A Catering Theory of Earnings Guidance: Empirical Evidence and Stock Market Implications

Nils Lohmeier[†] Hannes Mohrschladt[‡]

This Version: September 12, 2022

Abstract: We propose and test a catering theory of earnings guidance. Managers cater to reference point dependent investor preferences by issuing excessively optimistic earnings forecasts if investors' stock returns are comparably low and vice versa. As predicted by our model, earnings guidance is most biased when managers strongly discount future outcomes, when the stock's payoff uncertainty is high, and when managers face low costs for issuing inaccurate forecasts. Additional analyses based on CEO turnover support intentional managerial catering as underlying mechanism. Catering via earnings guidance shapes stock market prices such that the convergence of stock prices towards fundamental values is delayed until the final earnings announcement.

Keywords: Management Guidance, Catering, Capital Gains Overhang, Stock Mispricing

JEL: G14, G30, G40

[†]Finance Center Münster, University of Münster, Universitätsstr. 14-16, 48143 Münster, Germany; Email: nils.lohmeier@wiwi.uni-muenster.de.

[‡]Finance Center Münster, University of Münster, Universitätsstr. 14-16, 48143 Münster, Germany; Email: hannes.mohrschladt@wiwi.uni-muenster.de.

The authors thank Ylva Baeckström, participants of the Finance Center Münster Research Seminar, the 2022 Behavioural Finance Working Group Conference and the 2022 Research in Behavioral Finance Conference for their valuable comments and suggestions. This paper was partly written while Hannes Mohrschladt was a visiting researcher at the Ohio State University, Columbus.

1. Introduction

Managers provide a great deal of information in order to influence market beliefs and, as a consequence, stock price levels. Beyond standard accounting figures, earnings guidance has become a central tool to shape investor beliefs given its inherently forward-looking nature (Penman, 1980; Ball and Shivakumar, 2008). Consequently, guidance can lead to more efficient stock pricing if value-relevant information is already published at an early stage (Cotter et al., 2006; Seybert and Yang, 2012). However, systematic biases in earnings guidance might also impair market efficiency. In this paper, we argue that managers cater to their investors through earnings guidance and thus communicate systematically biased information. Based on a simple model, we posit that managers try to cater to their investors' perception of firm and management performance by issuing particularly optimistic forecasts if their investors have experienced disappointing stock returns and vice versa. Our empirical analyses support this conjecture. Moreover, we find that such opportunistically biased earnings guidance influences stock market prices and that this effect reverses when the actual earnings are announced later.

We formalize our catering theory in a simple model based on three central ingredients, which are motivated by prior psychological research and empirical evidence. First, markets react to earnings guidance, incorporating conveyed forecasts at least partially into earnings expectations. Second, investors evaluate investments relative to their purchase price, deeming stock prices short of that reference price as disappointing (Kahneman and Tversky, 1979; Shefrin and Statman, 1985; Tversky and Kahneman, 1992). Third, managers' utility depends both on the long-term shareholder wealth and short-run stock prices as investors might react unfavorably to poor stock returns (Baker and Wurgler, 2004; Baker et al., 2016).

The central prediction derived from our theoretical framework is that managers convey excessively optimistic forecasts for stocks trading below the investor's purchase price. Thus, we predict a smoothing pattern akin to earnings management: managers issue particularly optimistic forecasts if investors have experienced disappointing stock returns and issue slightly pessimistic guidance when returns have been high. Moreover, our theoretical framework lays out the conditions under which managers are particularly incentivized to cater, specifically when they have a strong presence preference, their firm's stock is volatile and their personal costs for issuing inaccurate forecasts are low.

To test our theoretical predictions, we employ the capital gains overhang measure *CGO* as proposed by Grinblatt and Han (2005) to measure the average stock return experienced by a firm's investor base. Developed in an equilibrium model based on prospect theory and mental accounting, *CGO* reflects this experienced return based on the aggregate investors' purchase price which is estimated by the use of past stock price and turnover dynamics. As *CGO* captures investors' past returns, it should predict the direction and magnitude of managerial catering via earnings guidance. We examine the impact of *CGO* on these systematic biases in earnings forecasts by the use of the I/B/E/S Guidance database and define the *Guidance Bias* as the difference between forecasted earnings and ex-post earnings realizations deflated by the firm's market capitalization.

Consistent with managerial catering, we find that low-*CGO* firms significantly overestimate future earnings by 0.91% on average while high-*CGO* firms tend to moderately understate earnings expectations (average *Guidance Bias* of -0.19%). This negative relationship between *CGO* and *Guidance Bias* holds in both regression analyses and univariate sorts and is robust to a multitude of specifications. Our subsequent analyses strongly support catering as underlying mechanism of these systematic biases in managerial guidance since

they affirm additional hypotheses derived from our theoretical framework. For example, our model predicts that myopic managers will engage more strongly in catering. The prior literature on earnings management (Bushee, 1998) and investments (Polk and Sapienza, 2008) documents catering to be strongest among firms with a highly transient investor base as the short-term pressure increases manager's presence preference. In line with this hypothesis, the effect of *CGO* on *Guidance Bias* is stronger among firms with high turnover and severe downward price pressure from short sellers. Furthermore, our model predicts catering to increase for firms with an uncertain payoff. As predicted our interaction tests provide evidence that catering increases among more volatile firms. Moreover, our framework implies that managers reduce catering as managers' costs for issuing biased forecasts increase. Rogers and Stocken (2005) show that managers' willingness to deceive the market decreases as the markets' ability to detect erroneous information increases. We argue that costs are imposed on managers if the market recognizes deceptive forecasts early on and confirm that managers reduce catering as the number of analysts covering their firm increases. Similarly, catering is less prevalent among firms operating in industries with increased risk of litigation. In addition, we argue that recently appointed managers should not be blamed for low stock returns prior to their appointment such that they should not engage in *CGO*-dependent catering. As predicted, the negative effect of *CGO* on *Guidance Bias* indeed vanishes among firms with new CEOs. Lastly, we show that the effect of *CGO* on *Guidance Bias* is distinct from the stock return over the past years, implying that the investors' perception of the past performance is the driver of biased forecasts. These analyses strongly suggest that the documented guidance biases are indeed due to managers' opportunistic catering behavior rather than biases in the managers' own beliefs.

