I regress *Guider* on the variables listed in Panel

A of Table 2, which are used both for entropy balancing and as control variables in my subsequent analyses. I also include industry (2-digit SIC) and year-quarter fixed effects, and cluster the standard errors by firm. The results in Table 3 are useful for at least two reasons. First, they show that the variables listed in Panel A of Table 2 are effective in predicting firms' quarterly earnings guidance decisions, as evidenced by an area under the ROC curve of 0.83. This helps to mitigate concerns that my findings are driven by correlated omitted variables or functional form misspecification.

Second, the results in Table 3 provide a better understanding of the firms that choose to issue quarterly earnings guidance. Notably, the marginal effects presented in Column (2) show that the probability of providing quarterly earnings guidance is 13.62 percent greater when analyst coverage increases from the first to the third quartile of its distribution. Consistent with prior literature, the results in Table 3 also suggest that there is a negative relationship between quarterly earnings guidance and information asymmetry, and a positive relationship between quarterly earnings guidance and institutional ownership. It appears that quarterly guiders are also more likely than nonguiders to be in either the growth phase or mature phase of their life cycles, and to be members of high litigation-risk industries.

## **Primary Analyses**

In Table 4, I present results related to my first hypothesis, which predicts that there is no difference in the extent to which quarterly guiders and non-guiders focus on short-term earnings. In Column (1), where the dependent variable is *MeetFinal*, I find a significantly positive coefficient on *Guider* (t-statistic = 14.70). The coefficient of 0.119 indicates that quarterly guiders are about 17.12 percent more likely than non-guiders to

meet the final analyst consensus forecast for the quarter (0.119  $\div$  0.695 = 0.171). This result is consistent with quarterly guiders being more focused on meeting short-term earnings expectations than non-guiders.<sup>13</sup>

However, such a result could also be explained by quarterly guiders exhibiting strong performance that legitimately exceeds analysts' expectations. To differentiate between these competing explanations, in Column (2), I replace the dependent variable with an indicator variable that is set equal to one when firm i's actual earnings meet or beat the initial analyst consensus forecast for quarter t, and zero otherwise (*MeetInitial*). If then use a  $\chi^2$  test to test whether the coefficient on  $Guider(\beta_1)$  is equal in Columns (1) and (2). If  $\beta_1$  is larger when the dependent variable is MeetFinal than when it is MeetInitial, it would suggest that quarterly earnings guidance has a greater impact on the firm's propensity to meet the final analyst consensus forecast, relative to its impact on the firm's propensity to meet the initial analyst consensus forecast. This would be consistent with quarterly guiders strategically walking analysts' earnings expectations down to a beatable level. On the other hand, if  $\beta_1$  is not significantly different between Columns (1) and (2), it would suggest that quarterly guiders are more likely than non-guiders to meet the final analyst consensus forecast as a result of strong performance.

The results show that  $\beta_I$  is 0.043 in Column (2), whereas  $\beta_I$  is 0.119 in Column (1). A  $\chi^2$  test reveals that  $\beta_I$  is significantly larger in Column (1) than in Column (2) (p-value = 0.00). Thus, although the significantly positive  $\beta_I$  in Column (2) suggests that

<sup>13</sup> The results in Table 4 are similar when I estimate binary logit models rather than estimating linear probability models using OLS. I present the results of OLS regressions for ease of interpretation.

 $<sup>^{14}</sup>$  The initial analyst consensus forecast is estimated at the beginning of quarter t, prior to the manager's issuance of earnings guidance for quarter t.

quarterly guiders are about 7.66 percent more likely than non-guiders to meet the initial analyst consensus forecast  $(0.043 \div 0.561 = 0.077;$  t-statistic = 4.77), the results of the  $\chi^2$  test indicate that this increase is dwarfed by the 17.12 percent increase in quarterly guiders' propensity to meet the final analyst consensus forecast. Overall, these results suggest that quarterly guiders walk the initial analyst consensus forecast down to a beatable level, and that strong performance only partially explains the increased frequency with which quarterly guiders meet short-term earnings expectations.<sup>15</sup>

One could also argue that quarterly guiders are more likely than non-guiders to meet the final analyst consensus forecast because quarterly earnings guidance is issued to reduce information asymmetry. If this were the case, I would expect to find that quarterly earnings guidance improves analysts' forecast accuracy in an unbiased manner. In other words, there should be no difference between quarterly guiders and non-guiders with regard to their propensity to *just meet* the final analyst consensus forecast as opposed to *just miss* it. I therefore estimate two additional specifications in Columns (3) and (4) where I replace the dependent variable with an indicator variable that is set equal to one when firm i's actual earnings for quarter t positively (negatively) deviate from the final analyst consensus forecast by a penny or less, and zero otherwise; denoted as *JustMeet* (*JustMiss*). Again, I use a  $\chi^2$  test to test whether  $\beta_I$  is equal across the two specifications. If  $\beta_I$  is larger when the dependent variable is *JustMeet* than when it is *JustMiss*, it would

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 $<sup>^{15}</sup>$  As an alternative test, I repeat the analysis shown in Column (1) of Table 4 and add *MeetInitial* as a control variable. *MeetInitial* controls for the strength of the firm's performance relative to analysts' initial (unguided) expectations. I find that the coefficient on *Guider* remains significantly positive (t-statistic = 15.61). Economically, the coefficient of 0.101 on *Guider* suggests that quarterly guiders are about 14.35 percent more likely than non-guiders to meet the final analyst consensus forecast for the quarter, after controlling for whether the firm meets the initial analyst consensus forecast for the quarter (0.101  $\div$  0.704 = 0.143). Thus, this alternative specification provides additional evidence that quarterly guiders' increased propensity to meet the final analyst consensus forecast cannot be explained solely by strong performance.

suggest that quarterly guiders strategically avoid missing the final analyst consensus forecast. On the other hand, if  $\beta_I$  is not significantly different between Columns (3) and (4), it would be consistent with quarterly earnings guidance being issued to reduce information asymmetry.

In Column (3), I find that quarterly guiders are about 34.42 percent more likely than non-guiders to just meet the final analyst consensus forecast  $(0.053 \div 0.154 = 0.344;$  t-statistic = 5.81). However, in Column (4), I do not find a significant difference in the probability of just missing the final analyst consensus forecast between quarterly guiders and non-guiders (t-statistic = 1.38). A  $\chi^2$  test formalizes the result that  $\beta_I$  is significantly larger in Column (3) than in Column (4) (p-value = 0.00). Consequently, it does not appear that quarterly guiders' increased propensity to meet the final analyst consensus forecast can be fully explained by quarterly earnings guidance being issued to reduce information asymmetry.<sup>16</sup>

Taken together, the results in Table 4 are consistent with quarterly earnings guidance increasing a manager's attention to short-term financial results. Column (1) shows that quarterly guiders are more likely than non-guiders to meet the final analyst

<sup>16</sup> It is important to note that, individually, the insignificant coefficient on *Guider* in Column (4) is not consistent with either the "short-term focus" explanation or the "information asymmetry" explanation. If quarterly guiders are more focused on short-term financial results than non-guiders, then I would expect to find that quarterly guiders are *less* likely than non-guiders to just miss the final analyst consensus forecast, leading to a negative coefficient on *Guider*. This would occur to the extent that quarterly guiders use their forecasts to shift from the "just miss" category to the "just meet" category. Conversely, if quarterly earnings guidance is issued to reduce information asymmetry, then I would expect to find that quarterly guiders are *more* likely than non-guiders to just miss the final analyst consensus forecast, leading to a positive coefficient on *Guider*. This would occur to the extent that quarterly earnings guidance reduces the absolute value of analysts' forecast errors, thereby leading to more instances when the firm's actual earnings "just miss" the final analyst consensus forecast. The insignificant coefficient on *Guider* in Column (4) suggests that both effects may be present, and that they cancel each other out on average. In other words, there may be some instances when firms issue quarterly earnings guidance to reduce information asymmetry, and others when firms issue quarterly earnings guidance to avoid missing short-term earnings expectations.

consensus forecast for the quarter, and the results in Columns (2), (3), and (4) help to rule out alternative explanations that this finding is driven by strong performance or reductions in information asymmetry.

Table 5 provides an alternative test of my first hypothesis by comparing the language used in the 10-Ks and conference calls of quarterly guiders and non-guiders. Column (1) presents results where the dependent variable is 10-K: $St \div Lt$ . I find a significantly positive coefficient on Guider (t-statistic = 2.70), indicating that the discussion in quarterly guiders' 10-Ks tends to be more focused on the short term than the discussion in non-guiders' 10-Ks. Economically, the coefficient of 0.030 indicates that the ratio of 10-K: $St \div Lt$  is about 8.17 percent higher for quarterly guiders than nonguiders  $(0.030 \div 0.367 = 0.082)$ . The coefficient on *Guider* is negative in Column (2), where the dependent variable is 10-K:%LtView, although it is not statistically significant (t-statistic = -0.16). Thus, I do not find a significant difference in the extent to which quarterly guiders and non-guiders discuss long-term strategy in their 10-Ks. Column (3) presents results where the dependent variable is ConfCall:St + Lt, the measure of managerial short-termism developed by Brochet et al. (2015). The significantly positive coefficient of 0.169 indicates that the ratio of short-term conference call words to longterm conference call words is about 13.41 percent higher for quarterly guiders than for non-guiders  $(0.169 \div 1.260 = 0.134; t\text{-statistic} = 1.95)$ . Overall, the results in Table 5 provide additional support for the claim that quarterly earnings guidance increases a manager's focus on short-term performance, as it appears that quarterly guiders choose to discuss more short-term matters in their corporate disclosures. 17

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<sup>&</sup>lt;sup>17</sup> The results in Table 5 are similar when I replace the dependent variables with their decile rankings, which helps to mitigate concerns that skewness impacts my findings.

The findings in Tables 4 and 5 may help to explain why prominent business leaders such as Warren Buffett and Jamie Dimon seem to be convinced that quarterly earnings guidance leads to managerial myopia. These individuals may observe that quarterly guiders are more likely to meet short-term earnings expectations and provide more short-term oriented discussion in their corporate disclosures, and assume that poor performance necessarily follows. However, these impressions do not take into account whether quarterly earnings guidance is actually "unhealthy" in that it reduces a firm's long-term value.

To investigate this issue, in Table 6 I present results related to my second hypothesis, which relates to differences in long-term performance between quarterly guiders and non-guiders. In Column (1), the significantly positive coefficient of 0.054 on Guider (t-statistic = 2.00) represents the estimated difference in size- and industryadjusted returns between quarterly guiders and non-guiders over quarters t to t+11, which averages 0.039 for quarterly guiders and -0.015 for non-guiders. The significantly positive coefficient on *Guider* in Column (3) (t-statistic = 3.15) indicates that quarterly guiders also outperform non-guiders over quarters t to t+11 with regard to their accounting performance. Specifically, my results suggest that quarterly guiders report industry-adjusted asset turnover that is about 11.81 percent higher than non-guiders  $(0.047 \div 0.398 = 0.118)$ . When the dependent variable is industry-adjusted return on assets (Column 2), an alternative measure of accounting performance, the coefficient on guider is positive and marginally insignificant (t-statistic = 1.63). In Column (4), I do not find a significant difference between quarterly guiders and non-guiders regarding sales growth, although the coefficient on Guider is positive (t-statistic = 0.10). Last, I find that

the coefficient on *Guider* is significantly positive in Column (5), where the dependent variable is industry-adjusted operating cash flows scaled by lagged total assets (t-statistic = 3.78). The coefficient of 0.022 indicates that the industry-adjusted operating cash flows of quarterly guiders are about 17.89 percent higher over quarters t to t+11 than those of non-guiders  $(0.022 \div 0.123 = 0.179)$ .

In sum, the results in Table 6 do not support the claim that quarterly earnings guidance leads to a sacrifice of long-term value. It appears that instead, quarterly guiders perform better than observably similar non-guiders over the following three years. This may be the result of quarterly earnings guidance reducing the firm's information asymmetry, signaling high managerial ability, or lowering the firm's exposure to litigation risk. In addition, quarterly earnings guidance may improve the firm's long-term performance by enabling the manager to meet analysts' earnings expectations without engaging in value-decreasing earnings management.

Considered collectively, the results in Tables 4, 5, and 6 suggest that although quarterly earnings guidance increases a manager's focus on short-term financial results, it does not detract from the firm's long-term performance. In other words, my results support the view that, among the firms that choose to provide it, the marginal benefits of quarterly earnings guidance exceed the marginal costs. Thus, my findings do not support critics' claims that quarterly earnings guidance leads to managerial myopia. They are instead more consistent with the theory that voluntary disclosures are provided when they are expected to be value-increasing (Dye 2001).

## **CHAPTER V**

## ADDITIONAL ANALYSES

## **Cross-Sectional Tests**

To explore my conjecture that quarterly guiders outperform non-guiders in the long term because quarterly earnings guidance reduces information asymmetry, signals high managerial ability, and lowers litigation risk, I add an interaction term to my earlier specification as follows:

$$LongTermPerformance_{it} = \beta_0 + \beta_1 Guider_{it} + \beta_2 Benefit_{it} +$$

$$\beta_3 Guider_{it} \times Benefit_{it} + \sum \beta_i Controls + \gamma_s + \delta_t + \varepsilon_{it}$$
(2)

where I replace *Benefit* with proxies for information asymmetry, managerial ability, and litigation risk. A positive coefficient on the interaction term would support my conjecture, as it would suggest that the benefits of quarterly earnings guidance increase with these factors. I use analyst forecast dispersion at the beginning of the quarter (prior to the issuance of earnings guidance) to measure information asymmetry. Unlike other proxies, such as the bid-ask spread, this measure should capture information asymmetry without being influenced by the provision of quarterly earnings guidance. I measure managerial ability using management forecast accuracy (Baik et al. 2011). Because the sample for this test excludes non-guiders, I omit *Guider* and *Guider*×*Benefit* from Equation (2) and focus on *Benefit* as bearing the coefficient of interest. Is I specify both my information asymmetry and managerial ability variables as indicator variables split at the median for ease of interpretation. Last, I measure litigation risk using an indicator

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<sup>&</sup>lt;sup>18</sup> The sample excludes non-guiders because management forecast accuracy (the dependent variable) is only available for firms that issue a forecast.

variable that is set equal to one (zero) when a firm belongs (does not belong) to a high litigation-risk industry (Francis et al. 1994; Kim and Skinner 2012).

The results in Panel A of Table 7 suggest that quarterly earnings guidance is more beneficial for firms with higher information asymmetry, as  $\beta_3$  is positive in all specifications and statistically significant in two out of five specifications. Similarly, the results in Panel B are consistent with the view that firms enjoy greater benefits from quarterly earnings guidance when their managers possess higher ability, as the coefficient of interest is positive and statistically significant in three out of five specifications.<sup>19</sup> In Panel C, I do not find significant differences in the extent to which firms benefit from quarterly earnings guidance based on litigation risk. Taken together, the results in Table 7 are consistent with my conjecture that quarterly guiders outperform non-guiders because quarterly earnings guidance reduces information asymmetry and signals high managerial ability.

## **Earnings Management and Underinvestment**

An additional explanation for my finding that quarterly guiders outperform non-guiders in the long term is that their managers are able to meet analysts' earnings expectations without engaging in value-decreasing earnings management. Therefore, I examine whether quarterly guiders are less inclined to use real and accrual-based earnings management, and whether quarterly guiders are less likely to underinvest. These tests also address the claim that quarterly earnings guidance encourages these behaviors. For example, Warren Buffett writes in a letter to the shareholders of Berkshire Hathaway, "... I have observed many instances in which CEOs engaged in uneconomic operating

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<sup>&</sup>lt;sup>19</sup> The results in Panel B of Table 7 are similar when I include or exclude managerial ability scores as a control variable. In the tabulated results, managerial ability scores are included in my list of controls.

maneuvers so that they could meet [the earnings guidance] they had announced. Worse still, after exhausting all that operating acrobatics would do, they sometimes played a wide variety of accounting games to 'make the numbers'," (Buffett 2000).

To test the claim that quarterly earnings guidance leads to more earnings management, I calculate discretionary R&D expenses and discretionary SG&A expenses as the residuals from models that predict a firm's expected R&D and SG&A expenses by 2-digit SIC industry and year-quarter (Vorst 2016). Following Call et al. (2014), I calculate discretionary accruals as the absolute value of the residuals from the Jones (1991) model after controlling for economic losses, again estimated by 2-digit SIC industry and year-quarter. I also form a total earnings management measure by summing the decile rankings of a firm's discretionary R&D expenses, discretionary SG&A expenses, and discretionary accruals (where discretionary R&D and SG&A expenses are multiplied by negative one prior to ranking so that each component is increasing with earnings management). I then re-estimate Equation (1) using each of these measures of earnings management as the dependent variable.

The results are presented in Panel A of Table 8. I find a significantly positive coefficient on *Guider* in Column (1), suggesting that quarterly guiders report more discretionary R&D expenses than non-guiders (t-statistic = 3.38). The coefficient on *Guider* is positive but insignificant in Column (2), where the dependent variable is discretionary SG&A expenses (t-statistic = 1.38). These results are consistent with quarterly guiders engaging in less real earnings management than non-guiders. In Column (3), the coefficient on *Guider* is negative but insignificant with respect to the

magnitude of discretionary accruals (t-statistic = -0.69).<sup>20</sup> Last, the coefficient on *Guider* is significantly negative in Column (4), which is consistent with quarterly guiders using less total earnings management than non-guiders (t-statistic = -3.37). Thus, in contrast to the claims of prominent business leaders, I find no evidence that quarterly earnings guidance increases earnings management. These results support my conjecture that, by enabling the manager to influence analysts' earnings expectations, quarterly earnings guidance reduces the need to manage earnings.

Next, to test the claim that quarterly earnings guidance leads to underinvestment (e.g., Buffett and Dimon 2018), I examine whether quarterly guiders are more likely to underinvest in capital assets, R&D, M&A, and in total. Accordingly, I specify four indicator variables that are set equal to one in quarters when a firm's investments fall into the bottom quartile of unexpected investment, and zero otherwise (Biddle, Hilary, and Verdi 2009). Following Biddle et al. (2009), I calculate unexpected investment as the residual from regressing investments on lagged sales growth by 2-digit SIC industry and year-quarter. I re-estimate Equation (1) using each of these underinvestment indicators as the dependent variable.