To examine the stock market implications of these biased forecasts, we investigate excess returns in three-day event windows around guidance dates. We find that low-*CGO* firms experience 1.22% higher guidance announcement returns than high-*CGO* firms. Regression results support the significant and economically large effect of *CGO* on guidance date announcement returns. Hence, our results suggest that managerial catering succeeds in moving stock prices by inducing an expectational error into the market. Additionally, we examine excess returns on subsequent earnings announcements. Here, we find that low-*CGO* firms experience 1.33% lower excess returns on announcement days compared to high-*CGO* firms. This effect is economically large and statistically significant in different regression specifications, too. Taken together, our results indicate that managerial catering via earnings guidance contributes to the overvaluation of low-*CGO* firms which is largely corrected around earnings announcements as true earnings are revealed.

Our contribution to the literature is mainly fourfold. First, we add to the recently growing research field on management guidance. The prior literature has identified a multitude of factors affecting guidance accuracy and *Guidance Bias*, such as various firm characteristics (Baginski and Hassell, 1997; Faurel et al., 2018; Huang et al., 2021), corporate governance aspects (Ajinkya et al., 2005; Feng et al., 2009), managerial overconfidence (Hilary and Hsu, 2011; Hribar and Yang, 2016), and investor sentiment (Bergman and Roychowdhury, 2008). Distinct from these factors, we theoretically motivate and empirically identify managerial catering as additional mechanism that can contribute to biased guidance. Contrary to the previous literature, this implies that the documented biases in earnings guidance do not stem from managers' biased beliefs, but are rather the consequence of their opportunistic objective to influence stock market prices. While the guidance literature has largely highlighted managers' disciplining effect on market expectations and thus their

positive contribution to market efficiency (Cotter et al., 2006; Li and Zhuang, 2012; Seybert and Yang, 2012), we point out that managers can also impede the formation of efficient prices. Consequently, our results indicate that investors and analysts should carefully take opportunistic managerial motives into account when interpreting forecasts from low-*CGO* firms.

Second, we contribute to the literature on managerial catering. Catering has been extensively documented in the accounting and finance literature. For example, managers engage in earnings management to present consistent profits and to smooth earnings fluctuations (Bartov, 1993; Gaver et al., 1995; Graham et al., 2005) by implementing specific real activities or using their discretion in accounting choices (Healy and Wahlen, 1999; Roychowdhury, 2006). Consequently, stated figures frequently overstate the actual financial situation in bad times while understatement dominates in good times. In particular, managers often try to prevent negative earnings surprises (Burgstahler and Dichev, 1997; Degeorge et al., 1999; Graham et al., 2005) as these can invoke strong negative market reactions. Since managerial compensation and stock prices are oftentimes tied directly (Cheng and Warfield, 2005; Bergstresser and Philippon, 2006) and since negative and volatile stock price performance can trigger CEO turnover (Puffer and Weintrop, 1991; Jenter and Kanaan, 2015), managers face strong incentives to cater to their investors' mood. Since regulation has substantially reduced leeway in earnings management during the last decades (Leuz et al., 2003; Libby et al., 2015), recent corporate finance research has focused on additional managerial actions aimed at appealing to the mood and preferences of the firm's investor base. Specifically, managers have been shown to strategically adjust investments (Polk and Sapienza, 2008), nominal stock prices (Baker et al., 2009), and

dividends (Baker and Wurgler, 2004; Li and Lie, 2006; Golubov et al., 2020) to appeal to non-standard investor preferences. We identify a new avenue for catering, namely management guidance, and document its short-term success in moving market prices.

Third, our results provide further evidence for the relevance of reference prices for the communication of firm-specific information. Prior research on asset pricing and corporate finance has largely highlighted how investors (George and Hwang, 2004; Grinblatt and Han, 2005; Wang et al., 2017) and managers (Loughran and Ritter, 2002; Ljungqvist and Wilhelm Jr, 2005; Baker et al., 2012) unknowingly anchor on salient reference prices, causing systematically biased behavior among both groups. We document that managers are implicitly aware of this investor trait and strategically employ guidance to smooth shareholders' reference point-dependent evaluation of managerial performance. Thus, the systematic influence of shareholders' purchase prices on earnings guidance stems from managers' opportunism rather than their irrational beliefs. Our findings add to a recently growing literature in corporate finance, which shows that managers intentionally exploit investors' anchoring biases in, for example, seasoned equity offerings (Dittmar et al., 2020; Hovakimian and Hu, 2020). Moreover, while prior research on corporate actions has mainly focused on the 52-week high as reference price (Baker et al., 2012; Dittmar et al., 2020; Hovakimian and Hu, 2020), we extend this literature strand by showing that the investors' average purchase price influences managerial behavior, too.

Fourth, our findings add to the overarching question how firm information influences stock prices and market efficiency. Early research shows that stock price reactions are qualitatively in line with the new information contained in such fundamental publications (Ball and Brown, 1968; Fama, 1970). However, the processing of new information might be prone to investors' attention constraints (Peng and Xiong, 2006), representativeness

heuristics (Barberis et al., 1998), or overconfidence (Daniel et al., 1998) such that market prices might not immediately and perfectly reflect the stock's fundamental value. These biases can result in anomalous patterns of stock return predictability such as post-earnings announcement drift which have been frequently documented in empirical event studies (Ball and Kothari, 1991; Pritamani and Singal, 2001; Chan, 2003; Tetlock, 2010; Savor, 2012). Our analyses provide a new angle on the asset pricing implications of corporate announcements: beyond the unintentionally biased processing of information by market participants, stock prices can also be distorted by the publication of intentionally biased information.[1] In our line of argument, investors' biases are thus confined to their naïve belief not to anticipate the opportunistic biases induced by catering in managerial guidance.

Beyond this event study evidence, we also add to asset pricing research on the cross-sectional overvaluation of low-*CGO* stocks (Grinblatt and Han, 2005). The mispricing associated with *CGO* has been explained by investors' prospect theory preferences, the disposition effect, and their underreaction towards new information (Ikenberry and Ramnath, 2002; Frazzini, 2006; Hirshleifer et al., 2009; Jiang and Zhu, 2017). We show that managerial guidance increases rather than decreases this mispricing as the overly optimistic forecasts for low-CGO firms further increase the overvaluation of these firms. Beyond investor biases, opportunistically biased guidance can thus contribute to cross-sectional return predictability. Given the inherent connection between *CGO* and momentum (Grinblatt and Han, 2005), our results also relate to the emergence of momentum profits: managers systematically contribute to the overvaluation of firms that have performed badly in the recent past.

[1] Related mechanisms are documented with respect to accruals: firms' strategic earnings management (Healy and Wahlen, 1999) may contribute to the negative relationship between accruals and subsequent stock returns (Sloan, 1996; Hirshleifer et al., 2011, 2012).

This implies a continued underperformance of previous loser stocks, that is, managerial guidance delays the convergence of stock prices towards fundamental values.

The remainder of the paper is organized as follows. Section 2 lays out our theoretical framework. Section 3 introduces the data sources, key variables and summary statistics. Section 4 presents empirical evidence for catering via earnings guidance. Section 5 discusses the capital market implications of catering. Section 6 concludes.

2. Theory

We propose a theory of managerial catering via earnings guidance. Our stylized model has three key ingredients. First, management guidance affects share prices as stock market participants partially incorporate new earnings signals into prices. Second, investors are loss averse and evaluate the performance of their investments relative to their purchase price. Third, managers' utility depends both on the current firm value and on long-term shareholder wealth, as is typically assumed by models on managerial catering and signaling (Baker and Wurgler, 2004; Baker et al., 2016). Thus, managers face a trade-off between the short-run benefit of positive stock market reactions induced by upward-biased forecasts on the one hand side and the associated long-term costs of deception on the other hand side. As a result, our model allows us to predict the direction and magnitude of managerial guidance bias in different settings.

2.1. Setup

Our model is based on two points in time, $t = 1$ and $t = 2$, and focuses on the interplay between a manager and the investors of her company's stock. The final payoff of the stock P_2 is realized in $t = 2$ and follows a uniform distribution within the interval $[E_1(P_2) \pm 0.5\sigma]$

with $\sigma > 0$.[2] In $t = 1$, the manager issues a forecast with respect to this final payoff. We assume that investors behave in a completely rational way with the only exception that they are not fully aware of the possibility that the managerial guidance might be biased. For simplicity, we assume a discount rate of zero such that the fundamental and actual stock price immediately before the guidance equals

$$P_1^F = E_1(P_2). \tag{1}$$

Beyond the fundamental component $E_1(P_2)$, the managerial guidance in $t = 1$ contains a guidance bias b. A proportion $q \in (0, 1)$ of the guidance bias is taken seriously by investors such that the stock price after issuing the guidance equals

$$P_1 = E_1(P_2) + qb = P_1^F + qb. \tag{2}$$

Thus, our model allows for temporary mispricing qb induced by biased forecasts. The notion is in line with prior catering models which also relax the assumption of market efficiency (Baker and Wurgler, 2004; Baker et al., 2009).[3]

Following the literature on the reference point dependent evaluation of stock prices (Baker et al., 2016), we argue that investors evaluate prices relative to reference points R, that is, investors' utility in $t = 1$ and $t = 2$ is given by $V_1(P_1, R_1)$ and $V_2(P_2, R_2)$, respectively. We assume that the manager follows an investor perspective such that her utility depends on both V_1 and V_2. This setup is similar to Bebchuk and Stole (1993) and motivated by the

[2]This assumption simplifies our calculations and is similar to the model specification in Baker et al. (2016).

[3]Note that the efficient market hypothesis of Fama (1970) implies that any such mispricing is immediately eliminated by rational arbitrageurs who trade against it. However, De Long et al. (1990) and Shleifer and Vishny (1997) elaborate why mispricing can persist even in the presence of rational arbitrageurs. While we do not explicitly model the role of arbitrageurs, their presence will affect the magnitude of q, that is, a higher number of sophisticated arbitrageurs implies a lower q.

notion that a poor intermediate stock performance can already have detrimental effects for managers such as reduced compensation and, potentially, CEO turnover.[4] In line with Beyer et al. (2019), we also assume that managers suffer personal costs that are quadratic in guidance bias b, that is, cb^2. These costs might reflect reliability considerations caused by intentionally biased forecasts as well as plausibility constraints and moral concerns (also see Dye and Sridhar, 2008). Hence, the manager's intertemporal utility is given as

$$U = V_1(P_1, R_1) + \beta V_2(P_2, R_2) - cb^2 \tag{3}$$

where $\beta \in (0, 1)$ discounts future values.

Shefrin and Statman (1985), Ben-David and Hirshleifer (2012), Wang et al. (2017), An et al. (2020), Riley et al. (2020), and many others argue that an investor's purchase price is a highly important reference price, strongly influencing the evaluation of an investment and thus trading behavior. Hence, we set $R_1 = P_0$ with P_0 representing the purchase price of the firm's investor base. As investors use the stock price P_1 to evaluate their investment in $t = 1$, we assume that they also update their reference point such that $R_2 = P_1$.[5] Following Baker et al. (2016), we posit that investors perceive negative deviations from reference points as particularly bad. Hence, we scale up these losses using a loss aversion parameter of $(1 + \lambda)$ with $\lambda > 0$. Such a specification and the asymmetric evaluation of gains versus losses is well-founded in the psychological literature on loss aversion and a core feature of prospect theory decision makers (Kahneman and Tversky, 1979; Tversky and Kahneman,

[4] Leland and Pyle (1977), Miller and Rock (1985), Stein (1989), and Baker et al. (2016) also assume that managers care about both current stock prices and long-term firm value.

[5] Naturally, there might also be long-term investors who neither evaluate their investment in $t = 1$ nor update their reference price. We do not explicitly model this heterogeneity among investors. However, as long as a positive fraction of the investor base evaluates P_1 and considers intermediate utility V_1, our findings remain qualitatively the same and are merely scaled by the proportion of investors who care about V_1.