The results in Panel B of Table 8 suggest that quarterly guiders are less likely to underinvest than non-guiders. Specifically, I find a significantly negative coefficient on *Guider* when the dependent variable is the R&D underinvestment indicator (Column 2; t-statistic = -2.27). I do not find a significant difference between quarterly guiders and non-

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<sup>&</sup>lt;sup>20</sup> My finding that there is no significant difference in the use of discretionary accruals between quarterly guiders and non-guiders contrasts with the results of Call et al. (2014), who report that quarterly guiders record fewer discretionary accruals than non-guiders. However, I do find significant evidence that quarterly guiders record fewer discretionary accruals in a robustness test, where I use a propensity score matching methodology rather than entropy balancing (Table 10). Differences in research design may therefore explain why the results in Table 8 contrast with those of Call et al. (2014), who rely primarily on a propensity-matched sample to test their hypotheses.

guiders with regard to their capital asset underinvestment (Column 1), M&A underinvestment (Column 3), or total underinvestment (Column 4), although the relevant coefficients are all negative (t-statistics = -1.36, -1.40, and -1.10, respectively). These findings do not support critics' claims that quarterly earnings guidance encourages underinvestment. Instead, they support the view that quarterly earnings guidance enables a manager to invest more freely because, as a result of her ability to influence the analyst consensus forecast, the manager is less concerned that her investments will cause the firm to miss short-term earnings expectations.

## **Other Short-Term Pressures**

I next examine whether quarterly earnings guidance tends to lower long-term performance when it coincides with other short-term pressures. These tests are in response to the SEC's interest in learning whether quarterly earnings guidance is more likely to lead to managerial myopia when it is combined with other factors. <sup>21</sup> To provide evidence on this issue, I estimate Equation (2) and replace *Benefits* with measures of short-term pressure. Brochet et al. (2015) identify transient institutional ownership, analyst following, and stock-based compensation as factors that should increase managerial short-termism. I therefore specify indicator variables split at the median for high transient institutional ownership, high analyst following, and high stock-based compensation, and include these indicators in my regressions. Negative coefficients on the interaction terms between these factors and *Guider* would suggest that the benefits of quarterly earnings guidance are diminished when the practice is combined with other short-term pressures.

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<sup>&</sup>lt;sup>21</sup> The SEC's call for comments on quarterly earnings guidance can be viewed at https://www.sec.gov/news/press-release/2018-287.

In Table 9, I find very little evidence to support the view that any of these factors has an impact on the relationship between quarterly earnings guidance and long-term performance. Across Panels A, B, and C, only two of the fifteen the coefficients of interest are statistically significant at conventional levels. Thus, it does not appear that quarterly earnings guidance is more likely to be detrimental to long-term performance when it is combined with other short-term pressures.

## **Robustness Tests**

## **Propensity Score Matching Analysis**

I rely on entropy balancing in my primary analyses to improve the similarity of the covariate distributions between quarterly guiders and non-guiders. This approach allows me to reweight the observations in my sample so that non-guiders are comparable to quarterly guiders. I can also seek to achieve this objective by using propensity score matching, where each quarterly guider observation is matched to a non-guider observation with a similar propensity score. As a robustness test, I repeat the tests shown in Tables 4-6 and 8 using propensity score matching to assess whether my findings are sensitive to the use of entropy balancing.

Specifically, I estimate a propensity score for each observation in my sample by regressing an indicator variable set equal to one for quarterly guiders and zero for non-guiders on the firm characteristics listed in Panel A of Table 2. I then match each quarterly guider observation with the non-guider observation that has the closest propensity score, requiring that matches occur within the same 2-digit SIC industry and year-quarter. This process results in a sample of 4,081 quarterly guider observations and 4,081 non-guider observations. Although I drop matches when there are sizeable

differences in their propensity scores, I find that there are still small (but statistically significant) differences between the quarterly guiders and non-guiders in my matched sample. For example, I note that quarterly guiders, on average, have significantly larger market values of equity, more analyst coverage, and higher institutional ownership than matched non-guiders.

I use this matched sample of quarterly guiders and non-guiders to repeat my tests, and I report the results in Table 10. The results are strikingly similar to those from my primary analyses using entropy balancing. In Panel A, I continue to find evidence that quarterly guiders are more focused on meeting short-term earnings expectations than non-guiders. Panel B suggests that quarterly guiders also use more short-term language in their 10-Ks than non-guiders. Thus, my propensity score matching analyses likewise support the conclusion that quarterly earnings guidance shifts a manager's attention to the short term. Panel C shows that quarterly guiders outperform matched non-guiders with regard to their size- and industry-adjusted returns, industry-adjusted asset turnover, and industry-adjusted operating cash flows over quarters t to t+11. Again, this is consistent with my main results. Last, Panels D and E provide additional evidence that quarterly guiders are less inclined than non-guiders to engage in earnings management or to underinvest.

Thus, it does not appear that my results are sensitive to the use of entropy balancing, as I draw the same inferences when I instead use propensity score matching. I note that the absolute magnitude and statistical significance of the coefficients of interest

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<sup>&</sup>lt;sup>22</sup> I do not report results related to conference call language as part of my propensity-score matching analysis because there are very few observations available to run this test from my hand-collected sample of conference call transcripts. Specifically, there is conference call data available for fewer than 30 of my matched firm-quarter observations.

tend to be larger in Table 10 than in my primary analyses. This is not surprising, as descriptive statistics reveal that entropy balancing is more effective than propensity score matching in eliminating observable differences quarterly guiders and non-guiders. The unresolved differences under propensity score matching likely contribute to the larger differences between quarterly guiders and non-guiders observed in Table 10. Entropy balancing also allows me to test my hypotheses using a larger sample of quarterly guiders, enhancing the generalizability of my results. As a consequence, I place greater confidence in my primary analyses. However, the results in Table 10 provide some assurance that my results are robust to alternative specifications.

## Difference-In-Difference Analysis

In my primary analyses, I conduct cross-sectional tests where I compare quarterly guiders to an entropy-balanced sample of non-guiders. Thus, my counterfactual is a group of firms that do not provide quarterly earnings guidance, yet possess observably similar features to the firms that do choose to provide it. An alternative is to compare quarterly guiders in the quarters before and after they commence quarterly earnings guidance. This alternative approach is useful in that it controls for factors that are stable within a firm over time. However, it is limited to a sample of initiators, and it is subject to biases related to the decision to start providing quarterly earnings guidance, i.e., the firm's underlying economic conditions may not be stable across the pre- and post- periods. I estimate my difference-in-difference analysis around the initiation of quarterly earnings

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<sup>&</sup>lt;sup>23</sup> Testing for evidence of managerial myopia around the cessation of quarterly earnings guidance may be more problematic because there is evidence that poor performance drives the decision to stop providing quarterly earnings guidance (Houston et al. 2010; Chen et al. 2011). Consequently, it is difficult to disentangle the effects of discontinuing quarterly earnings guidance from the effects of poor performance.

guidance, using a matched sample of non-guiders to account for time trends over the initiation period.

I identify 449 firms that initiate regular quarterly earnings guidance over my sample period of 2003 to 2015, and I use coarsened exact matching to match them with non-guiders in the quarter prior to earnings guidance initiation (Iacus, King, and Porro 2012). I require that matches occur in the same year-quarter and 2-digit SIC industry. Additionally, matches must fall within the same quartile of analyst following, calculated by fiscal year and 1-digit SIC industry. Among firms that satisfy these requirements, I select the control firm with the closest market value of equity to the treatment firm.  $^{24}$  I then estimate my difference-in-difference analysis over the pre- and post-treatment periods consisting of quarters t-8 to t-1 and quarters t to t+7, respectively, where earnings guidance is initiated in quarter t. To execute this analysis, I estimate the following regression:

$$Outcome_{it} = \beta_0 + \beta_1 Starter_{it} + \beta_2 Post_{it} + \beta_3 Starter \times Post_{it} +$$

$$\sum \beta_j Controls + \gamma_s + \delta_t + \varepsilon_{it}$$

$$(3)$$

where I replace *Outcome* with various dependent variables as needed to test my hypotheses. *Starter* distinguishes the firms that initiate quarterly earnings guidance from their matched control firms, whereas *Post* distinguishes the pre-period from the post-period. Thus, the coefficient of interest is on the interaction *Starter*×*Post*. As in my previous tests, I include each of the firm characteristics listed in Panel A of Table 2 as

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<sup>&</sup>lt;sup>24</sup> In my difference-in-difference analysis, I use coarsened exact matching rather than propensity score matching because it appears to be more effective, at least in this setting, at improving the similarity of the covariate distributions between treatment and control firms, while also enabling me to preserve a greater number of guidance initiators in my sample.

control variables. I also include industry (2-digit SIC) and year-quarter fixed effects, and cluster the standard errors by firm and year-quarter.

The results are shown in Table 11. Overall, my inferences remain unchanged. In Panel A, I continue to find evidence that quarterly earnings guidance increases a manager's focus on short-term financial results, as the coefficient on  $Starter \times Post$  is significantly positive when the dependent variable is MeetFinal (t-statistic = 4.17). In Panel B, I also find that the extent to which quarterly guiders discuss long-term strategy in their 10-Ks declines more from the pre-period to the post-period than for non-guiders (t-statistic = -2.77). The coefficient on  $Starter \times Post$  is positive and only marginally insignificant, however, when the dependent variable is the ratio of short-term 10-K words to long-term 10-K words (t-statistic = 1.57).<sup>25</sup>

The results in Panel C reveal no indication that initiation of quarterly earnings guidance lowers a firm's long-term performance, as the coefficients on *Starter*×*Post* are generally positive but statistically insignificant. There is weak evidence that industry-adjusted operating cash flows increase more for quarterly guiders than for non-guiders over the pre- to post-periods (t-statistic = 1.25). The coefficients on *Starter*×*Post* also tend to be statistically insignificant in Panels D and E, where changes in earnings management and underinvestment are examined. There is weak evidence that total earnings management and underinvestment in capital assets declines more for quarterly guiders than non-guiders (t-statistics = -1.19 and -1.31, respectively).

<sup>&</sup>lt;sup>25</sup> I do not report results related to conference call language as part of my difference-in-difference analysis because there are very few observations available to run this test from my hand-collected sample of conference call transcripts. Specifically, there is conference call data available for fewer than ten firms that initiate quarterly earnings guidance.

My difference-in-difference specifications are likely to suffer from a lack of power due to my small sample of initiators, so it is important to note that the signs of the coefficients on *Starter*×*Post* in Table 11 are generally consistent with those reported for the coefficients of interest in Tables 4-6 and 8. At a minimum, the results reported in Table 11 fail to support the contention that quarterly earnings guidance leads to a *loss* of long-term value. They also reinforce my finding that quarterly earnings guidance increases a manager's attention to short-term performance. This provides greater confidence that my main results are not driven by firm-specific correlated omitted variables.

#### Other Robustness Tests

I perform several other tests to examine the robustness of my finding that quarterly guiders outperform non-guiders in the long term, and I report the results in Table 12. Overall, my inferences remain unchanged when I make any of the following adjustments to my research design:

- I estimate long-term performance over five years rather than three years
- I include the following variables both in my entropy balancing procedure and as additional control variables:
  - Analysts' forecasts for the firm's long-term growth
  - Firm-specific competition (Li, Lundholm, and Minnis 2013)
  - The firm's propensity to meet the final analyst consensus forecast
     (MeetFinal)

These robustness tests provide additional assurance that my results are not the product of functional form misspecification or correlated omitted variables.

#### **CHAPTER VI**

## **CONCLUSION**

I examine the claim that quarterly earnings guidance leads a manager to sacrifice long-term value to meet short-term earnings expectations (i.e., become myopic). Using an entropy balanced sample of quarterly guiders and non-guiders, I find evidence that quarterly earnings guidance increases a manager's focus on short-term earnings, as quarterly guiders are more likely than non-guiders to meet analysts' quarterly earnings expectations. Quarterly guiders also tend to use a greater proportion of short-term language in their 10-Ks and conference calls, which is consistent with a greater fixation on short-term financial results. However, I do not find evidence that quarterly earnings guidance detracts from a firm's long-term performance. My results suggest that quarterly guiders outperform non-guiders over the next three and five years across a variety of measures, including size- and industry-adjusted returns, industry-adjusted asset turnover, and industry-adjusted operating cash flows. Thus, my findings do not support the view that quarterly earnings guidance leads to managerial myopia.

My research is timely given the SEC's ongoing investigation into the desirability of quarterly reporting and quarterly earnings guidance. Although prominent business leaders call for suspension of the practice, my results suggest that among the firms that choose to provide it, the marginal benefits of providing quarterly earnings guidance exceed the marginal costs. In addition to having direct policy implications, my study contributes to the broader literatures on earnings guidance and the real effects of disclosure.

## APPENDIX A

## VARIABLE DEFINITIONS

## Quarterly earnings guidance

Guider<sub>t</sub> An indicator variable set equal to one when firm *i* provides

> earnings guidance for every quarter over a minimum of twelve consecutive quarters; and zero when firm i does not provide earnings guidance for any quarter over a minimum of twelve

consecutive quarters.

## Firm characteristics

ratio<sub>t</sub>

dispersion<sub>t</sub>

ln(Market value The natural logarithm of firm i's market value of equity

of equity)t (CSHOQ $\times$ PRCCQ) in quarter t (in millions).

Managerial The managerial ability score calculated by Demerjian, Lev, and ability<sub>t</sub>

McVay (2012) for firm i in the fiscal year that contains quarter t. Managerial ability scores are generously provided by Peter

Demerjian at his website,

https://faculty.washington.edu/pdemerj/data.html.

Book-to-market Firm i's total equity (SEQ) in quarter t divided by firm i's market

value of equity (CSHOQ $\times$ PRCCQ) in quarter t.

Total liabilities (LTQ) for firm i in quarter t, divided by total assets Leveraget

(ATQ) for firm i in quarter t.

Bid-ask spread<sub>t</sub> The average daily bid-ask spread for firm *i* in quarter *t*, multiplied

> by 100. The daily bid-ask spread is calculated as the absolute difference between firm i's closing bid and ask prices, scaled by

firm i's closing stock price.

Analyst forecast The standard deviation of analyst forecasts (STDEV) for firm i at

> the beginning of quarter t (prior to the issuance of earnings guidance for quarter t), scaled by firm i's stock price (PRCCQ) at

the beginning of quarter t, and multiplied by 100.

Return volatility<sub>t</sub> The standard deviation of firm i's daily returns (RET) in quarter t.

Litigation An indicator variable set equal to one when firm i's 4-digit SIC

industry<sub>t</sub> code falls within the following ranges: 2833-2836, 8731-8734,

3570-3577, 7370-7374, 3600-3674, 5200-5961, and zero otherwise

(Francis, Philbrick, and Schipper 1994).

## Firm characteristics (continued)

ln(Number of analysts)<sub>t</sub>

The natural logarithm of the number of analysts (NUMEST) following firm i in quarter t.

Transient institutional ownership<sub>t</sub>

The fraction of firm *i*'s shares outstanding (SHROUT) in quarter *t* that are reported in 13-F filings as being owned by transient institutional investors. The data needed to classify institutional investors as transient, quasi-indexer, or dedicated are generously

provided by Brian Bushee at his website,

http://acct.wharton.upenn.edu/faculty/bushee/IIclass.html.

Quasi-indexer institutional ownership<sub>t</sub>

The fraction of firm *i*'s shares outstanding (SHROUT) in quarter *t* that are reported in 13-F filings as being owned by quasi-indexer institutional investors. The data needed to classify institutional investors as transient, quasi-indexer, or dedicated are generously provided by Brian Bushee at his website,

http://acct.wharton.upenn.edu/faculty/bushee/IIclass.html.

Dedicated institutional ownership<sub>t</sub>

The fraction of firm *i*'s shares outstanding (SHROUT) in quarter *t* that are reported in 13-F filings as being owned by dedicated institutional investors. The data needed to classify institutional investors as transient, quasi-indexer, or dedicated are generously provided by Brian Bushee at his website,

http://acct.wharton.upenn.edu/faculty/bushee/IIclass.html.

Life cycle: Introduction An indicator variable set equal to one in quarter *t* when firm *i*'s operating cash flows (OANCFQ) are negative; investing cash flows (IVNCFQ) are negative; and financing cash flows (FINCFQ) are positive (Dickinson 2011).

Life cycle: Growth<sub>t</sub> An indicator variable set equal to one in quarter *t* when firm *i*'s operating cash flows (OANCFQ) are positive; investing cash flows (IVNCFQ) are negative; and financing cash flows (FINCFQ) are positive (Dickinson 2011).

Life cycle: Mature<sub>t</sub> An indicator variable set equal to one in quarter *t* when firm *i*'s operating cash flows (OANCFQ) are positive; investing cash flows (IVNCFQ) are negative; and financing cash flows (FINCFQ) are negative (Dickinson 2011).

## **Firm characteristics (continued)**

flows<sub>t</sub>

Life cycle: Shake-out <sub>t</sub>	<ul> <li>An indicator variable set equal to one in quarter t when:</li> <li>Firm i's operating cash flows (OANCFQ) are negative; investing cash flows (IVNCFQ) are negative; and financing cash flows (FINCFQ) are negative.</li> <li>Firm i's operating cash flows (OANCFQ) are positive; investing cash flows (IVNCFQ) are positive; and financing cash flows (FINCFQ) are positive.</li> <li>Firm i's operating cash flows (OANCFQ) are positive; investing cash flows (IVNCFQ) are positive; and financing cash flows (FINCFQ) are negative (Dickinson 2011).</li> </ul>
Life cycle: Decline <sub>t</sub>	<ul> <li>An indicator variable set equal to one in quarter t when:</li> <li>Firm i's operating cash flows (OANCFQ) are negative; investing cash flows (IVNCFQ) are positive; and financing cash flows (FINCFQ) are positive.</li> <li>Firm i's operating cash flows (OANCFQ) are negative; investing cash flows (IVNCFQ) are positive; and financing cash flows (FINCFQ) are negative (Dickinson 2011).</li> </ul>
Size- and industry-adjusted returns <sub>t</sub>	Firm $i$ 's size- and industry-adjusted returns for quarter $t$ . To adjust for size and industry, I calculate returns over fifty portfolios (five size quintiles based on firm $i$ 's market value of equity at the end of quarter $t$ - $l \times$ ten 1-digit SIC industries).
Industry-adjusted return on assets <sub>t</sub>	Firm $i$ 's return on assets in quarter $t$ ((PIQ <sub>t</sub> +XINTQ <sub>t</sub> +DQP <sub>t</sub> )/ATQ <sub>t-1</sub> ) minus the median return on assets for firm $i$ 's 2-digit SIC industry in quarter $t$ .
Industry-adjusted asset turnover <sub>t</sub>	Firm $i$ 's asset turnover in quarter $t$ (SALEQ $_t$ /ATQ $_{t-1}$ ) minus the median asset turnover for firm $i$ 's 2-digit SIC industry in quarter $t$ .
Industry-adjusted sales growth <sub>t</sub>	Firm $i$ 's sales growth in quarter $t$ ((SALEQ $_t$ /SALEQ $_{t-1}$ )-1) minus the median sales growth for firm $i$ 's 2-digit SIC industry in quarter $t$ .
Industry-adjusted operating cash	Firm $i$ 's operating cash flows in quarter $t$ (OANCFQ $t$ /ATQ $t$ -1) minus the median operating cash flows for firm $i$ 's 2-digit SIC

industry in quarter t.