1992). Moreover, it is in line with the earnings management literature, which also exhibits a disproportionate focus on avoiding losses and negative surprises (Burgstahler and Dichev, 1997; Degeorge et al., 1999; Graham et al., 2005). Assuming linear utility in gain and loss domain for simplicity, the considerations in this paragraph imply that Equation (3) can be restated as

$$U = P_1 - P_0 + \lambda(P_1 - P_0)\mathbf{1}_{P_1<P_0} + \beta\left(P_2 - P_1 + \lambda(P_2 - P_1)\mathbf{1}_{P_2<P_1}\right) - cb^2. \tag{4}$$

Substituting P_1 based on Equation (2) leads to

$$\begin{aligned} U = {} & E_1(P_2) + qb - P_0 + \lambda(E_1(P_2) + qb - P_0)\mathbf{1}_{P_1<P_0} \\ & + \beta\left(P_2 - E_1(P_2) - qb + \lambda(P_2 - E_1(P_2) - qb)\mathbf{1}_{P_2<P_1}\right) - cb^2. \end{aligned} \tag{5}$$

Then, a rational manager will choose b such that it maximizes her expected utility, which is given by

$$\begin{aligned} E_1(U) &= E_1(P_2) + qb - P_0 + \lambda(E_1(P_2) + qb - P_0)\mathbf{1}_{P_1<P_0} - \beta\left(qb + \lambda qb\mathbf{1}_{P_2<P_1}\right) - cb^2 \\ &= (E_1(P_2) - P_0)(1 + \lambda\mathbf{1}_{P_1<P_0}) + qb\left(1 + \lambda\mathbf{1}_{P_1<P_0} - \beta(1 + \lambda\mathbf{1}_{P_2<P_1})\right) - cb^2. \end{aligned} \tag{6}$$

Given the uniform distribution of P_2 in the interval $[E_1(P_2) \pm 0.5\sigma]$, we assume that the stock price P_1 also lies within this interval, that is, $qb \in [-0.5\sigma, 0.5\sigma]$. Hence, the probability of a price decrease between $t = 1$ and $t = 2$ is

$$E_1(\mathbf{1}_{P_2<P_1}) = E_1(\mathbf{1}_{P_2<E_1(P_2)+qb}) = Prob(P_2 < E_1(P_2) + qb) = 0.5 + qb/\sigma. \tag{7}$$

This leads to

$$E_1(U) = (E_1(P_2) - P_0)(1 + \lambda \mathbf{1}_{P_1<P_0}) + qb\,(1 + \lambda \mathbf{1}_{P_1<P_0} - \beta(1 + \lambda(0.5 + qb/\sigma))) - cb^2. \quad (8)$$

Thus, the manager is incentivized to increase the shareholders' long-term wealth ($E_1(P_2)$) and to choose an optimal level of guidance bias b. This choice goes along with two countervailing effects. Specifically, providing excessively optimistic earnings forecasts raises the stock price P_1 and thus has a positive effect on the intermediate utility V_1. This effect is particularly strong if the market considers the guidance credible (high q) and if the investors are in the loss domain ($P_1 < P_0$), reflecting the short-term demand for good news from disenchanted investors. Conversely, raising expectations and reference prices in $t = 1$ via excessively optimistic guidance reduces utility in $t = 2$ as investors tend to be disappointed by P_2.

2.2. Model Implications

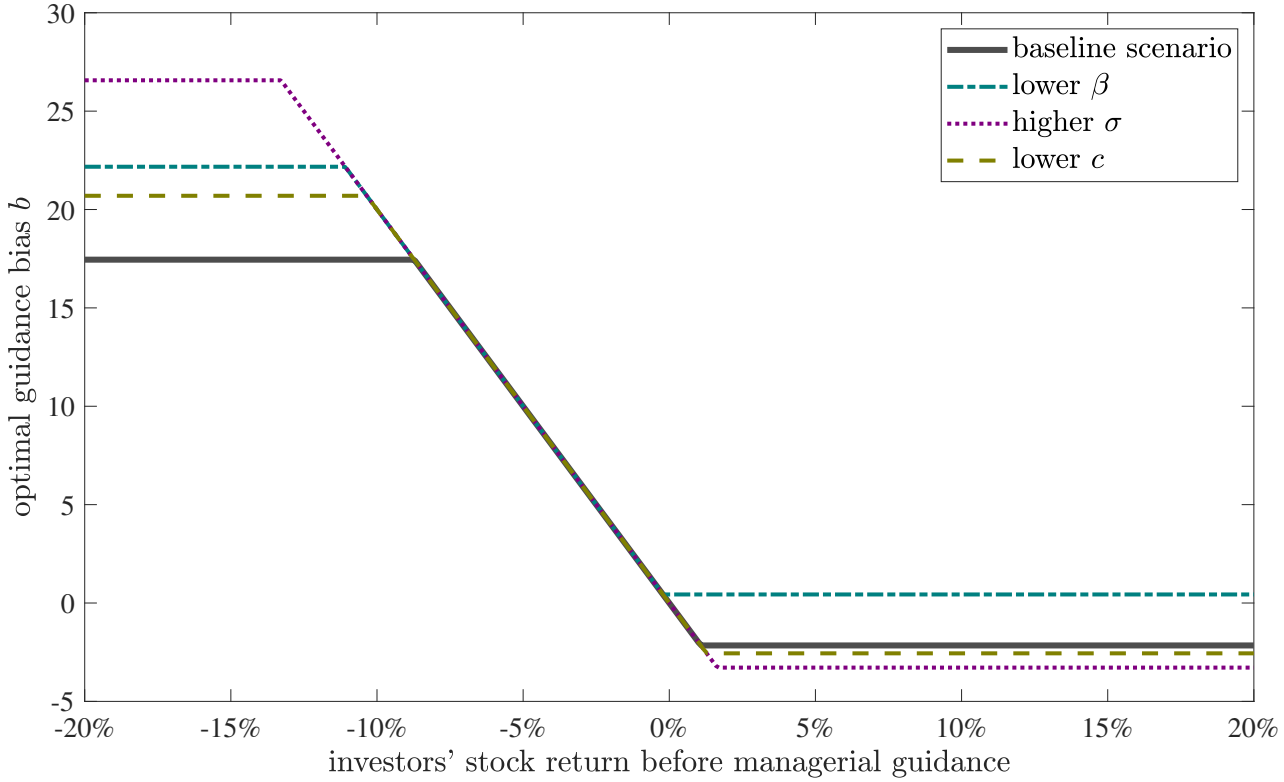
A formal investigation of the arguments in the previous subsection implies that the manager will choose the following guidance bias b in order to maximize her expected level of intertemporal utility:

$$b = median\left\{ \frac{1 + \lambda - \beta(1 + 0.5\lambda)}{2c/q + 2\beta\lambda q/\sigma} \;,\; \frac{P_0 - P_1^F}{q} \;,\; \frac{1 - \beta(1 + 0.5\lambda)}{2c/q + 2\beta\lambda q/\sigma} \right\} \quad (9)$$

The proof for this expression is provided in the Appendix. According to Equation (9), if both $\lambda = 0$ and $\beta = 1$, the manager would not deceive the market ($b = 0$). Hence, the combination of loss aversion and disproportionate interest in intermediate price levels causes managers to issue biased guidance. In this case, the guidance bias b negatively

depends on the return that the investor base has experienced since stock purchase. This negative relationship from Equation (9) is graphically illustrated in Figure 1.