## Firm characteristics (continued)

Management forecast accuracy<sub>t</sub>

The absolute value of firm i's actual earnings for quarter t (ACTUAL) minus the manager's first EPS forecast for quarter t (VAL\_1), scaled by firm i's stock price at the beginning of quarter t, and multiplied by -100 so that higher values represent greater accuracy. For range forecasts, I use the upper bound (VAL 2) to proxy for the manager's forecast (Ciconte, Kirk, and Tucker 2014).

Stock-based compensation<sub>t</sub>

The residual from regressing the top five executives' average stock- and option-based compensation on market value of equity, book-to-market ratio, and industry and year fixed effects, divided by 100 (Brochet, Loumioti, and Serafeim 2015).

Competition<sub>t</sub>

The number of competition-related words in firm i's 10-K per 1,000 total words in firm i's 10-K in the fiscal year that contains quarter t. Competition-related words are "competition", "competitor", "competitive", "compete", and "competing", including words that end with an "s" (Li, Lundholm, and Minnis 2013).

Analysts' longterm growth forecast<sub>t</sub>

Analysts' long-term growth forecast outstanding for firm i at the end of quarter t.

## **Short-term earnings expectations**

forecast<sub>t</sub>

Meet final analyst An indicator variable set equal to one in quarter t when firm i's actual earnings (ACTUAL) are greater than or equal to the analyst consensus forecast (MEANEST) at the earnings announcement date for quarter t, and zero otherwise.

Meet initial analyst forecastt An indicator variable set equal to one in quarter t when firm i's actual earnings (ACTUAL) are greater than or equal to the analyst consensus forecast (MEANEST) at the beginning of quarter t (prior to the issuance of earnings guidance for quarter t), and zero otherwise.

Just meet final analyst forecast<sub>t</sub> An indicator variable set equal to one in quarter t when firm i's actual earnings (ACTUAL) are greater than or equal to the analyst consensus forecast (MEANEST) and less than or equal to the analyst consensus forecast plus one cent at the earnings announcement date for quarter t, and zero otherwise.

## **Short-term earnings expectations (continued)**

Just miss final analyst forecast<sub>t</sub>

An indicator variable set equal to one in quarter *t* when firm *i*'s actual earnings (ACTUAL) are less than the analyst consensus forecast (MEANEST) and greater than or equal to the analyst consensus forecast minus one cent at the earnings announcement date for quarter *t*, and zero otherwise.

## 10-K and conference call language

10-K: Short-term words ÷ Long-term words<sub>t</sub>

The number of short-term words in firm *i*'s 10-K divided by the sum of short-term words and long-term words in firm *i*'s 10-K in the fiscal year that contains quarter *t*. Short-term words are: "short term", "short-term", "short run", and "short-run". Long-term words are: "long term", "long-term", "long run", and "long-run". I exclude short-term words and long-term words when they are followed by the words "asset", "assets", "liability", or "liabilities". I obtain 10-Ks from the SEC's website at <a href="https://www.sec.gov/Archives/">https://www.sec.gov/Archives/</a> using Python. I also use Python to count the number of short- and long-term words in a firm's 10-K.

10-K: % Longterm view words<sub>t</sub> The number of long-term view words in firm *i*'s 10-K divided by the total number of words in firm *i*'s 10-K in the fiscal year that contains quarter *t*. Long-term view words are: "firm value", "value creation", "create value", "creates value", "sustain", "sustainable", "sustainability", "environment", "environmental", "socially responsible", "social responsibility", and "governance". This list of long-term view words is inspired by letters written by Warren Buffett, Jamie Dimon, and Larry Fink, which can be accessed via the following links:

- <a href="https://www.blackrock.com/corporate/investor-relations/2016-larry-fink-ceo-letter">https://www.blackrock.com/corporate/investor-relations/2016-larry-fink-ceo-letter</a>
- <a href="https://www.wsj.com/articles/short-termism-is-harming-the-economy-1528336801">https://www.wsj.com/articles/short-termism-is-harming-the-economy-1528336801</a>

I obtain 10-Ks from the SEC's website at <a href="https://www.sec.gov/Archives/">https://www.sec.gov/Archives/</a> using Python. I also use Python to count the number of long-term view words in a firm's 10-K.

## 10-K and conference call language (continued)

Conference call: Short-term words  $\div$  Long-term words<sub>t</sub> The number of short-term words in firm *i*'s conference call divided by the number of long-term words in firm *i*'s conference call for quarter *t*. Following Brochet, Loumioti, and Serafeim (2015), short-term words are: "day(s)", "daily", "short term", "short-term", "short-run", "week(s)", "weekly", "month(s)", "monthly", "quarter(s)", and "quarterly". Long-term words are: "long term", "long-term", "long run", "long-run", "year(s)", "annual(ly)", "look(ing) ahead", and "outlook". I hand collect conference call transcripts from Capital IQ, and I use Python to count the number of short- and long-term words in a firm's conference call.

## **Long-term performance**

Size- and industry-adjusted returns <sub>t,t+11</sub>	Firm $i$ 's size- and industry-adjusted returns over quarters $t$ to $t+11$ . To adjust for size and industry, I calculate returns over fifty portfolios (five size quintiles based on firm $i$ 's market value of equity at the end of quarter $t-1 \times ten 1$ -digit SIC industries).
Industry-adjusted return on assets <sub>t,t+11</sub>	Firm $i$ 's return on assets in quarter $t$ ((PIQ <sub>t</sub> +XINTQ <sub>t</sub> +DQP <sub>t</sub> )/ATQ <sub>t-1</sub> ) minus the median return on assets for firm $i$ 's 2-digit SIC industry in quarter $t$ , summed over quarters $t$ to $t+11$ .
Industry-adjusted asset turnover <sub>t,t+11</sub>	Firm $i$ 's asset turnover in quarter $t$ (SALEQ $_t$ /ATQ $_{t-1}$ ) minus the median asset turnover for firm $i$ 's 2-digit SIC industry in quarter $t$ , summed over quarters $t$ to $t+11$ .
Industry-adjusted sales growth <sub>t,t+11</sub>	Firm $i$ 's sales growth in quarter $t$ ((SALEQ <sub>t</sub> /SALEQ <sub>t-1</sub> )-1) minus the median sales growth for firm $i$ 's 2-digit SIC industry in quarter $t$ , summed over quarters $t$ to $t+11$ .
Industry-adjusted operating cash flows <sub>t,t+11</sub>	Firm $i$ 's operating cash flows in quarter $t$ (OANCFQ $_t$ /ATQ $_{t-1}$ ) minus the median operating cash flows for firm $i$ 's 2-digit SIC industry in quarter $t$ , summed over quarters $t$ to $t+11$ .

## **Earnings management**

Discretionary R&D expenses<sub>t</sub>

The residual from estimating the following regression by quarter and 2-digit SIC industry, multiplied by 100 (Vorst 2016):  $XRDQ_t/ATQ_{t-1} = \beta_0 + \beta_1 I/ATQ_{t-1} + \beta_2 InMVE_t + \beta_3 TobinsQ_t + \beta_4 InternalFunds_t/ATQ_{t-1} + \beta_5 SALEQ_t/ATQ_{t-1} + \beta_6 \Delta SALEQ_t + \varepsilon_t$  where TobinsQ is calculated as: (PRCCQ\_t×CSHOQ\_t + PSTKQ\_t + DLTTQ\_t + DLCQ\_t)/ATQ\_{t-1}, and InternalFunds is calculated as: IBQ\_t + DPQ\_t + XRDQ\_t. I require a minimum of 20 observations per industry-quarter to estimate the model.

Discretionary SG&A expenses<sub>t</sub>

The residual from estimating the following regression by quarter and 2-digit SIC industry, multiplied by 100 (Vorst 2016):  $XSGAQ_t/ATQ_{t-1} = \beta_0 + \beta_1 I/ATQ_{t-1} + \beta_2 InMVE_t + \beta_3 TobinsQ_t + \beta_4 InternalFunds_t/ATQ_{t-1} + \beta_5 \Delta SALEQ_t/ATQ_{t-1} + \beta_6 \Delta SALEQ_t/ATQ_{t-1} \times Neg\Delta SALEQ_t + \varepsilon_t$  where TobinsQ is calculated as: (PRCCQ<sub>t</sub>×CSHOQ<sub>t</sub> + PSTKQ<sub>t</sub> + DLTTQ<sub>t</sub> + DLCQ<sub>t</sub>)/ATQ<sub>t-1</sub>, and InternalFunds is calculated as: IBQ<sub>t</sub> + DPQ<sub>t</sub> + XRDQ<sub>t</sub>. I require a minimum of 20 observations per industry-quarter to estimate the model.

Discretionary accruals<sub>t</sub>

The absolute value of the residual from estimating the following regression by quarter and 2-digit SIC industry, multiplied by 100 (Call, Chen, and Miao 2014):

Accruals/ $ATQ_{t-1} = \beta_0 + \beta_1 \Delta SALEQ_t / ATQ_{t-1} + \beta_2 PPENTQ_{t-1} / ATQ_{t-1} + \beta_3 Indadj\_CFO_t / ATQ_{t-1} + \beta_4 NegIndadj\_CFO + \beta_5 Indadj\_CFO_t / ATQ_{t-1} \times NegIndadj\_CFO_t + \varepsilon_t$  where Accruals is calculated as: IBCQ<sub>t</sub> – OANCFQ<sub>t</sub>, and Indadj\\_CFO is calculated as: OANCFQ<sub>t</sub> minus the median OANCFQ<sub>t</sub> for firm *i*'s 2-digit SIC industry in quarter *t*. I require a minimum of 20 observations per industry-quarter to estimate the model.

Total earnings management<sub>t</sub>

The summed decile rankings of firm *i*'s discretionary R&D expenses, discretionary SG&A expenses, and discretionary accruals in quarter *t*, where discretionary R&D and SG&A expenses are multiplied by negative one so that they are increasing in earnings management.

## Underinvestment

## Underinvestment in capital assets<sub>t</sub>

An indicator variable set equal to one when firm *i*'s investments in capital assets (CAPXQ-SPPEQ) fall into the bottom quartile of unexpected investments in capital assets in quarter *t*. Unexpected investments in capital assets is the residual from estimating the following model by quarter and 2-digit SIC industry, multiplied by 100 (Biddle, Hilary, and Verdi 2009):

 $(CAPXQ_t-SPPEQ_t)/ATQ_{t-1} = \beta_0 + \beta_1 SalesGrowth_{t-1} + \varepsilon_t$  where SalesGrowth is calculated as: (SALEQ<sub>t</sub>/SALEQ<sub>t-1</sub>)-1. I require a minimum of 20 observations per industry-quarter to estimate the model.

## Underinvestment in R&D<sub>t</sub>

An indicator variable set equal to one when firm *i*'s investments in research and development (XRDQ) fall into the bottom quartile of unexpected R&D investments in quarter *t*. Unexpected R&D investments is the residual from estimating the following model by quarter and 2-digit SIC industry, multiplied by 100 (Biddle, Hilary, and Verdi 2009):

 $XRDQ_t/ATQ_{t-1} = \beta_0 + \beta_1 Sales Growth_{t-1} + \varepsilon_t$  where Sales Growth is calculated as: (SALEQ<sub>t</sub>/SALEQ<sub>t-1</sub>)-1. I require a minimum of 20 observations per industry-quarter to estimate the model.

## Underinvestment in M&A<sub>t</sub>

An indicator variable set equal to one when firm i's mergers and acquisitions (AQCQ) fall into the bottom quartile of unexpected M&A in quarter t. Unexpected M&A is the residual from estimating the following model by quarter and 2-digit SIC industry, multiplied by 100 (Biddle, Hilary, and Verdi 2009):  $AQCQ_t/ATQ_{t-1} = \beta_0 + \beta_1SalesGrowth_{t-1} + \varepsilon_t$  where SalesGrowth is calculated as: (SALEQ $_t$ /SALEQ $_t$ -1)-1. I require a minimum of 20 observations per industry-quarter to estimate the model.

## **Underinvestment (continued)**

Total underinvestment<sub>t</sub>

An indicator variable set equal to one when firm *i*'s *Investments* fall into the bottom quartile of unexpected investment in quarter *t*. *Investments* is the sum of R&D expenses (XRDQ), capital expenditures (CAPXQ), and acquisitions (AQCQ) minus sales of PP&E (SPPEQ) for firm *i* in quarter *t*, scaled by total assets (ATQ) in quarter *t-1* (Biddle, Hilary, and Verdi 2009). Unexpected investment is the residual from estimating the following model by quarter and 2-digit SIC industry, multiplied by 100 (Biddle, Hilary, and Verdi 2009):

Investments<sub>t</sub> =  $\beta_0 + \beta_1 Sales Growth_{t-1} + \varepsilon_t$  where Sales Growth is calculated as: (SALEQ<sub>t</sub>/SALEQ<sub>t-1</sub>)-1. I require a minimum of 20 observations per industry-quarter to estimate the model.

## Difference-in-difference analysis

Starter An indicator variable set equal to one for firms that initiate the

provision of quarterly earnings guidance (for a minimum of twelve consecutive quarters); and zero for matched control firms that do

not initiate quarterly earnings guidance.

Post An indicator variable set equal to one in the post-earnings

guidance initiation quarters of t to t+7, and zero in the pre-earnings guidance initiation quarters of t-8 to t-1, where earnings guidance

is initiated in quarter *t*.

APPENDIX B

SPORADIC QUARTERLY EARNINGS GUIDANCE

		Sporadic	Test of		Non-	Test of
	Guider	guider	diff.	Guider	guider	diff.
			·			
	mean	mean	t-stat	mean	mean	t-stat
			t-stat			t-stat
	median	median		median	median	
ln(Market value of equity) <sub>t-1</sub>	7.504	7.120	19.40***	7.504	6.824	36.94***
m(warker value of equity)[-]	7.384	6.966	17.70	7.384	6.617	30.74
Managerial ability <sub>t</sub>	0.027	0.002	14.61***	0.027	0.017	13.29***
Manageriai admityt	-0.013	-0.031	14.01	-0.013	-0.031	13.29
Book-to-market ratio <sub>t-1</sub>	0.446	0.498	-13.75***	<b>0.446</b>	0.514	-17.08***
DOOK-to-market ratio <sub>t-1</sub>	0.379	0.429	-13.73	0.440	0.425	-17.00
Lavaraga	0.379	0.429	-14.88***	0.379	0.423	-22.86***
Leverage <sub>t-1</sub>		0. <b>46</b> 6	-14.00		0.478	-22.00
Did calconned	0.410		27 02***	0.410		27 72***
Bid-ask spread <sub>t-1</sub>	0.166	0.280	-27.83***	0.166	0.352	-37.72***
A 1 (C )	0.100	0.141	0.50***	0.100	0.158	10 12444
Analyst forecast dispersion <sub>t</sub>	0.238	0.311	-9.50***	0.238	0.825	-19.12***
5	0.077	0.084	44 (0.000)	0.077	0.115	<b>6.4.6</b> 0 destates
Return volatility <sub>t-1</sub>	0.025	0.027	-11.60***	0.025	0.029	-24.28***
	0.022	0.023		0.022	0.025	
Litigation industry <sub>t</sub>	0.546	0.409	22.30***	0.546	0.352	39.12***
	1.000	0.000		1.000	0.000	
ln(Number of analysts) <sub>t-1</sub>	2.081	1.772	31.12***	2.081	1.440	68.78***
	2.197	1.792		2.197	1.386	
Transient institutional ownership <sub>t-1</sub>	0.154	0.141	9.73***	0.154	0.114	36.00***
	0.145	0.123		0.145	0.095	
Quasi-indexer institutional ownership <sub>t-1</sub>	0.475	0.419	16.96***	0.475	0.348	46.90***
	0.533	0.473		0.533	0.372	
Dedicated institutional ownership <sub>t-1</sub>	0.029	0.034	-6.74***	0.029	0.027	4.80***
_	0.000	0.000		0.000	0.000	
Life cycle: Introduction <sub>t-1</sub>	0.070	0.107	-10.20***	0.070	0.124	-16.34***
•	0.000	0.000		0.000	0.000	
Life cycle: Growth <sub>t-1</sub>	0.282	0.267	2.71***	0.282	0.243	8.72***
•	0.000	0.000		0.000	0.000	
Life cycle: Mature <sub>t-1</sub>	0.460	0.433	4.38***	0.460	0.419	8.05***
	0.000	0.000	-10-0	0.000	0.000	
Life cycle: Shake-out <sub>t-1</sub>	0.156	0.141	3.48***	0.156	0.142	3.76***
Ziro oyere. Situite sugar	0.000	0.000	27.10	0.000	0.000	
Life cycle: Decline <sub>t-1</sub>	0.031	0.052	-8.37***	0.031	0.071	-15.99***
Zire eyere. Beeninet-1	0.000	0.000	0.07	0.000	0.000	10.00
Size- and industry-adjusted returns <sub>t</sub>	0.008	0.002	2.80***	0.008	0.004	1.82*
Size- and modestry-adjusted returnst	0.002	-0.002	2.00	0.002	-0.008	1.02
Industry-adjusted return on assets <sub>t</sub>	0.002 <b>0.011</b>	<b>0.009</b>	8.38***	0.002 <b>0.011</b>	0.003	18.30***
mustry-adjusted return on assets <sub>t</sub>	0.009	0.007	0.30	0.011	0.002	10.50
Industry adjusted asset turners			1 61			1 10
Industry-adjusted asset turnover <sub>t</sub>	0.037	0.034	1.64	0.037	0.039	-1.19
Industry adjusted calcal and di	0.005	0.005	0.05	0.005	0.009	E 10***
Industry-adjusted sales growth <sub>t</sub>	0.015	0.014	0.05	0.015	0.027	-5.19***
T. J. van P. va. J. va. C	0.004	0.000	10 55000	0.004	0.000	10 04***
Industry-adjusted operating cash flows <sub>t</sub>	0.012	0.008	10.57***	0.012	0.003	19.94***
	0.011	0.006		0.011	0.004	

	Guider	Sporadic guider	Guider	Non- guider	Test of diff.
Number of firm-quarter observations	11,494	14,792	11,494	51,362	

Appendix B reports descriptive statistics for quarterly guiders, sporadic quarterly guiders, and non-guiders. Quarterly guiders are defined as firms that provide earnings guidance for every quarter over a minimum of twelve consecutive quarters. Sporadic quarterly guiders are defined as firms that provide earnings guidance for one to eleven quarters over twelve consecutive quarters. Last, non-guiders are defined as firms that do not provide earnings guidance for any quarter over a minimum of twelve consecutive quarters. \*, \*\*\*, and \*\*\* indicate statistical significance at the 10, 5, and 1 percent level, respectively. Continuous variables are winsorized at the 1st and 99th percentiles. See variable definitions in Appendix A.

## APPENDIX C

## **TABLES**

# **TABLE 1** Sample Selection

	Firm-quarter observations
CRSP-Compustat merged database, 2001-2018	428,609
Lagged and leading observations outside sample period of 2003-2015	(121,908)
	306,701
Utility and financial services industries	(117,462)
	189,239
Observations missing necessary CRSP-Compustat variables	(76,174)
	113,065
Observations missing necessary I/B/E/S variables	(29,140)
	83,925
Observations missing managerial ability scores	(2,095)
	81,830
Observations not classified as a quarterly guider or non-guider	(18,974)
	62,856

**TABLE 2**Descriptive Statistics

## **Panel A: Firm characteristics**

	Without	entropy l	oalancing	With e	ancing	
	Guider	Non- guider	Test of diff.	Guider	Non- guider	Test of diff.
	<b>mean</b> median	<b>mean</b> median	t-stat	mean median	mean median	t-stat
$ln(Market\ value\ of\ equity)_{t-1}$	<b>7.504</b>	6.824	36.94***	<b>7.504</b>	<b>7.504</b>	0.00
Managerial ability <sub>t</sub>	7.384 <b>0.027</b>	6.617 <b>0.007</b>	13.29***	7.384 <b>0.027</b>	7.413 <b>0.027</b>	0.00
Book-to-market ratio <sub>t-1</sub>	-0.013 <b>0.446</b>	-0.031 <b>0.514</b>	-17.08***	-0.013 <b>0.446</b>	-0.010 <b>0.446</b>	-0.01
Leverage <sub>t-1</sub>	0.379 <b>0.423</b>	0.425 <b>0.478</b>	-22.86***	0.379 <b>0.423</b>	0.382 <b>0.423</b>	0.00
Bid-ask spread <sub>t-1</sub>	0.410 <b>0.166</b>	0.470 <b>0.352</b>	-37.72***	0.410 <b>0.166</b>	0.414 <b>0.166</b>	0.00
Analyst forecast dispersion <sub>t</sub>	0.100 <b>0.238</b> 0.077	0.158 <b>0.825</b> 0.115	-19.12***	0.100 <b>0.238</b> 0.077	0.098 <b>0.238</b> 0.091	-0.01
Return volatility <sub>t-1</sub>	0.077 0.025 0.022	<b>0.113 0.029</b> 0.025	-24.28***	0.077 0.025 0.022	0.091 0.025 0.022	0.00
Litigation industry <sub>t</sub>	<b>0.546</b> 1.000	<b>0.023 0.352</b> 0.000	39.12***	<b>0.546</b> 1.000	<b>0.546</b> 1.000	0.01
ln(Number of analysts) <sub>t-1</sub>	<b>2.081</b> 2.197	<b>1.440</b> 1.386	68.78***	<b>2.081</b> 2.197	<b>2.081</b> 2.197	0.00
Transient institutional ownership <sub>t-1</sub>	<b>0.154</b> 0.145	<b>0.114</b> 0.095	36.00***	<b>0.154</b> 0.145	<b>0.154</b> 0.144	0.01
Quasi-indexer institutional ownership <sub>t-1</sub>	<b>0.475</b> 0.533	<b>0.348</b> 0.372	46.90***	<b>0.475</b> 0.533	<b>0.475</b> 0.537	0.01
Dedicated institutional ownership <sub>t-1</sub>	<b>0.029</b> 0.000	<b>0.027</b> 0.000	4.80***	<b>0.029</b> 0.000	<b>0.029</b> 0.000	0.00
Life cycle: Introduction <sub>t-1</sub>	<b>0.070</b> 0.000	<b>0.124</b> 0.000	-16.34***	<b>0.070</b> 0.000	<b>0.070</b> 0.000	0.01
Life cycle: Growth <sub>t-1</sub>	<b>0.282</b> 0.000	<b>0.243</b> 0.000	8.72***	<b>0.282</b> 0.000	<b>0.282</b> 0.000	0.00
Life cycle: Mature <sub>t-1</sub>	<b>0.460</b> 0.000	<b>0.419</b> 0.000	8.05***	<b>0.460</b> 0.000	<b>0.460</b> 0.000	0.00
Life cycle: Shake-out <sub>t-1</sub>	<b>0.156</b> 0.000	<b>0.142</b> 0.000	3.76***	<b>0.156</b> 0.000	<b>0.156</b> 0.000	0.00
Life cycle: Decline <sub>t-1</sub>	<b>0.031</b> 0.000	<b>0.071</b> 0.000	-15.99***	<b>0.031</b> 0.000	<b>0.031</b> 0.000	0.00
Size- and industry-adjusted returns <sub>t</sub>	<b>0.008</b> 0.002	<b>0.004</b> -0.008	1.82*	<b>0.008</b> 0.002	<b>0.008</b> 0.000	0.00
Industry-adjusted return on assets <sub>t</sub>	<b>0.011</b> 0.009	<b>0.002</b> 0.005	18.30***	<b>0.011</b> 0.009	<b>0.011</b> 0.010	0.00
Industry-adjusted asset turnover <sub>t</sub>	<b>0.037</b> 0.005	<b>0.039</b> 0.009	-1.19	<b>0.037</b> 0.005	<b>0.037</b> 0.008	0.00

TABLE 2
Descriptive Statistics
(continued)

Panel A: Firm characteristics (continued)

	Without entropy balancing		With entropy balancing			
	Guider	Non- guider	Test of diff.	Guider	Non- guider	Test of diff.
	mean median	<b>mean</b> median	t-stat	<b>mean</b> median	mean median	t-stat
Industry-adjusted sales growtht	<b>0.015</b> 0.004	<b>0.027</b> 0.000	-5.19***	<b>0.015</b> 0.004	<b>0.015</b> 0.003	0.00
Industry-adjusted operating cash flows <sub>t</sub>	<b>0.012</b> 0.011	<b>0.003</b> 0.004	19.94***	<b>0.012</b> 0.011	<b>0.012</b> 0.010	0.00
Number of firm-quarter observations	11,494	51,362		11,494	51,362	

## Panel B: Short-term earnings expectations

	Without entropy balancing		With entropy balancing			
	Guider	Non- guider	Test of diff.	Guider	Non- guider	Test of diff.
	mean median	mean median	t-stat	<b>mean</b> median	mean median	t-stat
Meet final analyst forecast <sub>t</sub>	<b>0.814</b> 1.000	<b>0.608</b> 1.000	42.22***	<b>0.814</b> 1.000	<b>0.695</b> 1.000	23.03***
Meet initial analyst forecast <sub>t</sub>	<b>0.604</b> 1.000	<b>0.495</b> 0.000	21.06***	<b>0.604</b> 1.000	<b>0.561</b> 1.000	7.01***
Just meet final analyst forecast <sub>t</sub>	<b>0.207</b> 0.000	<b>0.126</b> 0.000	22.76***	<b>0.207</b> 0.000	<b>0.154</b> 0.000	10.78***
Just miss final analyst forecast <sub>t</sub>	<b>0.086</b> 0.000	<b>0.069</b> 0.000	6.07***	<b>0.086</b> 0.000	<b>0.079</b> 0.000	1.82*
Number of firm-quarter observations	11,494	51,362		11,494	51,362	

TABLE 2
Descriptive Statistics
(continued)

Panel C: 10-K and conference call language

Panel C: 10-K and conference call language								
	Without	Without entropy balancing			With entropy balancing			
	Guider	Non- guider	Test of diff.	Guider	Non- guider	Test of diff.		
	<b>mean</b> median	mean median	t-stat	mean median	<b>mean</b> median	t-stat		
10-K: Short-term words ÷ Long-term words <sub>t</sub>	<b>0.397</b> 0.364	<b>0.344</b> 0.309	21.07***	<b>0.397</b> 0.364	<b>0.367</b> 0.344	10.17***		
10-K: % Long-term view words <sub>t</sub>	<b>0.068</b> 0.052	<b>0.077</b> 0.056	-11.98***	<b>0.068</b> 0.052	<b>0.068</b> 0.051	-0.55		
Number of firm-quarter observations	9,476	41,849		9,476	41,849			
$\begin{aligned} & Conference \ call : Short-term \ words \div \\ & Long-term \ words_t \end{aligned}$	<b>1.432</b> 1.210	<b>1.416</b> 1.240	0.45	<b>1.432</b> 1.210	<b>1.257</b> 1.170	3.17***		
Number of firm-quarter observations	603	2,674		603	2,674			
Panel D: Long-term performance								
	Without	t entropy	balancing	With 6	entropy ba	alancing		
		Non-	Test of		Non-	Test of		

	Without entropy balancing		With entropy balancing		lancing	
	Guider	Non- guider	Test of diff.	Guider	Non- guider	Test of diff.
	<b>mean</b> median	<b>mean</b> median	t-stat	mean median	<b>mean</b> median	t-stat
Size- and industry-adjusted returns <sub>t,t+11</sub>	0.039	-0.001	4.39***	0.039	-0.015	5.79***
Industry-adjusted return on assets <sub>t,t+11</sub>	-0.074 <b>0.117</b>	-0.133 <b>0.028</b>	18.61***	-0.074 <b>0.117</b>	-0.122 <b>0.104</b>	3.28***
Industry-adjusted asset turnover <sub>t,t+11</sub>	0.093 <b>0.445</b>	0.041 <b>0.474</b>	-1.71*	0.093 <b>0.445</b>	0.093 <b>0.398</b>	2.33***
Industry-adjusted sales growth <sub>t,t+11</sub>	0.082 <b>0.168</b>	0.149 <b>0.502</b>	-21.26***	0.082 <b>0.168</b>	0.078 <b>0.166</b>	0.32
Industry-adjusted operating cash	0.083 <b>0.145</b>	0.118 <b>0.053</b>	24.49***	0.083 <b>0.145</b>	0.068 <b>0.123</b>	7.45***
$flows_{t,t+11}$	0.112	0.049		0.112	0.094	
Number of firm-quarter observations	11,494	51,362		11,494	51,362	

TABLE 2
Descriptive Statistics
(continued)

# Panel E: Entropy balancing weights

	Guider	Non- guider
	mean median	<b>mean</b> median
Entropy balancing weights	<b>1.000</b> 1.000	<b>0.224</b> 0.077
Distribution of entropy balancing weights:		
$0.0 < x \le 0.1$	0	28,446
$0.1 < x \le 0.2$	0	7,342
$0.2 < x \le 0.3$	0	3,847
$0.3 < x \le 0.4$	0	2,512
$0.4 < x \le 0.5$	0	2,002
$0.5 < x \le 0.6$	0	1,474
$0.6 < x \le 0.7$	0	1,193
$0.7 < x \le 0.8$	0	961
$0.8 < x \le 0.9$	0	692
0.9 < x < 1.0	0	586
x = 1	11,494	0
x > 1.0	0	2,307
Number of firm-quarter observations	11,494	51,362

This table reports descriptive statistics for quarterly guiders and non-guiders. Quarterly guiders are defined as firms that provide earnings guidance for every quarter over a minimum of twelve consecutive quarters, and non-guiders are defined as firms that do not provide earnings guidance for any quarter over a minimum of twelve consecutive quarters. In the first three columns of Panels A, B, C, and D, I report descriptive statistics that compare quarterly guiders to non-guiders. In the last three columns of Panels A, B, C, and D, I report descriptive statistics that compare quarterly guiders to non-guiders where the sample has been reweighted using entropy balancing. I balance on each of the firm characteristics listed in Panel A, as well as 2-digit SIC industry and year-quarter. Panel E reports descriptive statistics for the entropy balancing weights. \*, \*\*, and \*\*\* indicate statistical significance at the 10, 5, and 1 percent level, respectively. Continuous variables are winsorized at the 1st and 99th percentiles. See variable definitions in Appendix A.

**TABLE 3**Determinants of Quarterly Earnings Guidance

	(1) Guider <sub>t</sub>	(2) Marginal effects
	Guidei	Marginal effects
ln(Market value of equity) <sub>t-1</sub>	-0.075	-1.701
	(-1.431)	
Managerial ability <sub>t</sub>	-0.171	-0.201
	(-0.474)	
Book-to-market ratio <sub>t-1</sub>	0.168	0.644
	(1.041)	
Leverage <sub>t-1</sub>	-0.575**	-1.781
	(-2.116)	
Bid-ask spread <sub>t-1</sub>	-0.570***	-1.427
	(-2.803)	
Analyst forecast dispersion <sub>t</sub>	-0.054*	-0.130
	(-1.749)	
Return volatility <sub>t-1</sub>	-7.012**	-1.085
	(-2.117)	
Litigation industry <sub>t</sub>	0.358*	3.452
	(1.675)	
ln(Number of analysts) <sub>t-1</sub>	0.912***	13.622
•	(11.343)	
Transient institutional ownership <sub>t-1</sub>	1.045**	1.640
-	(2.440)	
Quasi-indexer institutional ownership <sub>t-1</sub>	0.707***	3.253
•	(3.010)	
Dedicated institutional ownership <sub>t-1</sub>	0.099	0.035
•	(0.128)	
Life cycle: Growth <sub>t-1</sub>	0.227***	2.226
·	(2.755)	
Life cycle: Mature <sub>t-1</sub>	0.194**	1.835
•	(2.223)	
Life cycle: Shake-out <sub>t-1</sub>	0.096	0.920
•	(1.071)	
Life cycle: Decline <sub>t-1</sub>	-0.202*	-1.758
•	(-1.809)	
Size- and industry-adjusted returns <sub>t</sub>	0.095	0.188
	(1.393)	
Industry-adjusted return on assets <sub>t</sub>	0.431	0.146
•	(0.421)	
Industry-adjusted asset turnover <sub>t</sub>	1.398***	1.972
	(3.520)	
Industry-adjusted sales growth <sub>t</sub>	-0.252***	-0.318
, ,	(-3.257)	
Industry-adjusted operating cash flows <sub>t</sub>	2.038***	0.775
	(3.597)	
Industry and year-quarter fixed effects	Yes	
Number of observations	61,171	
Pseudo R <sup>2</sup>	0.229	
Area under the ROC curve	0.825	

### TABLE 3

# Determinants of Quarterly Earnings Guidance (continued)

This table reports a logistic regression that examines the determinants of quarterly earnings guidance. The dependent variable in Column (1) is set equal to one for quarterly guiders, and zero for non-guiders. Quarterly guiders are defined as firms that provide earnings guidance for every quarter over a minimum of twelve consecutive quarters, and non-guiders are defined as firms that do not provide earnings guidance for any quarter over a minimum of twelve consecutive quarters. The marginal effects presented in Column (2) are calculated as the change in the probability of providing quarterly earnings guidance that results from moving from the first to the third quartile of each independent variable's distribution when all independent variables are set at their means, multiplied by 100. The only exceptions are the marginal effects presented for *Litigation Industry*, *Life cycle: Growth*, *Life cycle: Mature*, *Life cycle: Shake-out*, and *Life cycle: Decline*, which are calculated as the change in the probability of providing quarterly earnings guidance that results from moving from zero to one when all independent variables are set at their means, multiplied by 100. \*, \*\*, and \*\*\* indicate statistical significance at the 10, 5, and 1 percent level, respectively. Firm-clustered t-statistics for two-tailed tests are reported in parentheses. The regression is estimated with industry and year-quarter fixed effects (not reported). Continuous variables are winsorized at the 1st and 99th percentiles. See variable definitions in Appendix A.

**TABLE 4**Quarterly Earnings Guidance and Short-Term Earnings Expectations

	(1) Meet final analyst forecast <sub>t</sub>	(2) Meet initial analyst forecast <sub>t</sub>	(3) Just meet final analyst forecast <sub>t</sub>	Just miss final analyst forecast <sub>t</sub>
Guider <sub>t</sub>	0.119***	0.043***	0.053***	0.006
Guideri	(14.669)	(4.770)	(5.805)	(1.381)
In(Market value of equity) <sub>t-1</sub>	0.015***	0.027***	-0.004	-0.005**
in(intainer value of equity)[-]	(3.237)	(4.592)	(-0.877)	(-2.446)
Managerial ability <sub>t</sub>	0.062**	0.106***	-0.103***	-0.050***
Wallagerial desirey	(2.043)	(2.975)	(-3.511)	(-3.059)
Book-to-market ratio <sub>t-1</sub>	0.005	-0.041**	-0.116***	-0.035***
Book to market ratio[-]	(0.320)	(-2.301)	(-7.206)	(-4.243)
Leverage <sub>t-1</sub>	0.058**	0.000	-0.116***	-0.038***
Leverage <sub>[-1</sub>	(2.514)	(0.020)	(-5.049)	(-3.285)
Bid-ask spread <sub>t-1</sub>	0.004	0.037**	0.064***	0.010
Did usk spreud-1	(0.339)	(2.287)	(4.704)	(1.215)
Analyst forecast dispersion <sub>t</sub>	-0.006	-0.003	-0.014***	-0.007***
i mary se rorecast dispersion	(-1.219)	(-0.605)	(-5.328)	(-7.659)
Return volatility <sub>t-1</sub>	0.446	-0.265	-0.822**	-0.595**
rectain volumely [-]	(1.217)	(-0.587)	(-2.278)	(-2.656)
Litigation industry <sub>t</sub>	0.033**	0.056***	0.033**	0.001
Diagation industry(	(2.651)	(3.649)	(2.243)	(0.095)
In(Number of analysts) <sub>t-1</sub>	0.002	-0.023***	0.012	0.014***
mi(r, units or or unary sto)[1]	(0.316)	(-2.789)	(1.482)	(3.628)
Transient institutional ownership <sub>t-1</sub>	0.175***	0.359***	-0.091**	-0.082***
Transfelt institutional ownership.	(4.343)	(8.470)	(-2.537)	(-4.287)
Quasi-indexer institutional ownership <sub>t-1</sub>	0.003	-0.051**	0.051**	0.015
Quasi macker mattational ownershipt-1	(0.194)	(-2.432)	(2.647)	(1.524)
Dedicated institutional ownership <sub>t-1</sub>	-0.039	-0.013	-0.036	0.040
Doubleto motivational o whorship is	(-0.573)	(-0.139)	(-0.456)	(0.853)
Life cycle: Growth <sub>t-1</sub>	0.018	0.037***	-0.010	0.002
and eyere. Growing	(1.594)	(2.773)	(-0.842)	(0.216)
Life cycle: Mature <sub>t-1</sub>	0.017	0.038***	-0.009	0.004
	(1.580)	(2.856)	(-0.709)	(0.488)
Life cycle: Shake-out <sub>t-1</sub>	0.014	0.040**	-0.022*	-0.001
	(1.157)	(2.549)	(-1.797)	(-0.169)
Life cycle: Decline <sub>t-1</sub>	-0.000	0.038*	-0.051***	0.004
	(-0.013)	(1.831)	(-3.138)	(0.392)
Size- and industry-adjusted returns <sub>t</sub>	0.183***	0.660***	0.005	-0.037***
	(11.850)	(22.376)	(0.357)	(-3.530)
Industry-adjusted return on assets <sub>t</sub>	1.218***	1.927***	0.028	-0.043
industry dejusted retains on assets,	(8.369)	(8.839)	(0.225)	(-0.641)
Industry-adjusted asset turnover <sub>t</sub>	-0.056*	0.021	0.034	0.020
industry desired deservation very	(-1.740)	(0.562)	(1.049)	(0.921)
Industry-adjusted sales growth <sub>t</sub>	0.198***	0.329***	-0.084***	-0.048***
Brown	(7.916)	(9.632)	(-4.519)	(-4.624)
Industry-adjusted operating cash flows <sub>t</sub>	0.263**	0.108	-0.210**	-0.093
and the state of t	(2.277)	(0.781)	(-2.279)	(-1.609)
	\ \ \-\ \ \	()	(/	(/