Figure 1. Managerial Choice of Optimal Guidance Bias
This figure depicts the relationship between the investors' stock return from purchase to immediately before the guidance (i.e., $P_1^F / P_0 - 1$) and the guidance bias b chosen by the manager to maximize her expected level of intertemporal utility. The baseline scenario uses $P_0 = 100$ as the investors' initial stock purchase price, $\lambda = 1.25$ to reflect loss aversion, a discount factor of $\beta = 0.7$, personal costs for issuing biased forecasts of $c = 0.5\%$, a guidance bias price impact of $q = 50\%$, and final payoff uncertainty $\sigma = 20$. Beyond this baseline scenario, the "lower β-scenario" applies $\beta = 0.6$, the "higher σ-scenario" applies $\sigma = 40$, and the "lower c-scenario" applies $c = 0.25\%$.



As evident from Equation (9) and Figure 1, our stylized model yields several testable predictions with respect to the guidance bias b. Most importantly, the guidance bias strongly depends on the investors' stock performance. If the stock trades in the loss domain ($P_1^F < P_0$), managers will provide upward-biased earnings forecasts. For stocks in the gain domain, this effect is ambiguous: for high values of β and λ, they will issue pessimistic forecasts and vice versa. Taking together the arguments on loss and gain domain, managerial forecasts will be upward-biased on average. The underlying mechanism is as

follows. Investors are unhappy if the stock trades below its purchase price, such that the pressure on management is high. Thus, the manager is incentivized to give an excessively optimistic forecast to alleviate this short-term pressure. On the contrary, a manager with a content investor base might provide a slightly pessimistic earnings forecast such that she still has some positive news in reserve to offset potential unforeseen detrimental news in the future. This latter effect is partly mitigated by the manager's preference for immediate rather than later utility.

Hypothesis 1. *Managerial guidance biases decrease in their aggregate investors' return since purchase.*

In addition to this baseline effect, our model predicts in which situations the relationship between guidance bias and previous stock returns should be particularly strong. For example, a stronger managerial preference for immediate compared to future utility (stronger discounting via lower β) carries two implications (see Equation (9) and Figure 1). First, managers will issue more optimistic forecasts to transfer later utility to today. Second, the impact of previous returns on b increases as the attenuating effect in $t = 2$ becomes less important.

Hypothesis 2. *The negative effect of the aggregate investors' return on guidance biases is stronger when the manager applies stronger discounting.*

Further, if the uncertainty with respect to the final payoff is higher (higher σ), the magnitude of guidance biases increases. If the stock is in the loss domain, a high level of σ implies that high levels of b do not necessarily lead to negative stock returns between $t = 1$ and $t = 2$ such that the manager's utility gain from deceiving the market in $t = 1$ outweighs the expected utility loss in $t = 2$.

Hypothesis 3. *The negative effect of the aggregate investors' return on guidance biases is stronger if price uncertainty is high.*

Finally, managers will issue more biased forecasts if the costs c for deceiving the market are comparably low.

Hypothesis 4. *The negative effect of the aggregate investors' return on guidance biases is stronger if the manager's costs for issuing a biased forecasts are low.*

We empirically examine the four hypotheses in the following.

3. Data

3.1. Data Sources

We obtain managerial earnings forecasts issued between February 2002 and November 2018 from the I/B/E/S Guidance database and only consider US firms with stock listings on NYSE, AMEX, or NASDAQ. We restrict our analyis to annual earnings guidance issued at most 365 days before the associated fiscal year end such that we always focus on the management forecast which is arguably most important for estimating the stock's fundamental value.[6] Moreover, we focus on the earliest forecast within this period as managements' lever to influence market beliefs and expectations is bigger early within the fiscal year (Rogers and Stocken, 2005; Hutton et al., 2012). Due to our interest in the quantitative accuracy of management forecasts, we require earnings guidance to be sufficiently specific such that we only include point and range estimates. With respect to range estimates, we follow the prior guidance literature and use the midpoint in our

[6]We also run our main regressions based on a equally constructed sample of quarterly earnings guidance, yielding qualitatively similar results reported in the Online Appendix.

analyses (Basi et al., 1976; Hassell and Jennings, 1986; Baik et al., 2011). Lastly, we follow McNichols (1989) in excluding stocks with share prices below 10 USD to avoid the small-denominator problem.

Additional stock market, accounting and analyst data is obtained from CRSP, Compustat and I/B/E/S, respectively. Following Seybert and Yang (2012), we use investor sentiment data from the University of Michigan Survey of Consumers. Following Huang et al. (2021), we exclude financial firms and utilities due to industry-specific regulations (Standard Industrial Classification (SIC) codes 6000 to 6999 and 4900 to 4949).

3.2. Variables

Main Dependent Variables. To measure biases in managerial earnings guidance, we define the *Guidance Bias* for fiscal year t as the difference between estimated and realized earnings per share EPS_t, deflated by the stock price P_{t-1} at the beginning of the associated fiscal year (Ajinkya et al., 2005; Rogers and Stocken, 2005; Baik et al., 2011):

$$Guidance\ Bias_t = \frac{EPS_{forecasted,t} - EPS_{realized,t}}{P_{t-1}} \tag{10}$$

Hence, the *Guidance Bias* measures which proportion of the firm's market capitalization is earned more or less than predicted. Positive biases indicate excessively optimistic forecasts, while negative values indicate managerial pessimism relative to the ex-post realization.