TABLE 4
Quarterly Earnings Guidance and Short-Term Earnings Expectations (continued)

	(1) Meet final analyst forecast <sub>t</sub>	(2) Meet initial analyst forecast <sub>t</sub>	(3) Just meet final analyst forecast <sub>t</sub>	(4) Just miss final analyst forecast <sub>t</sub>
Industry and year-quarter fixed effects	Yes	Yes	Yes	Yes
Number of observations	62,856	62,856	62,856	62,856
Adjusted R <sup>2</sup>	0.066	0.163	0.045	0.012
$\chi^2$ test: $\beta_{1Final} = \beta_{1Initial}$ or $\beta_{1JustMeet} = \beta_{1JustMiss}$	107.72*** (0.000)		25.57*** (0.000)	

This table reports OLS regressions where the propensity to meet (or miss) analysts' quarterly earnings forecasts is compared between quarterly guiders and non-guiders. The sample is reweighted via entropy balancing to improve the comparability of treatment and control observations. The initial analyst consensus forecast is estimated at the beginning of quarter t, whereas the final analyst consensus forecast is estimated at the earnings announcement date for quarter t. I consider a firm as just meeting or just missing analysts' earnings expectations when actual earnings deviate by a penny or less from the final analyst consensus forecast. At the bottom of the table, I use  $\chi^2$  tests to test the hypothesis that the coefficient on  $Guider(\beta_I)$  is equal in Columns (1) and (2) or in Columns (3) and (4). The corresponding p-value is reported in parentheses. \*, \*\*\*, and \*\*\* indicate statistical significance at the 10, 5, and 1 percent level, respectively. Firm- and year-quarter-clustered t-statistics for two-tailed tests are reported in parentheses. Each regression is estimated with industry and year-quarter fixed effects (not reported). Continuous variables are winsorized at the 1st and 99th percentiles. See variable definitions in Appendix A.

**TABLE 5**Quarterly Earnings Guidance and 10-K and Conference Call Language

	(1)	(2)	(3)
	10-K:		Conference call:
	Short-term words	10-K:	Short-term words
	÷ Long-term	% Long-term	÷ Long-term
	words <sub>t</sub>	view words <sub>t</sub>	words <sub>t</sub>
			1
Guider <sub>t</sub>	0.030***	-0.000	0.169*
	(2.701)	(-0.161)	(1.954)
ln(Market value of equity) <sub>t-1</sub>	-0.018***	0.005***	0.024
	(-2.862)	(3.524)	(0.378)
Managerial ability <sub>t</sub>	0.123***	-0.042***	0.011
	(3.261)	(-4.540)	(0.036)
Book-to-market ratio <sub>t-1</sub>	-0.082***	0.018***	0.256
	(-4.198)	(3.999)	(0.699)
Leverage <sub>t-1</sub>	-0.167***	0.026***	-0.345
	(-5.350)	(4.362)	(-1.148)
Bid-ask spread <sub>t-1</sub>	-0.004	0.004	-2.146
	(-0.235)	(1.172)	(-1.125)
Analyst forecast dispersion <sub>t</sub>	0.001	0.001	1.072**
	(0.181)	(0.741)	(2.616)
Return volatility <sub>t-1</sub>	0.640*	-0.169**	16.868**
	(1.859)	(-2.549)	(2.220)
Litigation industry <sub>t</sub>	0.043*	-0.023***	-0.053
	(1.984)	(-4.623)	(-0.388)
ln(Number of analysts) <sub>t-1</sub>	0.001	-0.001	0.165
	(0.083)	(-0.506)	(1.432)
Transient institutional ownership <sub>t-1</sub>	0.038	-0.006	-0.400
	(0.859)	(-0.797)	(-0.472)
Quasi-indexer institutional ownership <sub>t-1</sub>	-0.026	0.006	0.285
	(-1.114)	(1.260)	(1.192)
Dedicated institutional ownership <sub>t-1</sub>	0.038	-0.048***	-0.935*
***	(0.506)	(-3.265)	(-1.788)
Life cycle: Growth <sub>t-1</sub>	0.006	0.003	-0.256
***	(0.695)	(1.431)	(-1.599)
Life cycle: Mature <sub>t-1</sub>	-0.004	0.006***	-0.420***
Y.C. 1 01 1	(-0.451)	(2.841)	(-2.820)
Life cycle: Shake-out <sub>t-1</sub>	0.030***	0.001	-0.276*
Y.C. 1 D 1	(3.252)	(0.505)	(-1.972)
Life cycle: Decline <sub>t-1</sub>	0.055***	-0.005**	-0.385*
	(4.515)	(-2.608)	(-1.715)
Size- and industry-adjusted returns <sub>t</sub>	0.020**	-0.003	0.285
T 1	(2.358)	(-1.575)	(1.333)
Industry-adjusted return on assets <sub>t</sub>	-0.170	0.062***	4.380**
T 1	(-1.229)	(2.708)	(2.426)
Industry-adjusted asset turnover <sub>t</sub>	-0.057	-0.005	0.647
To do an order of the desired	(-1.193)	(-0.597)	(0.819)
Industry-adjusted sales growth <sub>t</sub>	-0.005	-0.004**	-0.116
Indiana di malana di 16	(-0.395)	(-2.069)	(-0.446)
Industry-adjusted operating cash flows <sub>t</sub>	0.110	0.018	1.403
	(1.456)	(1.155)	(1.030)

TABLE 5

Quarterly Earnings Guidance and 10-K and Conference Call Language (continued)

	$(1) \\ 10\text{-K:}$ Short-term words $ \div \text{Long-term} \\ \text{words}_t$	(2) 10-K: % Long-term view words <sub>t</sub>	(3) Conference call: Short-term words ÷ Long-term words <sub>t</sub>
Industry and year-quarter fixed effects	Yes	Yes	Yes
Number of observations	51,325	51,325	3,275
Adjusted R <sup>2</sup>	0.125	0.343	0.382

This table reports OLS regressions where 10-K and conference call language is compared between quarterly guiders and non-guiders. The sample is reweighted via entropy balancing to improve the comparability of treatment and control observations. I use Python to analyze firms' 10-K and conference call language. The dependent variable in Column (1) represents a ratio of short-term 10-K words to long-term 10-K words (e.g., short-run, long-run). The dependent variable in Column (2) represents the fraction of total 10-K words that reflect taking a long-term view (e.g., sustainability, firm value, social responsibility). The dependent variable in Column (3) represents a ratio of short-term conference call words to long-term conference call words, following the methodology developed by Brochet, Loumioti, and Serafeim (2015). \*, \*\*, and \*\*\* indicate statistical significance at the 10, 5, and 1 percent level, respectively. Firm- and year-quarter-clustered t-statistics for two-tailed tests are reported in parentheses. Each regression is estimated with industry and year-quarter fixed effects (not reported). Continuous variables are winsorized at the 1st and 99th percentiles. See variable definitions in Appendix A.

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**TABLE 6**Quarterly Earnings Guidance and Long-Term Performance

	(1)	(2)	(3)	(4)	(5)
	Size- and				Industry- adj.
	industry-	Industry-	Industry-	Industry-	operating
	adj.	adj.	adj. asset	adj. sales	cash
	returns <sub>t,t+11</sub>	$ROA_{t,t+11}$			$flows_{t,t+11}$
	100011151,1111	110111,1111	<u> </u>	810 ((111,1111	110 ((5),(+11
Guider <sub>t</sub>	0.054**	0.013	0.047***	0.002	0.022***
	(2.005)	(1.628)	(3.152)	(0.099)	(3.784)
ln(Market value of equity) <sub>t-1</sub>	-0.019	0.033***	-0.019**	-0.019*	0.017***
• •	(-1.428)	(6.999)	(-2.367)	(-1.968)	(5.195)
Managerial ability <sub>t</sub>	0.035	0.036	0.083	-0.013	0.071***
	(0.426)	(1.154)	(1.330)	(-0.150)	(3.047)
Book-to-market ratio <sub>t-1</sub>	0.031	-0.159***	-0.007	-0.430***	-0.140***
	(0.503)	(-7.692)	(-0.194)	(-11.843)	(-11.730)
Leverage <sub>t-1</sub>	0.310***	-0.062**	-0.025	-0.419***	-0.125***
	(4.429)	(-2.486)	(-0.485)	(-5.373)	(-6.924)
Bid-ask spread <sub>t-1</sub>	0.117**	0.053**	0.099***	-0.003	-0.002
	(2.010)	(2.376)	(3.196)	(-0.075)	(-0.169)
Analyst forecast dispersion <sub>t</sub>	-0.050***	-0.013***	0.006	0.012	-0.011***
	(-5.184)	(-3.192)	(0.677)	(0.789)	(-3.864)
Return volatility <sub>t-1</sub>	0.074	-1.042**	-0.938	3.430***	0.307
***	(0.044)	(-2.441)	(-1.587)	(4.290)	(1.246)
Litigation industry <sub>t</sub>	-0.012	-0.058***	-0.130***	-0.007	0.011
1.07 1 ( 1 )	(-0.275)	(-3.117)	(-3.656)	(-0.197)	(1.038)
ln(Number of analysts) <sub>t-1</sub>	0.003	-0.015**	0.054***	0.025	0.014***
The section of the state of the section of the sect	(0.109)	(-2.109)	(3.832)	(1.395)	(2.827)
Transient institutional ownership <sub>t-1</sub>	-0.113	-0.040	-0.116	0.428***	0.057*
Over indexen institutional asympathin	(-0.881)	(-1.044) 0.051***	(-1.601) 0.041	(2.799) -0.162***	(1.920)
Quasi-indexer institutional ownership <sub>t-1</sub>	0.088				0.015
Dedicated institutional asymptohin	(1.560) -0.052	(3.014) 0.051	(1.194) -0.048	(-3.662) 0.045	(1.134) 0.051
Dedicated institutional ownership <sub>t-1</sub>	(-0.236)	(0.719)	(-0.326)	(0.139)	(1.130)
Life cycle: Growth <sub>t-1</sub>	0.030	0.719)	(-0.320) -0.045***	-0.125**	0.062***
Life cycle. Growin <sub>t-1</sub>	(1.268)	(4.636)	(-3.123)	(-2.456)	(8.367)
Life cycle: Mature <sub>t-1</sub>	0.067***	0.073***	0.012	-0.156***	0.083***
Life cycle. Waturet-1	(2.747)	(7.705)	(0.822)	(-2.967)	(11.039)
Life cycle: Shake-out <sub>t-1</sub>	0.051*	0.045***	0.001	-0.154***	0.059***
Ene cycle. Shake out-1	(1.805)	(4.932)	(0.096)	(-2.813)	(7.953)
Life cycle: Decline <sub>t-1</sub>	0.062	-0.006	0.056*	0.004	0.004
Ene cycle. Become <sub>t-1</sub>	(1.496)	(-0.407)	(1.729)	(0.060)	(0.358)
Size- and industry-adjusted returns <sub>t</sub>	0.171***	0.119***	-0.065***	0.316***	0.076***
2	(3.604)	(9.401)	(-3.053)	(9.100)	(8.276)
Industry-adjusted return on assets <sub>t</sub>	-0.303	4.266***	-3.355***	-2.247***	2.034***
and y any and a control of	(-0.934)	(10.421)	(-12.095)	(-6.771)	(9.462)
Industry-adjusted asset turnover <sub>t</sub>	0.009	0.132***	10.817***	-0.249***	0.062**
	(0.104)	(3.346)	(98.598)	(-3.203)	(2.289)
Industry-adjusted sales growth <sub>t</sub>	0.091**	-0.183***	-1.290***	0.986***	-0.105***
	(2.371)	(-9.160)	(-24.280)	(11.146)	(-7.130)
Industry-adjusted operating cash flows <sub>t</sub>	1.146***	1.066***	-1.868***	-0.512*	1.960***
· -	(4.451)	(6.167)	(-8.038)	(-1.879)	(16.193)

**TABLE 6**Quarterly Earnings Guidance and Long-Term Performance (continued)

	(1)	(2)	(3)	(4)	(5) Industry-
	Size- and				adj.
	industry-	Industry-	Industry-	Industry-	operating
	adj.	adj.	adj. asset	adj. sales	cash
	$returns_{t,t+11}$	$ROA_{t,t+11}$	$turnover_{t,t+11}$	$growth_{t,t+11}$	$flows_{t,t+11}$
Industry and year-quarter fixed effects	Yes	Yes	Yes	Yes	Yes
Number of observations	62,856	62,856	62,856	62,856	62,856
Adjusted R <sup>2</sup>	0.036	0.547	0.897	0.139	0.598

This table reports OLS regressions where the long-term performance of quarterly guiders and non-guiders is compared. The sample is reweighted via entropy balancing to improve the comparability of treatment and control observations. Industry-adjusted performance is calculated by subtracting the median performance by 2-digit SIC industry from the firm's performance. \*, \*\*, and \*\*\* indicate statistical significance at the 10, 5, and 1 percent level, respectively. Firm- and year-quarter-clustered t-statistics for two-tailed tests are reported in parentheses. Each regression is estimated with industry and year-quarter fixed effects (not reported). Continuous variables are winsorized at the 1st and 99th percentiles. See variable definitions in Appendix A.

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TABLE 7
Quarterly Earnings Guidance and Long-Term Performance
Cross-Sections: Information Asymmetry, Managerial Ability, and Litigation Risk

Panel A: Information asymmetry					
	(1)	(2)	(3)	(4)	(5)
					Industry-
	Size- and				adj.
	industry-	Industry-	Industry-	Industry-	operating
	adj.	adj.	adj. asset	adj. sales	cash
	returns <sub>t,t+11</sub>	$ROA_{t,t+11}$	turnover <sub>t,t+11</sub>	growth <sub>t,t+11</sub>	flows <sub>t,t+11</sub>
C. The	0.010	0.006	0.022	0.015	0.010**
Guider <sub>t</sub>	0.018 (0.586)	0.006 (0.589)	0.023	-0.015 (-0.836)	0.018**
High analyst forecast dispersion <sub>t</sub>	-0.132***	-0.044***	(1.286) -0.073***	(-0.836) -0.017	(2.429) -0.024***
riigii aliaryst forecast dispersioni	(-4.751)	(-5.194)	(-4.291)	(-0.904)	(-3.869)
Guider <sub>t</sub> × High analyst forecast	0.075**	0.013	0.051**	0.042	0.008
dispersion <sub>t</sub>	(1.990)	(1.011)	(2.012)	(0.960)	(0.928)
	( 12 2 )	( ) 2	,	( /	(2.12 2)
Controls	Yes	Yes	Yes	Yes	Yes
Industry and year-quarter fixed effects	Yes	Yes	Yes	Yes	Yes
Number of observations	62,856	62,856	62,856	62,856	62,856
Adjusted R <sup>2</sup>	0.036	0.548	0.897	0.139	0.598
	0.000	0.4004	O O S Astratata	0.005	0.00 saladah
F test: $\beta_I + \beta_3 = 0$	0.093**	0.190*	0.074***	0.027	0.026***
	(0.011)	(0.082)	(0.001)	(0.555)	(0.001)
Panel B: Managerial ability					
1 miles 20 islandiges in the size	(1)	(2)	(3)	(4)	(5)
	, ,	. ,	( )	( )	Industry-
	Size- and				adj.
	industry-	Industry-	Industry-	Industry-	operating
	adj.	adj.	adj. asset	adj. sales	cash
	$returns_{t,t+11}$	$ROA_{t,t+11}$	$\underline{turnover_{t,t+11}}$	$growth_{t,t+11}$	flows <sub>t,t+11</sub>
TT 1	0.072*	0.015*	0.025**	0.022	0.000
High management forecast accuracy <sub>t</sub>	0.052*	0.015*	0.035**	-0.022	0.008
	(1.903)	(1.849)	(2.162)	(-0.803)	(1.353)
Controls	Yes	Yes	Yes	Yes	Yes
Industry and year-quarter fixed effects	Yes	Yes	Yes	Yes	Yes
Number of observations	11,494	11,494	11,494	11,494	11,494
Adjusted R <sup>2</sup>	0.059	0.558	0.903	0.150	0.620
3					

TABLE 7
Quarterly Earnings Guidance and Long-Term Performance
Cross-Sections: Information Asymmetry, Managerial Ability, and Litigation Risk
(continued)

Panel	C:	Litiga	tion	risk

Tuner Of Eniguion film	Size- and industry- adj.	(2) Industry- adj. ROA <sub>t,t+11</sub>	Industry- adj. asset turnover <sub>t,t+11</sub>	(4)  Industry- adj. sales growth <sub>t,t+11</sub>	(5) Industry- adj. operating cash flows <sub>t,t+11</sub>
Guidert	0.062*	0.019	0.035*	-0.015	0.025***
Litigation industry <sub>t</sub>	(1.666)	(1.616)	(1.720)	(-0.482)	(3.181)
	-0.004	-0.053***	-0.141***	-0.024	0.013
	(-0.097)	(-2.960)	(-3.713)	(-0.633)	(1.240)
$Guider_t \times Litigation \ industry_t$	-0.014	-0.010	0.022	0.033	-0.005
	(-0.273)	(-0.586)	(0.727)	(0.686)	(-0.438)
Controls Industry and year-quarter fixed effects Number of observations Adjusted R <sup>2</sup>	Yes	Yes	Yes	Yes	Yes
	Yes	Yes	Yes	Yes	Yes
	62,856	62,856	62,856	62,856	62,856
	0.036	0.547	0.897	0.140	0.598
F test: $\beta_1 + \beta_3 = 0$	0.048	0.009	0.057**	0.017	0.020**
	(0.196)	(0.430)	(0.012)	(0.622)	(0.022)

This table reports OLS regressions where long-term performance is compared between quarterly guiders and non-guiders. The sample is reweighted via entropy balancing to improve the comparability of treatment and control observations. Industry-adjusted performance is calculated by subtracting the median performance by 2-digit SIC industry from the firm's performance. Panel A examines whether the relationship between quarterly earnings guidance and long-term performance differs based on information asymmetry. Panel B examines whether the relationship between quarterly earnings guidance and long-term performance differs based on managerial ability. Panel C examines whether the relationship between quarterly earnings guidance and long-term performance differs based on litigation risk. \*, \*\*, and \*\*\* indicate statistical significance at the 10, 5, and 1 percent level, respectively. Firm- and year-quarter-clustered t-statistics for two-tailed tests are reported in parentheses. Each regression is estimated with industry and year-quarter fixed effects (not reported). Continuous variables are winsorized at the 1st and 99th percentiles. See variable definitions in Appendix A.