To measure the market's reaction towards both guidance and actual earnings announcement, we calculate cumulative abnormal returns in symmetric three-day windows around these event dates to determine *Guidance CAR* and *Earnings Announcement CAR*, respectively. Abnormal returns are calculated relative to the Fama and French (1992) three-factor

model. Following Savor (2012), the underlying factor loadings are estimated using the 255 trading days prior to the event date with a 31-day gap. We require at least 30 valid return observations to estimate factor loadings and event returns.

Main Explanatory Variable. All explanatory variables are based on firm-level information available at the last turn of month before the management forecast. Annual accounting information is updated each year at the end of June based on the fiscal period that ends in the previous calendar year; this time lag of at least six months ensures that the accounting information is publicly available when using it as predictive variable (Fama and French, 1993). Since we are interested in the long-run valuation effects of biased forecasts on earnings announcements, we link the later *Earnings Announcement CAR* to the same explanatory variable values as the corresponding *Guidance CAR*.

Our model predicts that the *Guidance Bias* is strongly dependent on the investors' purchase price. Therefore, we follow Grinblatt and Han (2005) in estimating the aggregate investor's purchase price to calculate the capital gains overhang measure *CGO*, which measures the average investor's stock return since share purchase. Following Grinblatt and Han (2005), the estimation is based on weekly price and trading volume data over the previous five years such that the market's average purchase price in week t is given as

$$P_{pur,t} = \sum_{n=1}^{260} (V_{t-n} \prod_{\tau=1}^{n-1} [1 - V_{t-n+\tau}]) P_{t-n}, \tag{11}$$

where V_t and P_t represent the stock's turnover ratio and split-adjusted stock price in week t, respectively. We truncate the turnover ratios at a maximum level of 1 such that the term in parentheses reflects the proportion of outstanding shares that was purchased for P_{t-n} in week $t - n$. We scale these proportions such that the 260 weekly weights add up to

1. In order to estimate $P_{pur,t}$, we require at least 100 weekly observations. Based on this aggregate cost basis, we calculate *CGO* as

$$CGO_t = \frac{P_t - P_{pur,t}}{P_{pur,t}}. \tag{12}$$

Our event study uses the last weekly *CGO*-estimate in the month prior to the first guidance announcement. *CGO* can therefore be interpreted as the investors' average return since stock purchase, that is, high values indicate that managers face an investor base that is comparably satisfied with the respective stock investment prior to the guidance announcement. The prior empirical literature has strongly emphasized the importance of the purchase price as reference price for investors (Shefrin and Statman, 1985; Ben-David and Hirshleifer, 2012; Wang et al., 2017; An et al., 2020; Riley et al., 2020) such that *CGO* strongly influences the evaluation of their investments and thus trading behavior. As *CGO* has been the main empirical specification in recent studies on the investors' reference-dependence on purchase prices and it captures effects on the investor's utility beyond a simple distinction in loss/gain domain, we employ it as our main explanatory variable. In line with our theoretical predictions, we also estimate the percentage of investors in the gain domain for each stock before the guidance date. We repeat all our regressions with the percentage of investors in the gain domain as explanatory variable and detail the results in our Online Appendix, yielding qualitatively equivalent insights. In addition, George and Hwang (2004) provide evidence that investors also apply the 52-week high as reference price. Based on this evidence, our Online Appendix provides additional analyses that use a stock's distance from its 52-week high instead of *CGO* as main explanatory variable. The results are qualitatively the same.

Control Explanatory Variables. Our multivariate analyses control for various stock characteristics that have been shown to predict accuracy and biases in management guidance. For brevity, we provide detailed variable definitions of all control variables in Table 1 and the Online Appendix.

We include the Frazzini and Pedersen (2014) *Beta* because prior studies show that increased market risk reduces forecast accuracy (Feng et al., 2009; Baik et al., 2011). Moreover, we control for *Size* as larger firms have been shown to display a smaller *Guidance Bias* (Ajinkya et al., 2005; Hribar and Yang, 2016). Similarly, we employ the *Book-to-Market* ratio, which arguably proxies for a firm's growth opportunities, as it has been related to forecast properties by the prior literature (Bamber and Cheon, 1998; Rogers and Stocken, 2005). We also control for the effect of a stock's idiosyncratic return volatility $IVOL$ as Houston et al. (2010) have used it to explain forecast cessation.

Since forecasts made earlier within a given year have been shown to be less accurate and more biased (Ajinkya et al., 2005; Feng et al., 2009; Hribar and Yang, 2016), we control for the forecast's time until the period-end, *Horizon*. In addition, we control the *Prior Error*, which is a one-period lag of the *Guidance Bias* to capture further firm-specific guidance determinants. As Rogers and Stocken (2005) relate industry-specific litigation risk to managerial guidance, we include a *Process Risk* dummy based on the firm's SIC code..[7]

We include a *Loss Indicator* based on the prior fiscal year as loss firms' forecasts have been found to be less accurate (Baik et al., 2011; Hilary and Hsu, 2011). Since the broader accounting performance has also been related to guidance properties, we include $Operating\ Profitability$ as additional control. Similarly, firms accessing capital

[7]Following Cheng and Warfield (2005) we classify firms operating in the SIC industries Biotechnology (SIC 2833 to 2836), Computer Hardware (SIC 3570 to 3577), Electronics (SIC 3600 to 3674), Retailing (SIC 5200 to 5961) and Computer Software (SIC 7371 to 7379) as highly exposed to litigation risk.

markets might be incentivized to issue positively biased guidance (Hribar and Yang, 2016), leading us to control for a *Net Equity Issuer* dummy variable.

Since analyst attention has shown to constrain management's willingness to issue inaccurate forecasts (Rogers and Stocken, 2005), we control for the number of Analysts, *Analyst Coverage*, and their disagreement *Analyst Dispersion*, calculated according to Johnson (2004). Moreover, Bergman and Roychowdhury (2008) illustrate how managers adjust their disclosure strategy to the prevailing investor sentiment, while Seybert and Yang (2012) show how sentiment affects *Guidance CAR*. Following these papers, we use the *Investor Sentiment* index from the Michigan Consumer Confidence Index as control.