**TABLE 8**Quarterly Earnings Guidance and Earnings Management and Underinvestment

# Panel A: Earnings management

	(1)	(2)	(3)	(4)
	Discretionary	Discretionary		
	R&D	SG&A	Discretionary	•
	expenses <sub>t</sub>	expenses <sub>t</sub>	accruals <sub>t</sub>	management <sub>t</sub>
Guider <sub>t</sub>	0.222***	0.238	-0.037	-0.858***
	(3.377)	(1.377)	(-0.691)	(-3.370)
ln(Market value of equity) <sub>t-1</sub>	-0.004	-0.220**	0.006	0.031
•	(-0.123)	(-2.431)	(0.184)	(0.236)
Managerial ability <sub>t</sub>	1.495***	6.374***	1.058***	-6.477***
	(6.100)	(7.239)	(5.581)	(-6.133)
Book-to-market ratio <sub>t-1</sub>	-0.383***	-1.912***	-1.069***	0.167
	(-3.337)	(-5.851)	(-9.708)	(0.369)
Leverage <sub>t-1</sub>	0.002	-0.245	-1.014***	-0.839
-	(0.013)	(-0.469)	(-6.249)	(-1.157)
Bid-ask spread <sub>t-1</sub>	0.210**	0.399	0.457***	-0.131
	(2.017)	(1.344)	(4.187)	(-0.350)
Analyst forecast dispersion <sub>t</sub>	0.055*	-0.012	0.066***	-0.014
	(1.860)	(-0.195)	(2.864)	(-0.196)
Return volatility <sub>t-1</sub>	3.924	8.550	9.004***	-3.686
	(1.623)	(1.372)	(3.053)	(-0.449)
Litigation industry <sub>t</sub>	0.726***	0.513	0.082	-2.551***
	(7.851)	(1.407)	(0.828)	(-5.648)
ln(Number of analysts) <sub>t-1</sub>	0.210***	0.363**	-0.040	-0.864***
	(4.128)	(2.517)	(-0.944)	(-4.329)
Transient institutional ownership <sub>t-1</sub>	0.477*	0.823	0.171	-1.586*
	(1.991)	(1.190)	(0.685)	(-1.696)
Quasi-indexer institutional ownership <sub>t-1</sub>	-0.157	-0.314	-0.538***	-0.064
	(-1.224)	(-0.867)	(-4.679)	(-0.128)
Dedicated institutional ownership <sub>t-1</sub>	0.673	2.354*	-0.272	-2.688
	(1.564)	(1.857)	(-0.714)	(-1.608)
Life cycle: Growth <sub>t-1</sub>	0.008	-0.037	-0.017	-0.178
	(0.146)	(-0.263)	(-0.183)	(-0.788)
Life cycle: Mature <sub>t-1</sub>	0.036	0.333**	0.077	-0.353
	(0.628)	(2.307)	(0.894)	(-1.499)
Life cycle: Shake-out <sub>t-1</sub>	0.204***	0.417***	0.027	-0.922***
	(3.291)	(2.927)	(0.323)	(-3.730)
Life cycle: Decline <sub>t-1</sub>	0.416***	0.555***	0.022	-1.123***
	(5.369)	(2.961)	(0.215)	(-4.193)
Size- and industry-adjusted returns <sub>t</sub>	-0.037	0.013	0.190*	0.351
	(-0.539)	(0.077)	(1.912)	(1.286)
Industry-adjusted return on assets <sub>t</sub>	-15.882***	-26.744***	-20.630***	39.321***
	(-11.445)	(-8.373)	(-6.351)	(8.227)
Industry-adjusted asset turnover <sub>t</sub>	1.442***	8.727***	1.910***	-6.429***
	(5.676)	(7.391)	(6.174)	(-5.235)
Industry-adjusted sales growth <sub>t</sub>	0.528***	-1.166***	0.742***	0.338
	(5.603)	(-4.328)	(5.118)	(0.905)
Industry-adjusted operating cash flows <sub>t</sub>	1.294**	2.184	1.159	-9.411***
	(2.215)	(1.392)	(0.723)	(-3.769)

TABLE 8

Quarterly Earnings Guidance and Earnings Management and Underinvestment (continued)

Panel A:	<b>Earnings</b>	management (	continued
I allel A.	Laimigs	management v	Commune

Taner M. Darnings management (comm	(1) Discretionary R&D expenses <sub>t</sub>	(2) Discretionary SG&A expenses <sub>t</sub>	(3) Discretionary accruals <sub>t</sub>	(4) Total earnings management <sub>t</sub>
Industry and year-quarter fixed effects Number of observations Adjusted $R^2$	Yes 60,098 0.203	Yes 60,098 0.209	Yes 44,428 0.168	Yes 44,428 0.137
Panel B: Underinvestment				
	(1)	(2)	(3)	(4)
	Under-	Under-	Under-	
	investment in	investment in	investment in	Total under-
	capital assets <sub>t</sub>	R&D <sub>t</sub>	M&A <sub>t</sub>	investment <sub>t</sub>
G	0.010	0.045/h/h	0.010	0.01.5
Guider <sub>t</sub>	-0.018	-0.045**	-0.010	-0.016
1.04.1.4.1	(-1.358)	(-2.274)	(-1.404)	(-1.103)
ln(Market value of equity) <sub>t-1</sub>	-0.012* (-1.735)	0.046*** (4.657)	-0.018*** (-4.109)	0.035*** (4.654)
Managerial ability <sub>t</sub>	0.258***	-0.545***	0.062*	-0.328***
Wanageriai aomityt	(4.921)	(-7.945)	(2.002)	(-5.759)
Book-to-market ratio <sub>t-1</sub>	0.154***	0.351***	-0.030**	0.328***
Book to market range,	(5.213)	(10.909)	(-2.248)	(12.522)
Leverage <sub>t-1</sub>	0.069*	0.328***	-0.003	0.289***
<i>5</i> · · ·	(1.970)	(6.105)	(-0.133)	(6.977)
Bid-ask spread <sub>t-1</sub>	0.000	-0.071***	0.002	-0.046*
_	(0.019)	(-2.704)	(0.114)	(-1.976)
Analyst forecast dispersion <sub>t</sub>	0.005	-0.010	0.006***	-0.004
	(1.040)	(-1.268)	(2.781)	(-0.652)
Return volatility <sub>t-1</sub>	-1.486***	-2.549***	0.341	-2.607***
	(-3.175)	(-3.650)	(0.883)	(-5.147)
Litigation industry <sub>t</sub>	0.018	-0.303***	-0.017	-0.197***
1.07 1 6 1	(0.849)	(-9.678)	(-1.354)	(-7.480)
ln(Number of analysts) <sub>t-1</sub>	-0.022*	-0.068***	-0.014*	-0.062***
Transient institutional oxynarchin	(-1.952) 0.007	(-4.387) -0.154**	(-1.850) 0.004	(-5.116) -0.158***
Transient institutional ownership <sub>t-1</sub>	(0.129)	(-2.021)	(0.099)	(-3.005)
Quasi-indexer institutional ownership <sub>t-1</sub>	0.024	0.017	-0.028*	0.032
Quasi indexer institutional ownership-1	(0.832)	(0.421)	(-1.699)	(1.045)
Dedicated institutional ownership <sub>t-1</sub>	-0.027	-0.242*	0.044	-0.113
1	(-0.278)	(-1.748)	(0.764)	(-0.945)
Life cycle: Growth <sub>t-1</sub>	-0.027**	0.011	-0.022	-0.029**
-	(-2.053)	(0.817)	(-1.547)	(-2.368)
Life cycle: Mature <sub>t-1</sub>	-0.010	0.021	-0.018	0.008
	(-0.858)	(1.523)	(-1.423)	(0.572)
Life cycle: Shake-out <sub>t-1</sub>	0.033**	-0.032**	-0.007	-0.002
	(2.399)	(-2.018)	(-0.488)	(-0.118)

TABLE 8
Quarterly Earnings Guidance and Earnings Management and Underinvestment (continued)

#### **Panel B: Underinvestment (continued)**

(1)	(2)	(2)	(4)
(-)	(2)	(3)	(4)
Under-	Under-	Under-	
vestment in	investment in	investment in	Total under-
pital assets <sub>t</sub>	$R\&D_t$	$M\&A_t$	$investment_t$
	_		
0.049**	-0.080***	0.003	-0.013
(2.408)	(-3.738)	(0.170)	(-0.682)
-0.015	-0.083***	-0.019	-0.046***
(-1.014)	(-5.449)	(-1.145)	(-2.947)
-0.561***	2.042***	0.172	1.053***
(-3.955)	(9.420)	(1.554)	(6.167)
-0.196***	0.266***	0.039	0.277***
(-3.332)	(3.895)	(1.362)	(4.444)
-0.007	-0.119***	-0.110***	-0.141***
(-0.335)	(-4.935)	(-5.692)	(-7.190)
-0.465***	-0.436***	0.122	-0.631***
(-4.571)	(-3.281)	(1.126)	(-5.445)
Yes	Yes	Yes	Yes
62,856	62.856	62.856	62,856
0.099	0.430	0.245	0.256
	Under-vestment in pital assets.  0.049** (2.408) -0.015 (-1.014) -0.561*** (-3.955) -0.196*** (-3.332) -0.007 (-0.335) -0.465*** (-4.571)  Yes 62,856	Undervestment in pital assets <sub>t</sub> 0.049** (2.408) -0.015 (-1.014) -0.561*** (-3.955) -0.196*** (-3.332) -0.007 (-0.335) -0.465*** (-4.571)  Vision of the pital assets <sub>t</sub> Underinvestment in R&D <sub>t</sub> -0.080*** (-3.738) -0.083*** (-5.449) -0.561*** (-5.449) -0.266*** (-3.332) -0.119*** (-4.335) -0.465** (-4.935) -0.436*** (-4.571)  Ves Yes 62,856  62,856	Undervestment in pital assets,         Underinvestment in R&Dt         Underinvestment in M&At           0.049**         -0.080***         0.003           (2.408)         (-3.738)         (0.170)           -0.015         -0.083***         -0.019           (-1.014)         (-5.449)         (-1.145)           -0.561***         2.042***         0.172           (-3.955)         (9.420)         (1.554)           -0.196***         0.266***         0.039           (-3.332)         (3.895)         (1.362)           -0.007         -0.119***         -0.110***           (-0.335)         (-4.935)         (-5.692)           -0.465***         -0.436***         0.122           (-4.571)         (-3.281)         (1.126)           Yes         Yes         Yes           62,856         62,856         62,856

This table reports OLS regressions that compare earnings management and underinvestment between quarterly guiders and non-guiders. The sample is reweighted via entropy balancing to improve the comparability of treatment and control observations. Panel A reports OLS regressions where earnings management is compared between quarterly guiders and non-guiders. I calculate discretionary R&D expenses and discretionary SG&A expenses as the residuals from models that predict a firm's expected R&D and SG&A expenses by 2-digit SIC industry and year-quarter (Vorst 2016). Following Call, Chen, and Miao (2014), I calculate discretionary accruals as the absolute value of the residuals from the Jones (1991) model after controlling for economic losses, estimated by 2-digit SIC industry and year-quarter. To form my total earnings management measure, I sum the decile rankings of a firm's discretionary R&D expenses, discretionary SG&A expenses, and discretionary accruals, where discretionary R&D and SG&A expenses are multiplied by negative one prior to ranking so that they are increasing in earnings management. Panel B reports OLS regressions where underinvestment is compared between quarterly guiders and non-guiders. Each underinvestment variable is an indicator set equal to one in quarters when a firm's investments fall into the bottom quartile of unexpected investment. I calculate unexpected investment as the residual from regressing investments on lagged sales growth by 2-digit SIC industry and year-quarter (Biddle, Hilary, and Verdi 2009). \*, \*\*, and \*\*\* indicate statistical significance at the 10, 5, and 1 percent level, respectively. Firm- and year-quarter-clustered t-statistics for two-tailed tests are reported in parentheses. Each regression is estimated with industry and year-quarter fixed effects (not reported). Continuous variables are winsorized at the 1st and 99th percentiles. See variable definitions in Appendix A.

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TABLE 9
Quarterly Earnings Guidance and Long-Term Performance
Cross-Sections: Transient Institutional Ownership, Analyst Following, and
Stock-Based Compensation

Panel A: Transient institutional owner	ship				
	(1)	(2)	(3)	(4)	(5)
					Industry-
	Size- and				adj.
	industry-	Industry-	Industry-	Industry-	operating
	adj.	adj.	adj. asset	adj. sales	cash
	$returns_{t,t+11}$	$ROA_{t,t+11}$	$\underline{\text{turnover}_{t,t+11}}$	growth <sub>t,t+11</sub>	flows <sub>t,t+11</sub>
G : 1	0.040	0.00 calcula	0.070 de de de	0.006	0.00 Calculuda
Guider <sub>t</sub>	0.048	0.026**	0.072***	-0.006	0.026***
TT's to a more strong to said a strong to some	(1.205)	(2.125)	(3.103)	(-0.215)	(3.203)
High transient institutional ownership <sub>t</sub>	0.019	0.006	0.007	0.051**	0.010
C. i.e With a series in the discrete	(0.683)	(0.722)	(0.374)	(2.600)	(1.618)
Guider <sub>t</sub> × High transient institutional	0.011	-0.019	-0.038	0.012	-0.006
ownership <sub>t</sub>	(0.237)	(-1.473)	(-1.427)	(0.355)	(-0.685)
Controls	Yes	Yes	Yes	Yes	Yes
Industry and year-quarter fixed effects	Yes	Yes	Yes	Yes	Yes
Number of observations	62,856	62,856	62,856	62,856	62,856
Adjusted R <sup>2</sup>	0.036	0.547	02,830	02,830	02,830
Adjusted K	0.030	0.347	0.697	0.136	0.398
F test: $\beta_1 + \beta_3 = 0$	0.058*	0.006	0.033*	0.007	0.020***
$p_1 + p_3 = 0$	(0.070)	(0.485)	(0.064)	(0.827)	(0.006)
	(0.070)	(0.103)	(0.001)	(0.027)	(0.000)
Panel B: Analyst following					
Panel B: Analyst following	(1)	(2)	(3)	(4)	(5)
Panel B: Analyst following	(1)	(2)	(3)	(4)	(5) Industry-
Panel B: Analyst following	(1) Size- and	(2)	(3)	(4)	Industry-
Panel B: Analyst following	Size- and				Industry- adj.
Panel B: Analyst following	Size- and industry-	Industry-	Industry-	Industry-	Industry-
Panel B: Analyst following	Size- and industry- adj.	Industry- adj.	Industry- adj. asset	Industry- adj. sales	Industry- adj. operating cash
Panel B: Analyst following	Size- and industry-	Industry-	Industry-	Industry- adj. sales	Industry- adj. operating
· · ·	Size- and industry- adj.	Industry- adj.	Industry- adj. asset	Industry- adj. sales growth <sub>t,t+11</sub>	Industry- adj. operating cash
Panel B: Analyst following  Guider <sub>t</sub>	Size- and industry- adj. returns <sub>t,t+11</sub>	Industry- adj. ROA <sub>t,t+11</sub>	Industry- adj. asset turnover <sub>t,t+11</sub>	Industry- adj. sales	Industry- adj. operating cash flows <sub>t,t+11</sub>
· · ·	Size- and industry- adj. returns <sub>t,t+11</sub>	Industry- adj. ROA <sub>t,t+11</sub>	Industry- adj. asset turnover <sub>t,t+11</sub> 0.058***	Industry- adj. sales growth <sub>t,t+11</sub> -0.061**	Industry- adj. operating cash flows <sub>t,t+11</sub>
Guider <sub>t</sub>	Size- and industry- adj. returns <sub>t,t+11</sub> 0.067 (1.667)	Industry- adj. ROA <sub>t,t+11</sub> 0.023** (2.043) -0.008	Industry- adj. asset turnover <sub>t,t+11</sub> 0.058*** (2.749)	Industry- adj. sales growth <sub>t,t+11</sub> -0.061** (-2.057) -0.027	Industry- adj. operating cash flows <sub>t,t+11</sub> 0.022*** (2.938) 0.010
Guider <sub>t</sub> High analyst following <sub>t</sub>	Size- and industry- adj. returns <sub>t,t+11</sub> 0.067 (1.667) 0.001	Industry- adj. ROA <sub>t,t+11</sub> 0.023** (2.043)	Industry- adj. asset turnover <sub>t,t+11</sub> 0.058*** (2.749) 0.051***	Industry- adj. sales growth <sub>t,t+11</sub> -0.061** (-2.057)	Industry- adj. operating cash flows <sub>t,t+11</sub> 0.022*** (2.938)
Guider <sub>t</sub>	Size- and industry- adj. returns <sub>t,t+11</sub> 0.067 (1.667) 0.001 (0.049)	Industry- adj. ROA <sub>t,t+11</sub> 0.023** (2.043) -0.008 (-0.891)	Industry- adj. asset turnover <sub>t,t+11</sub> 0.058*** (2.749) 0.051*** (2.721)	Industry- adj. sales growth <sub>t,t+11</sub> -0.061** (-2.057) -0.027 (-0.906)	Industry- adj. operating cash flows <sub>t,t+11</sub> 0.022*** (2.938) 0.010 (1.567)
Guider <sub>t</sub> High analyst following <sub>t</sub>	Size- and industry- adj. returns <sub>t,t+11</sub> 0.067 (1.667) 0.001 (0.049) -0.018	Industry- adj. ROA <sub>t,t+11</sub> 0.023** (2.043) -0.008 (-0.891) -0.013	Industry- adj. asset turnover <sub>t,t+11</sub> 0.058*** (2.749) 0.051*** (2.721) -0.016	Industry- adj. sales growth <sub>t,t+11</sub> -0.061** (-2.057) -0.027 (-0.906) 0.088**	Industry- adj. operating cash flows <sub>t,t+11</sub> 0.022*** (2.938) 0.010 (1.567) 0.000
Guider <sub>t</sub> High analyst following <sub>t</sub>	Size- and industry- adj. returns <sub>t,t+11</sub> 0.067 (1.667) 0.001 (0.049) -0.018	Industry- adj. ROA <sub>t,t+11</sub> 0.023** (2.043) -0.008 (-0.891) -0.013	Industry- adj. asset turnover <sub>t,t+11</sub> 0.058*** (2.749) 0.051*** (2.721) -0.016	Industry- adj. sales growth <sub>t,t+11</sub> -0.061** (-2.057) -0.027 (-0.906) 0.088**	Industry- adj. operating cash flows <sub>t,t+11</sub> 0.022*** (2.938) 0.010 (1.567) 0.000
$\begin{aligned} &Guider_t \\ &High \ analyst \ following_t \\ &Guider_t \times High \ analyst \ following_t \end{aligned}$	Size- and industry- adj. returns <sub>t,t+11</sub> 0.067 (1.667) 0.001 (0.049) -0.018 (-0.403)	Industry- adj. ROA <sub>t,t+11</sub> 0.023** (2.043) -0.008 (-0.891) -0.013 (-1.025)	Industry- adj. asset turnover <sub>t,t+11</sub> 0.058*** (2.749) 0.051*** (2.721) -0.016 (-0.669)	Industry- adj. sales growth <sub>t,t+11</sub> -0.061** (-2.057) -0.027 (-0.906) 0.088** (2.373)	Industry- adj. operating cash flows <sub>t,t+11</sub> 0.022*** (2.938) 0.010 (1.567) 0.000 (0.029)
$\begin{aligned} & Guider_t \\ & High \ analyst \ following_t \\ & Guider_t \times High \ analyst \ following_t \end{aligned}$ $Controls$	Size- and industry- adj. returns <sub>t,t+11</sub> 0.067 (1.667) 0.001 (0.049) -0.018 (-0.403)	Industry- adj. ROA <sub>t,t+11</sub> 0.023** (2.043) -0.008 (-0.891) -0.013 (-1.025)	Industry- adj. asset turnover <sub>t,t+11</sub> 0.058*** (2.749) 0.051*** (2.721) -0.016 (-0.669)	Industry- adj. sales growth <sub>t,t+11</sub> -0.061** (-2.057) -0.027 (-0.906) 0.088** (2.373)	Industry- adj. operating cash flows <sub>t,t+11</sub> 0.022*** (2.938) 0.010 (1.567) 0.000 (0.029)
$Guider_t \\ High analyst following_t \\ \\ Guider_t \times High \ analyst \ following_t \\ \\ Controls \\ Industry \ and \ year-quarter \ fixed \ effects \\ \\$	Size- and industry- adj. returns <sub>t,t+11</sub> 0.067 (1.667) 0.001 (0.049) -0.018 (-0.403)  Yes Yes	Industry- adj. ROA <sub>t,t+11</sub> 0.023** (2.043) -0.008 (-0.891) -0.013 (-1.025) Yes	Industry- adj. asset turnover <sub>t,t+11</sub> 0.058*** (2.749) 0.051*** (2.721) -0.016 (-0.669) Yes Yes	Industry- adj. sales growth <sub>t,t+11</sub> -0.061** (-2.057) -0.027 (-0.906) 0.088** (2.373) Yes Yes	Industry- adj. operating cash flows <sub>t,t+11</sub> 0.022*** (2.938) 0.010 (1.567) 0.000 (0.029)  Yes Yes
$Guider_t \\ High analyst following_t \\ Guider_t \times High analyst following_t \\ \\ Controls \\ Industry and year-quarter fixed effects \\ Number of observations \\ Adjusted R^2 \\$	Size- and industry- adj. returns <sub>t,t+11</sub> 0.067 (1.667) 0.001 (0.049) -0.018 (-0.403)  Yes Yes 62,856 0.036	Industry- adj. ROA <sub>t,t+11</sub> 0.023** (2.043) -0.008 (-0.891) -0.013 (-1.025) Yes Yes 62,856 0.547	Industry- adj. asset turnovert,t+11  0.058*** (2.749) 0.051*** (2.721) -0.016 (-0.669)  Yes Yes 62,856 0.897	Industry- adj. sales growth <sub>t,t+11</sub> -0.061** (-2.057) -0.027 (-0.906) 0.088** (2.373) Yes Yes 62,856 0.140	Industry-adj. operating cash flowst,t+11  0.022*** (2.938) 0.010 (1.567) 0.000 (0.029)  Yes Yes 62,856 0.598
$Guider_t \\ High analyst following_t \\ Guider_t \times High analyst following_t \\ Controls \\ Industry and year-quarter fixed effects \\ Number of observations$	Size- and industry- adj. returns <sub>t,t+11</sub> 0.067 (1.667) 0.001 (0.049) -0.018 (-0.403)  Yes Yes 62,856 0.036  0.049	Industry-adj. ROA <sub>t,t+11</sub> 0.023** (2.043) -0.008 (-0.891) -0.013 (-1.025)  Yes Yes 62,856 0.547 0.010	Industry- adj. asset turnover <sub>t,t+11</sub> 0.058*** (2.749) 0.051*** (2.721) -0.016 (-0.669)  Yes Yes 62,856 0.897  0.042**	Industry-adj. sales growth <sub>t,t+11</sub> -0.061** (-2.057) -0.027 (-0.906) 0.088** (2.373)  Yes Yes 62,856 0.140 0.027	Industry- adj. operating cash flows <sub>t,t+11</sub> 0.022*** (2.938) 0.010 (1.567) 0.000 (0.029)  Yes Yes 42,856 0.598  0.022***
$Guider_t \\ High analyst following_t \\ Guider_t \times High analyst following_t \\ \\ Controls \\ Industry and year-quarter fixed effects \\ Number of observations \\ Adjusted R^2 \\$	Size- and industry- adj. returns <sub>t,t+11</sub> 0.067 (1.667) 0.001 (0.049) -0.018 (-0.403)  Yes Yes 62,856 0.036	Industry- adj. ROA <sub>t,t+11</sub> 0.023** (2.043) -0.008 (-0.891) -0.013 (-1.025) Yes Yes 62,856 0.547	Industry- adj. asset turnovert,t+11  0.058*** (2.749) 0.051*** (2.721) -0.016 (-0.669)  Yes Yes 62,856 0.897	Industry- adj. sales growth <sub>t,t+11</sub> -0.061** (-2.057) -0.027 (-0.906) 0.088** (2.373) Yes Yes 62,856 0.140	Industry-adj. operating cash flowst,t+11  0.022*** (2.938) 0.010 (1.567) 0.000 (0.029)  Yes Yes 62,856 0.598

TABLE 9
Quarterly Earnings Guidance and Long-Term Performance
Cross-Sections: Transient Institutional Ownership, Analyst Following, and
Stock-Based Compensation

(continued)

Panel (	C:	Stock-based	compensation
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i anei C. Stock-baseu compensation					
	(1)	(2)	(3)	(4)	(5)
					Industry-
	Size- and				adj.
	industry-	Industry-	Industry-	Industry-	operating
	adj.	adj.	adj. asset	adj. sales	cash
	$returns_{t,t+11}$	$ROA_{t,t+11}$	$\underline{turnover_{t,t+11}}$	$growth_{t,t+11}$	flows <sub>t,t+11</sub>
Guidert	0.067**	0.009	0.037*	0.023	0.014*
	(2.019)	(0.829)	(1.878)	(0.754)	(1.682)
High stock-based compensation <sub>t</sub>	0.034	-0.033***	-0.014	-0.012	-0.003
	(0.977)	(-2.982)	(-0.619)	(-0.630)	(-0.412)
$Guider_t \times High stock-based$	-0.083*	-0.011	0.002	0.031	-0.001
compensation <sub>t</sub>	(-1.842)	(-0.727)	(0.076)	(0.757)	(-0.065)
Controls	Yes	Yes	Yes	Yes	Yes
Industry and year-quarter fixed effects	Yes	Yes	Yes	Yes	Yes
Number of observations	36,692	36,692	36,692	36,692	36,692
Adjusted R <sup>2</sup>	0.047	0.565	0.908	0.146	0.626
F test: $\beta_1 + \beta_3 = 0$	-0.016	-0.001	0.039*	0.054	0.013
	(0.719)	(0.913)	(0.090)	(0.150)	(0.122)

This table reports OLS regressions where long-term performance is compared between quarterly guiders and non-guiders. The sample is reweighted via entropy balancing to improve the comparability of treatment and control observations. Industry-adjusted performance is calculated by subtracting the median performance by 2-digit SIC industry from the firm's performance. Panel A examines whether the relationship between quarterly earnings guidance and long-term performance differs based on transient institutional ownership. Panel B examines whether the relationship between quarterly earnings guidance and long-term performance differs based on analyst coverage. Panel C examines whether the relationship between quarterly earnings guidance differs based on stock-based compensation. \*, \*\*, and \*\*\* indicate statistical significance at the 10, 5, and 1 percent level, respectively. Firm- and year-quarter-clustered t-statistics for two-tailed tests are reported in parentheses. Each regression is estimated with industry and year-quarter fixed effects (not reported). Continuous variables are winsorized at the 1st and 99th percentiles. See variable definitions in Appendix A.

# TABLE 10 Propensity Score Matching Analysis

Panel A: Short-term earnings expectat	tions				
		(1) Meet final analyst forecast <sub>t</sub>	(2) Meet initial analyst forecast <sub>t</sub>	(3) Just meet final analyst forecastt	(4) Just miss final analyst forecastt
Guider <sub>t</sub>		0.164*** (12.576)	0.080*** (5.931)	0.055*** (4.628)	-0.006 (-0.702)
$\begin{array}{c} \text{Controls} \\ \text{Industry and year-quarter fixed effects} \\ \text{Number of observations} \\ \text{Adjusted } R^2 \end{array}$		Yes Yes 8,162 0.092	Yes Yes 8,162 0.167	Yes Yes 8,162 0.034	Yes Yes 8,162 0.006
$\chi^2$ test: $\beta_{1Final} = \beta_{1Initial}$ or $\beta_{1JustMeet} = \beta_{1JustMiss}$			94*** 000)		7*** 000)
Panel B: 10-K language				(1) 10-K: Short-term words ÷ Long-term words <sub>t</sub>	(2) 10-K: % Long-term view words <sub>t</sub>
Guidert				0.023* (1.689)	0.001 (0.229)
Controls Industry and year-quarter fixed effects Number of observations Adjusted R <sup>2</sup>				Yes Yes 6,078 0.114	Yes Yes 6,078 0.340
Panel C: Long-term performance	(1)	(2)	(3)	(4)	(5) Industry-
	Size- and industry- adj. returns <sub>t,t+11</sub>	Industry- adj. ROA <sub>t,t+11</sub>	Industry- adj. asset turnover <sub>t,t+11</sub>	Industry- adj. sales growth <sub>t,t+11</sub>	adj. operating cash flows <sub>t,t+11</sub>
Guider <sub>t</sub>	0.074** (2.340)	0.014 (1.373)	0.039* (1.854)	-0.035 (-1.621)	0.020*** (2.815)
Controls Industry and year-quarter fixed effects Number of observations Adjusted R <sup>2</sup>	Yes Yes 8,162 0.029	Yes Yes 8,162 0.581	Yes Yes 8,162 0.893	Yes Yes 8,162 0.198	Yes Yes 8,162 0.613

TABLE 10
Propensity Score Matching Analysis (continued)

Panel D: Earnings management				
	(1)	(2)	(3)	(4)
		Discretionary		Total
	R&D	SG&A	Discretionary	earnings
	<u>expenses</u> <sub>t</sub>	expenses <sub>t</sub>	accruals <sub>t</sub>	management <sub>t</sub>
Guider <sub>t</sub>	0.301***	0.687***	-0.156**	-1.452***
	(3.610)	(3.349)	(-2.193)	(-4.642)
Controls	Yes	Yes	Yes	Yes
Industry and year-quarter fixed effects	Yes	Yes	Yes	Yes
Number of observations	7,616	7,616	5,606	5,606
Adjusted R <sup>2</sup>	0.245	0.255	0.165	0.168
Panel E: Underinvestment	(1)	(2)	(3)	(4)
	(1)	(2)	(3)	(4)
	Under-	** 1	** .	
	investment	Under-	Under-	TD + 1 1
	in capital	investment		Total under-
	assets <sub>t</sub>	in R&D <sub>t</sub>	in M&A <sub>t</sub>	investment <sub>t</sub>
Guidert	-0.014	-0.056**	-0.012	-0.026
	(-0.866)	(-2.273)	(-1.388)	(-1.283)
Controls	Yes	Yes	Yes	Yes
Industry and year-quarter fixed effects	Yes	Yes	Yes	Yes
Number of observations	8,162	8,162	8,162	8,162
Adjusted R <sup>2</sup>	0.098	0.379	0.282	0.245

This table reports OLS regressions related to my propensity score matching analysis, where firms that provide quarterly earnings guidance are matched to firms that do not provide quarterly earnings guidance based on their estimated propensities to provide quarterly earnings guidance. I estimate propensity scores for each observation in my sample by regressing an indicator variable set equal to one for quarterly guiders and zero for non-guiders on each of the firm characteristics listed in Panel A of Table 2. I then match each quarterly guider observation with the non-guider observation that has the closest propensity score, requiring that matches occur within the same 2-digit SIC industry and year-quarter. I use this matched sample of quarterly guiders and non-guiders to repeat the tests shown in Tables 4-6 and 8. \*, \*\*, and \*\*\* indicate statistical significance at the 10, 5, and 1 percent level, respectively. Firm- and year-quarter-clustered t-statistics for two-tailed tests are reported in parentheses. Each regression is estimated with industry and year-quarter fixed effects (not reported). Continuous variables are winsorized at the 1st and 99th percentiles. See variable definitions in Appendix A.

**TABLE 11**Difference-In-Difference Analysis

# Panel A: Short-term earnings expectations

Panel A: Short-term earnings expectations				
	(1)	(2)	(3)	(4)
	Meet final	Meet initial	Just meet	Just miss
	analyst	analyst	final analyst	final analyst
	forecast <sub>t</sub>	forecast <sub>t</sub>	forecast <sub>t</sub>	forecast <sub>t</sub>
$Post_t$	0.003	0.007	0.008	0.000
	(0.266)	(0.431)	(0.923)	(0.010)
Starter <sub>t</sub>	0.092***	0.017	0.040***	0.002
	(6.710)	(0.988)	(2.708)	(0.192)
$Post_t \times Starter_t$	0.065***	0.031	0.018	-0.009
	(4.165)	(1.328)	(1.357)	(-0.788)
Controls	Yes	Yes	Yes	Yes
Industry and year-quarter fixed effects	Yes	Yes	Yes	Yes
Number of observations	12,878	12,878	12,878	12,878
Adjusted R <sup>2</sup>	0.083	0.170	0.058	0.018
$\chi^2$ test: $\beta_{3Final} = \beta_{3Initial}$ or	3.9	79**	1.7	768
$eta_{3JustMeet}=eta_{3JustMiss}$	(0.0)	046)	(0.1	184)
F test: $\beta_1 + \beta_3 = 0$	0.068***	0.039**	0.026**	-0.008
	(0.000)	(0.018)	(0.043)	(0.357)
		•		
Panel B: 10-K language				
			(1)	(2)
			10-K:	
			Short-term	10-K:
			words ÷	% Long-
			Long-term	term view
			words <sub>t</sub>	$words_t$
			-	
$Post_t$			-0.001	0.002*
			(-0.122)	(1.679)
Starter <sub>t</sub>			0.024	0.006**
•			(1.441)	(2.035)
$Post_t \times Starter_t$			0.018	-0.006***
			(1.565)	(-2.770)
			(====)	(=::::)
Controls			Yes	Yes
Industry and year-quarter fixed effects			Yes	Yes
Number of observations			11,537	11,537
Adjusted R <sup>2</sup>			0.151	0.355
- <del> </del>				
F test: $\beta_1 + \beta_3 = 0$			0.017*	-0.003*
······································			(0.091)	(0.076)
			(	(/
		-		

TABLE 11
Difference-In-Difference Analysis
(continued)

(continued)						
Panel C: Long-term performance	(1)	(2)	(2)	(4)	(5)	
	(1)	(2)	(3)	(4)	(5)	
	G: 1				Industry-	
	Size- and	T., J.,	T., d.,	T., d.,	adj.	
	industry-	Industry-	Industry-	Industry- adj. sales	operating cash	
	adj. returns <sub>t.t+11</sub>	adj. ROA <sub>t,t+11</sub>	adj. asset turnover <sub>t,t+11</sub>		flows <sub>t,t+11</sub>	
	TCturnst,t+11	KOAt,t+11	turnovert,t+11	grownit,t+11	110WSt,t+11	
$Post_t$	-0.061	-0.021**	0.005	-0.030	-0.015*	
Tost	(-1.460)	(-2.032)	(0.207)	(-1.432)	(-1.973)	
Starter <sub>t</sub>	0.041	0.001	0.049	0.042	0.017	
	(0.689)	(0.067)	(1.603)	(1.251)	(1.538)	
$Post_t \times Starter_t$	0.062	0.008	0.009	-0.002	0.013	
	(0.977)	(0.531)	(0.277)	(-0.055)	(1.251)	
	,	,	,	,		
Controls	Yes	Yes	Yes	Yes	Yes	
Industry and year-quarter fixed effects	Yes	Yes	Yes	Yes	Yes	
Number of observations	12,878	12,878	12,878	12,878	12,878	
Adjusted R <sup>2</sup>	0.069	0.549	0.869	0.189	0.581	
_						
F test: $\beta_1 + \beta_3 = 0$	0.001	-0.014	0.015	-0.032	-0.002	
	(0.984)	(0.218)	(0.595)	(0.154)	(0.827)	
			1			
D IDE '						
Panel D: Earnings management		(1)	(2)	(2)	(4)	
		(1)	(2) Discretionary	(3)	(4) Total	
		R&D	SG&A	Discretionary	earnings	
		expenses <sub>t</sub>	expenses <sub>t</sub>	accruals <sub>t</sub>	managementt	
		•				
Post <sub>t</sub>		0.022	0.110	-0.206	-0.050	
		(0.468)	(0.776)	(-0.908)	(-0.124)	
Starter <sub>t</sub>		0.142	0.025	-0.245	0.531	
		(1.179)	(0.084)	(-1.021)	(0.844)	
$Post_t \times Starter_t$		-0.034	-0.004	0.034	-0.448	
		(-0.509)	(-0.016)	(0.145)	(-1.185)	
Controls		Yes	Yes	Yes	Yes	
Industry and year-quarter fixed effects		Yes	Yes	Yes	Yes	
Number of observations		9,493	9,493	1,845	1,845	
Adjusted R <sup>2</sup>		0.317	0.378	0.378	0.218	
Exact $\theta + \theta = 0$		0.011	0.107	0.172	0.409	
F test: $\beta_1 + \beta_3 = 0$		-0.011	0.107	-0.172	-0.498	