Moreover, we include *Illiquidity* estimated according to Amihud (2002) and *MAX* according to Bali et al. (2011) as additional return predictors identified by the asset pricing literature in our return regressions. Additionally, we use *Turnover* and *Relative Short Interest*, both calculated relative to shares outstanding, as measures of presence preference of guiding managers in our interaction tests. We use the *Flat Return* over the five years prior to the guidance date to differentiate between the investors' average return since purchase and the recent stock performance in general.[8] Lastly, we use dummies based on the two-digit SIC-codes for industry-fixed effects in our regressions. All continuous variables are winsorized at the 1% and 99%-level.[9] Our sample includes all firm-year observations with data availability for the three main dependent variables (bias in management guidance as well as cumulative abnormal announcement returns around guidance and earnings announcement dates) and *CGO*.

[8]We refrain from using *Flat Return* as control variable in all regressions due to potential multicollinearity issues.

[9]Repeating our main analyses with unwinsorized data yields comparable results, which are available in the Online Appendix.

3.3. Summary Statistics

The final sample consists of 9,079 firm-year observations between 2002 and 2018. Descriptive statistics are reported in Table 1. The average earnings forecast is given approximately 272.5 days before the fiscal period end and exhibits a positive bias of 0.1135%. Given the mean market capitalization in our sample, the average guidance bias converts to an overestimation of annual earnings of approximately $11.14 million on average. While the bias conveys that management guidance is, on average, too optimistic, the median bias of -0.0914% indicates that the majority of managers tends to underestimate future earnings, which is in line with managerial expectations management aimed at avoiding negative earnings surprises (Matsumoto, 2002).

Table 1. Summary Statistics
This table reports descriptive statistics for the variables used in our analyses. *Guidance Bias* is the difference between forecasted and realized EPS, deflated by the stock price at the beginning of the fiscal year (in %). *Guidance CAR* and *Earnings Announcement CAR* are abnormal announcement returns (in %) computed using a [-1, +1] event and a [-286, -31] estimation window, using the Fama and French (1992) 3-factor model, around the respective dates. *CGO* is defined as stock price change since the average investor's purchase, estimated via return and turnover dynamics, until the end of the prior month. 52-*Week High* is the ratio of the stock price at the previous month's end and the 52-week high. *Momentum* is defined as cumulative stock return in the months t-12 to t-2 relative to the guidance date. *Market Beta* is the coefficient of market returns in the market model. *Size* is the natural logarithm of the firm's market equity. *Book-to-Market* is the ratio of the firm's book value and market value of equity. *Loss Indicator* is a binary variable equal to 1 if the firm experienced negative EPS in the prior year and 0 otherwise. *Operating Profitability* is defined as the ratio of revenue minus SG&A and interest expenses to the book value of equity. *Analyst Coverage* is the natural logarithm of the number of analysts forecasting EPS for the considered firm in a given fiscal year. *Analyst Dispersion* is defined as standard deviation of current-fiscal-year estimates of future earnings. *Residual Variance* is calculated as idiosyncratic stock volatility after accounting for the Fama and French (1992) 3-factor model. *Net Equity Issuer* is a binary variable equal to 1 if the firm issued a net positive amount of stocks in the 12 months until the prior month's end and 0 otherwise. *Horizon* is the natural logarithm of the days between the fiscal period's end date and the guidance date. *Process Risk* is a binary variable if the firm operates in a SIC-industry exposed to increased litigation risk and 0 otherwise. *Prior Error* is the *Guidance Bias* of the prior fiscal year. *Investor Sentiment* is the consumer sentiment index obtained from the University of Michigan. *Illiquidity* is the Amihud (2002) measure of stock illiquidity. *MAX* is the maximum daily stock return in the prior month. *Relative Short Interest* is the ratio of shorted stock shares and shares outstanding. *Turnover* is the ratio of shares traded in the prior month and shares outstanding.

	Mean	St. Dev.	P25	Median	P75	N
Dependent Variables						
Guidance Bias (%)	0.1135	1.5420	−0.4721	−0.0914	0.3673	9,079
CAR Guidance (%)	0.2853	7.4167	−3.4625	0.3140	4.2785	9,079
CAR Earnings Announcement (%)	0.4723	7.5678	−3.5225	0.4100	4.6470	9,079
Explanatory Variables						
CGO	0.0689	0.1439	−0.0186	0.0702	0.1583	9,079
Beta	1.1449	0.7008	0.6533	1.0515	1.5145	8,750
Size	21.6668	1.5457	20.5399	21.4987	22.6616	9,079
Book-to-Market	0.3948	0.2950	0.1974	0.3259	0.5134	9,072
Horizon	5.5365	0.4373	5.4972	5.7398	5.7930	9,079
Loss Indicator	0.0902	0.2865	0.000	0.000	0.000	9,079
Process Risk	0.3213	0.4670	0.000	0.000	1.000	9,079
Prior Error	0.0103	1.2178	−0.3987	−0.0205	0.1866	9,079
Operating Profitability	0.3137	0.3938	0.1821	0.2643	0.3749	9,071
Analyst Coverage	13.6122	8.2744	7.000	12.000	19.000	9,079
Analyst Dispersion	2.6900	4.6111	0.7407	1.3438	2.6316	8,826
IVOL	0.2149	0.1184	0.1320	0.1853	0.2664	9,079
Net Equity Issuer Dummy	0.3943	0.4887	0.000	0.000	1.000	9,079
Investor Sentiment	85.0230	11.2696	75.5000	87.7000	94.4000	9,079
Illiquidity	0.0065	0.0217	0.0002	0.0009	0.0034	9,079
MAX	3.9899	2.4676	2.3517	3.3372	4.8161	9,079
Relative Short Interest	0.0501	0.0532	0.0154	0.0324	0.0664	9,079
Turnover	0.1805	0.1245	0.0974	0.1463	0.2242	9,079

Both guidance and earnings announcements are associated with substantial price reactions (see standard deviation of more than 7%). The positive average returns on corporate announcement dates are in line with the empirical evidence of Savor and Wilson (2016) and Engelberg et al. (2018). On average, investors have experienced a positive stock return of 6.89% since stock purchase prior to the guidance date. The average firm in the sample has a market capitalization of approximately $9,815 million indicating that our analyses focus on comparably large firms.

4. Empirical Evidence on Catering via Earnings Guidance

In this section, we test the theoretical predictions from Section 2. Thereby, we confirm that *CGO* affects the *Guidance Bias* and provide evidence for catering as underlying mechanism. Additional analyses show that catering disappears among newly appointed CEOs and that the effect of *CGO* is distinct from past stock returns.