(0.860)

(0.557)

(0.426)

(0.150)

TABLE 11
Difference-In-Difference Analysis (continued)

# Panel E: Underinvestment

Panel E: Underinvestment				
	(1)	(2)	(3)	(4)
	Under-			
	investment	Under-	Under-	
	in capital	investment	investment	Total under-
	assets <sub>t</sub>	in R&D <sub>t</sub>	in M&A <sub>t</sub>	investment <sub>t</sub>
$Post_t$	-0.009	-0.004	-0.011	-0.018
	(-0.663)	(-0.372)	(-0.894)	(-1.431)
Starter <sub>t</sub>	0.003	-0.046*	-0.027**	-0.013
	(0.183)	(-1.776)	(-2.401)	(-0.585)
$Post_t \times Starter_t$	-0.023	-0.010	0.025*	0.005
	(-1.308)	(-0.583)	(1.708)	(0.251)
Controls	Yes	Yes	Yes	Yes
Industry and year-quarter fixed effects	Yes	Yes	Yes	Yes
Number of observations	12,878	12,878	12,878	12,878
Adjusted R <sup>2</sup>	0.096	0.441	0.249	0.242
F test: $\beta_1 + \beta_3 = 0$	-0.032**	-0.014	0.014	-0.013
	(0.027)	(0.338)	(0.303)	(0.381)

This table reports OLS regressions related to my difference-in-difference analysis, where firms that initiate quarterly earnings guidance are matched to firms that continue to forgo quarterly earnings guidance. I identify 449 firms that initiate quarterly earnings guidance over my sample period of 2003 to 2015, and I use coarsened exact matching to identify matches in the quarter prior to earnings guidance initiation. I require that matches occur in the same year-quarter and 2-digit SIC industry. Additionally, matches must fall within the same quartile of analyst following, calculated by fiscal year and 1-digit SIC industry. Among firms that satisfy these requirements, I select the control firm with the closest market value of equity to the treatment firm. I then estimate my difference-in-difference analyses over the pre- and post- periods of quarters t-8 to t-1 and quarters t to t+7, respectively, where earnings guidance is initiated in quarter t. At the bottom of each panel, I use F and  $\chi^2$  tests to test various hypotheses. The corresponding p-values are reported in parentheses. \*, \*\*, and \*\*\* indicate statistical significance at the 10, 5, and 1 percent level, respectively. Firm- and year-quarter-clustered t-statistics for two-tailed tests are reported in parentheses. Each regression is estimated with industry and year-quarter fixed effects (not reported). Continuous variables are winsorized at the 1st and 99th percentiles. See variable definitions in Appendix A.

TABLE 12
Quarterly Earnings Guidance and Long-Term Performance
Robustness Tests: Performance Over Five Years and Additional Control Variables

Panel A: Performance over five years					
	(1)	(2)	(3)	(4)	(5)
	Size- and				Industry- adj.
	industry-	Industry-	Industry-	Industry-	operating
	adj.	adj. ROA <sub>t,t+19</sub>	adj. asset turnover <sub>t,t+19</sub>	adj. sales	cash flows <sub>t,t+19</sub>
	returns <sub>t,t+19</sub>	KOAt,t+19	turnover <sub>t,t+19</sub>	growth,t+19	110 w St,t+19
Guider <sub>t</sub>	0.063	0.020	0.087**	-0.012	0.035***
	(1.149)	(1.195)	(2.283)	(-0.296)	(2.962)
Controls	Yes	Yes	Yes	Yes	Yes
Industry and year-quarter fixed effects	Yes	Yes	Yes	Yes	Yes
Number of observations	45,883	45,883	45,883	45,883	45,883
Adjusted R <sup>2</sup>	0.042	0.522	0.863	0.142	0.586
			•		
Panel B: Controlling for analysts' long	_		(2)	(4)	(5)
	(1)	(2)	(3)	(4)	(5) Industry-
	Size- and				adj.
	industry-	Industry-	Industry-	Industry-	operating
	adj.	adj.	adj. asset	adj. sales	cash
	returns <sub>t,t+11</sub>	$ROA_{t,t+11}$	$\underline{\text{turnover}_{t,t+11}}$	growth <sub>t,t+11</sub>	flows <sub>t,t+11</sub>
Guidert	0.062**	0.007	0.024	0.018	0.018***
	(2.229)	(0.823)	(1.520)	(0.658)	(2.888)
Analysts' long-term growth forecast <sub>t</sub>	0.001	-0.004***	0.001	0.006***	-0.001
	(0.594)	(-5.977)	(0.428)	(2.921)	(-1.101)
Controls	Yes	Yes	Yes	Yes	Yes
Industry and year-quarter fixed effects	Yes	Yes	Yes	Yes	Yes
Number of observations	39,345	39,345	39,345	39,345	39,345
Adjusted R <sup>2</sup>	0.042	0.580	0.903	0.144	0.633
			•		
Panel C: Controlling for competition	(1)	(2)	(2)	(4)	(5)
	(1)	(2)	(3)	(4)	(5) Industry-
	Size- and				adj.
	industry-	Industry-	Industry-	Industry-	operating
	adj.	adj.	adj. asset	adj. sales	cash
	$\underline{returns_{t,t+11}}$	$ROA_{t,t+11}$	$\underline{turnover_{t,t+11}}$	$\underline{growth_{t,t+11}}$	flows <sub>t,t+11</sub>
Guidert	0.060**	0.016*	0.038**	0.003	0.023***
	(2.218)	(1.851)	(2.425)	(0.126)	(3.796)
	(2.210)	(1.051)	(2.723)	(0.120)	(3.770)
Competition <sub>t</sub>	-0.022	0.001	0.011	-0.037*	0.009

TABLE 12

Quarterly Earnings Guidance and Long-Term Performance

Taste: Performance Over Five Years and Additional Control Verice

Robustness Tests: Performance Over Five Years and Additional Control Variables (continued)

Panel C: Controlling for competition (continued)							
	(1)	(2)	(3)	(4)	(5)		
					Industry-		
	Size- and				adj.		
	industry-	Industry-	Industry-	Industry-	operating		
	adj.	adj.	adj. asset	adj. sales	cash		
	$returns_{t,t+11}$	$ROA_{t,t+11}$	$\underline{turnover_{t,t+11}}$	$growth_{t,t+11}$	flows <sub>t,t+11</sub>		
	37	<b>X</b> 7	37	<b>X</b> 7	3.7		
Controls	Yes	Yes	Yes	Yes	Yes		
Industry and year-quarter fixed effects	Yes	Yes	Yes	Yes	Yes		
Number of observations	51,501	51,501	51,501	51,501	51,501		
Adjusted R <sup>2</sup>	0.039	0.563	0.901	0.147	0.617		
			_				
			_				
Panel D: Controlling for the firm's propensity to meet the final analyst forecast							
•	(1)	(2)	(3)	(4)	(5)		
	. ,	, ,	, ,	, ,	Industry-		
	Size- and				adj.		
	industry-	Industry-	Industry-	Industry-	operating		
	adj.	adj.	adj. asset	adj. sales	cash		
	returns <sub>t,t+11</sub>	$ROA_{t,t+11}$	turnover <sub>t,t+11</sub>	$growth_{t,t+11}$	$flows_{t,t+11}$		
Guider <sub>t</sub>	0.041	0.015*	0.048***	-0.003	0.022***		
	(1.497)	(1.780)	(3.266)	(-0.142)	(3.754)		
Meet final analyst forecast <sub>t</sub>	0.135***	0.007	-0.018**	0.004	0.009***		
•	(8.552)	(1.195)	(-2.018)	(0.388)	(2.851)		
	` '	` /	` /	` /	` /		

This table reports OLS regressions where long-term performance is compared between quarterly guiders and non-guiders. The sample is reweighted via entropy balancing to improve the comparability of treatment and control observations. Industry-adjusted performance is calculated by subtracting the median performance by 2-digit SIC industry from the firm's performance. Panel A examines whether there are differences in long-term performance between quarterly guiders and non-guiders over the next five years (quarters t to t+19). Panel B examines whether there are differences in long-term performance between quarterly guiders and non-guiders after controlling for analysts' long-term growth forecast. Panel C examines whether there are differences in long-term performance between quarterly guiders and non-guiders after controlling for competition. Panel D examines whether there are differences in long-term performance between quarterly guiders and non-guiders after controlling for the firm's propensity to meet the final analyst consensus forecast. \*, \*\*, and \*\*\* indicate statistical significance at the 10, 5, and 1 percent level, respectively. Firm- and year-quarter-clustered t-statistics for two-tailed tests are reported in parentheses. Each regression is estimated with industry and year-quarter fixed effects (not reported). Continuous variables are winsorized at the 1st and 99th percentiles. See variable definitions in Appendix A.

Yes

Yes

62,856

0.040

Yes

Yes

62,856

0.546

Yes

Yes

62,856

0.898

Yes

Yes

62,856

0.138

Yes

Yes

62,856

0.595

Controls

Adjusted R<sup>2</sup>

Industry and year-quarter fixed effects

Number of observations

## **REFERENCES CITED**

- Acito, A. A. 2011. Does Quarterly Earnings Guidance Increase or Reduce Earnings Management? Doctoral dissertation, University of Iowa.
- Ajinkya, B. B., and M. J. Gift. 1984. Corporate Managers' Earnings Forecasts and Symmetrical Adjustments of Market Expectations. *Journal of Accounting Research* 22 (2): 425-444.
- Ajinkya, B. B., S. Bhojraj, and P. Sengupta. 2005. The Association Between Outside Directors, Institutional Investors, and the Properties of Management Earnings Forecasts. *Journal of Accounting Research* 43 (3): 343-376.
- Baik, B., D. B. Farber, and S. Lee. 2011. CEO Ability and Management Earnings Forecasts. *Contemporary Accounting Research* 28 (5): 1645-1668.
- Biddle, G. C., G. Hilary, and R. S. Verdi. 2009. How Does Financial Reporting Quality Relate to Investment Efficiency? *Journal of Accounting and Economics* 48 (2-3): 112-131.
- Brochet, F., M. Loumioti, and G. Serafeim. 2015. Speaking of the Short-Term: Disclosure Horizon and Managerial Myopia. *Review of Accounting Studies* 20: 1122-1163.
- Buffett, W. 2000. Chairman's Letter. Omaha, NE: Berkshire Hathaway Inc.
- Buffett, W., and J. Dimon. 2018. Short-Termism is Harming the Economy. *Wall Street Journal* (June 6).
- Bushee, B. J., and C. F. Noe. 2000. Corporate Disclosure Practices, Institutional Investors, and Stock Return Volatility. *Journal of Accounting Research* 38: 171-202.
- Call, A. C., S. Chen, A. Esplin, and B. Miao. 2016. *Long-Term Earnings Guidance: Implications for Managerial and Investor Short-Termism*. Working paper, Arizona State University, University of Texas at Austin, University of Alberta, and National University of Singapore.
- Call, A. C., S. Chen, and B. Miao. 2014. Short-Term Earnings Guidance and Accrual-Based Earnings Management. *Review of Accounting Studies* 19: 955-987.
- Chen, S., D. Matsumoto, and S. Rajgopal. 2011. Is Silence Golden? An Empirical Analysis of Firms That Stop Giving Quarterly Earnings Guidance. *Journal of Accounting and Economics* 51 (1-2): 134-150.
- Chen, S., K. Huang, and B. Lao. 2015. *Is Earnings Guidance Associated with Less Firm Innovation?* Working paper, University of Texas at Austin and Florida International University.

- Cheng, M., K. R. Subramanyam, and Y. Zhang. 2005. *Earnings Guidance and Managerial Myopia*. Working paper, University of Southern California and Columbia University.
- Chuk, E., D. Matsumoto, and G. S. Miller. 2013. Assessing Methods of Identifying Management Forecasts: CIG vs. Researcher Collected. *Journal of Accounting and Economics* 55 (1): 23-42.
- Ciconte III, W., M. Kirk, and J. W. Tucker. 2014. Does the Midpoint of Range Earnings Forecasts Represent Managers' Expectations? *Review of Accounting Studies* 628-660.
- Coller, M., and T. L. Yohn. 1997. Management Forecasts and Information Asymmetry: An Examination of Bid-Ask Spreads. *Journal of Accounting Research* 35 (2): 181-191.
- Demerjian, P., B. Lev, and S. McVay. 2012. Quantifying Managerial Ability: A New Measure and Validity Tests. *Management Science* 58 (7): 1229-1248.
- Diamond, D. W., and R. E. Verrecchia. 1991. Disclosure, Liquidity, and the Cost of Capital. *Journal of Finance* 46 (4): 1325-1359.
- Dickinson, V. 2011. Cash Flow Patterns as a Proxy for Firm Life Cycle. *The Accounting Review* 86 (6): 1969-1994.
- Dye, R. A. 2001. An Evaluation of "Essays on Disclosure" and the Disclosure Literature in Accounting. *Journal of Accounting and Economcis* 32 (1-3): 181-235.
- Field, L., M. Lowry, and S. Shu. 2005. Does Disclosure Deter or Trigger Litigation? *Journal of Accounting and Economics* 39 (3): 487-507.
- Fink, L. 2016. Larry Fink's 2016 Corporate Governance Letter to CEOs. *Huffington Post* (February 2).
- Francis, J., D. Philbrick, and K. Schipper. 1994. Shareholder Litigation and Corporate Disclosures. *Journal of Accounting Research* 32 (2): 137-164.
- Graham, J. R., C. R. Harvey, and S. Rajgopal. 2005. The Economic Implications of Corporate Financial Reporting. *Journal of Accounting and Economics* 40 (1-3): 3-73.
- Grocer, S. 2018. Companies Can't Seem to Quit Quarterly Guidance: DealBook's Closing Bell. *The New York Times* (September 26).
- Hainmueller, J. 2012. Entropy Balancing for Causal Effects: A Multivariate Reweighting Method to Produce Balanced Samples in Observational Studies. *Political Analysis* 20: 25-46.

- Henderson, R., and A. Edgecliffe-Johnson. 2019. Trump Proposal to Axe US Quarterly Reporting Gets Tepid Reception. *The Financial Times* (March 22).
- Hirst, D. E., L. Koonce, and S. Venkataraman. 2008. Management Earnings Forecasts: A Review and Framework. *Accounting Horizons* 22 (3): 315-338.
- Houston, J. F., B. Lev, and J. W. Tucker. 2010. To Guide or Not to Guide? Causes and Consequences of Stopping Quarterly Earnings Guidance. *Contemporary Accounting Research* 27 (1): 143-185.
- Hui, K. W., and S. R. Matsunaga. 2015. Are CEOs and CFOs Rewarded for Disclosure Quality? *The Accounting Review* 90 (3): 1013-1047.
- Iacus, S. M., G. King, and G. Porro. 2012. Causal Inference Without Balance Checking: Coarsened Exact Matching. *Political Analysis* 20 (1): 1-24.
- Jones, J. J. 1991. Earnings Management During Import Relief Investigations. *Journal of Accounting Research* 29 (2): 193-228.
- Kanodia, C., and H. Sapra. 2016. A Real Effects Perspective to Accounting Measurement and Disclosure: Implications and Insights for Future Research. *Journal of Accounting Research* 54 (2): 623-676.
- Kim, I., and D. J. Skinner. 2012. Measuring Securities Litigation Risk. *Journal of Accounting and Economics* 53 (1-2): 290-310.
- Kim, Y., L. Su, and X. Zhu. 2017. Does the Cessation of Quarterly Earnings Guidance Reduce Investors' Short-Termism? *Review of Accounting Studies* 22: 715-752.
- Lambert, R., C. Leuz, and R. E. Verrecchia. 2007. Accounting Information, Disclosure, and the Cost of Capital. *Journal of Accounting Research* 45 (2): 385-420.
- Lee, S., S. R. Matsunaga, and C. W. Park. 2012. Management Forecast Accuracy and CEO Turnover. *The Accounting Review* 87 (6): 2095-2122.
- Li, F., R. Lundholm, and M. Minnis. 2013. A Measure of Competition Based on 10-K Filings. *Journal of Accounting Research* 51 (2): 399-436.
- Matsumoto, D. A. 2002. Management's Incentives to Avoid Negative Earnings Surprises. *The Accounting Review* 483-514.
- Miller, G. S. 2002. Earnings Performance and Discretionary Disclosure. *Journal of Accounting Research* 40 (1): 173-204.
- Ocasio, W. 1997. Towards an Attention-Based View of the Firm. *Strategic Management Journal* 18: 187-206.

- Pearlstein, S. 2018. Will Ending Quarterly Earnings Guidance Free CEOs to Think Long Term? *The Washington Post* (June 7).
- Petersen, M. A. 2009. Estimating Standard Errors in Finance Panel Data Sets: Comparing Approaches. *Review of Financial Studies* 22 (1): 435-480.
- Porter, M. E. 1992. *Capital Choices: The Causes and Cures of Business Myopia*. Research Report to the U.S. Government's Council on Competitiveness, Washington D.C.
- Quinto, C. S., S. R. Matsunaga, and M. Tang. 2019. *Disclosure Policies in Quarterly Earnings Guidance*. Working paper, University of Oregon and New York University.
- Rajgopal, S. 2019. *Integrating Practice into Accounting Research*. Working paper, Columbia University.
- Rubin, G. T. 2018. SEC to Take Up Trump's Request on Quarterly Earnings Reports. *Wall Street Journal* (November 29).
- Shipman, J. E., Q. T. Swanquist, and R. L. Whited. 2017. Propensity Score Matching in Accounting Research. *The Accounting Review* 92 (1): 213-244.
- Skinner, D. J. 1994. Why Firms Voluntarily Disclose Bad News. *Journal of Accounting Research* 32 (1): 38-60.
- Stein, J. C. 1989. Efficient Capital Markets, Inefficient Firms: A Model of Myopic Corporate Behavior. *Quarterly Journal of Economics* 104 (4): 655-669.
- Trueman, B. 1986. Why Do Managers Voluntarily Release Earnings Forecasts? *Journal of Accounting and Economics* 8 (1): 53-71.
- Vorst, P. 2016. Real Earnings Management and Long-Term Operating Performance: The Role of Reversals in Discretionary Investment Cuts. *The Accounting Review* 91 (4): 1219-1256.
- Williams, P. A. 1996. The Relation Between a Prior Earnings Forecast by Management and Analyst Response to a Current Management Forecast. *The Accounting Review* 71 (1): 103-113.