4.1. Catering Effect in Earnings Guidance

We argue that managers use earnings guidance to cater to their investors' perception of firm and, in particular, managerial performance. Consequently, we expect managers to dampen expectations if their investors already appreciate the high returns of their investment. In this case, the managers still have positive news in reserve to offset potential unforeseen negative future events which might otherwise have resulted in investor discontent. On the contrary, we expect managers to issue overly optimistic forecasts when their investors have experienced poor stock returns. In this case, managerial catering could attenuate negative stock performance which might trigger investor rebellion or CEO

turnover (Puffer and Weintrop, 1991; Jenter and Kanaan, 2015). Thus, we expect *CGO* to be negatively related to the *Guidance Bias* as predicted by Hypothesis 1.

To test our first theoretical prediction, we present results from regression analyses with the *Guidance Bias* as dependent variable in Table 2. While specifications (1) to (4) include industry- and year-fixed effects and control for an increasing number of covariates detailed in Section 3.2, specification (5) includes firm- and year-fixed effects as well as all applicable control variables. Standard errors are corrected for heteroskedasticity, while results from additional panel regressions and regressions with clustered standard errors are presented in the Online Appendix.

In each regression, we find an economically large and statistically significant negative relation between *CGO* and *Guidance Bias*. The statistical significance of the *CGO* coefficient is large across all specifications with t-values between -10.6656 and -13.5451. Similarly, the implied economic effect is large. Given *CGO* coefficients between -1.5470 and -1.9984, a one standard deviation increase in *CGO* is associated with a decrease in *Guidance Bias* of 0.2226% to 0.2876%, which translates to 14.44% to 18.65% of the dependent variable's standard deviation. Hence, our empirical analysis confirms Hypothesis 1 as lower stock returns of the current investor base go along with more optimistic earnings guidance. Importantly, the effect of *CGO* is distinct from previously identified determinants of biased guidance. [10]

[10]Several of the included control variables significantly affect *Guidance Bias* in our regressions. *Size* (Ajinkya et al., 2005; Hribar and Yang, 2016), *Book-to-Market* (Bamber and Cheon, 1998), *Horizon* (Ajinkya et al., 2005; Feng et al., 2009; Hribar and Yang, 2016), *Loss Indicator* (Baik et al., 2011; Hilary and Hsu, 2011) and *Investor Sentiment* (Bergman and Roychowdhury, 2008) yield significant coefficients as predicted by the prior literature in at least some specifications. A noteworthy deviation from earlier studies can be found for *Size*, where positive coefficients turn significantly negative, when firm-fixed effects are included. Similarly, *Analyst Coverage* and *Net Equity Issuer Dummy* yield significant coefficient contrary to the prior literature when considering firm-fixed effects.

Table 2. Guidance Bias and Capital Gains Overhang
This table reports coefficient estimates from OLS regression for the sample period from January 2002 to December 2018. The dependent variable is *Guidance Bias*, which is the difference between forecasted EPS and realized EPS, divided by the stock price at the beginning of the fiscal year. Our main explanatory variable, the capital gains measure *CGO*, is defined as stock price change since the average investor's purchase. Further explanatory variables are described in Table 1 of the paper. A constant term is included but not reported. t-statistics, which are reported in parentheses, are calculated using the method by White (1980) to account for heteroskedasticity. *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively.

	Dependent Variable: *Guidance Bias*				
	(1)	(2)	(3)	(4)	(5)
CGO	-1.9108***	-1.7052***	-1.5470***	-1.6917***	-1.9984***
	(-13.5451)	(-11.6713)	(-10.6656)	(-11.2885)	(-12.6705)
Beta		-0.0133	-0.0015	0.0194	0.0072
		(-0.4614)	(-0.0511)	(0.6706)	(0.1703)
Size		-0.0862***	-0.0809***	-0.0778***	0.4952***
		(-6.9681)	(-6.6592)	(-4.2498)	(7.3581)
Book-to-Market		0.3123***	0.1757**	0.1795*	0.8177***
		(3.6381)	(2.0307)	(1.9530)	(5.1788)
Horizon			0.1397***	0.1119***	0.1095***
			(4.8136)	(3.8590)	(3.1489)
Loss Indicator			-0.1060	-0.1150	-0.2377**
			(-1.4610)	(-1.5364)	(-2.5015)
Process Risk			-0.0462	-0.0426	
			(-0.9303)	(-0.8411)	
Prior Error			0.1824***	0.1796***	-0.0206
			(7.4146)	(7.0889)	(-0.8206)
Operating Profitability				0.0423	0.0641
				(1.0351)	(1.6099)
Analyst Coverage				0.0006	0.0099*
				(0.1918)	(1.7697)
Analyst Dispersion				0.0032	-0.0116
				(0.4381)	(-1.3491)
IVOL				-0.1154	-0.1681
				(-0.5306)	(-0.7119)
Net Equity Issuer Dummy				-0.0248	-0.0852**
				(-0.6736)	(-1.9912)
Investor Sentiment				0.0100***	0.0066*
				(2.8887)	(1.8342)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes	No
Firm Fixed Effects	No	No	No	No	Yes
N	9,079	8,746	8,746	8,499	8,499
Adjusted R^2	0.0563	0.0694	0.0899	0.0935	0.2255

To investigate the nature of the relationship between *CGO* and *Guidance Bias* more extensively, we also conduct a cross-sectional portfolio sort of guiding firms on *CGO* discussed in more detail in Section 5. It is notable, however, that the catering effect is asymmetrically stronger for low-*CGO* than high-*CGO* firms. While guiding firms in

the lowest quintile of *CGO* firms display excessively optimistic forecasts with a mean *Guidance Bias* of 0.9123%, high-*CGO* firms are only slightly pessimistic (-0.1905%) albeit significantly so. Such asymmetric behavior of management is line with the loss aversion included in our theoretical model as managers of loss firms face stronger investor reactions than managers in the gain domain. [11]

4.2. Catering Mechanism in Earnings Guidance

While Table 2 empirically confirms the predictive power of *CGO* for *Guidance Bias*, our catering theory via earnings guidance yields additional predictions about the conditions under which catering incentives are particularly strong. Specifically, the catering-induced *Guidance Bias* is predicted to be particularly strong when managers have a strong presence preference (Hypothesis 2), the stock's final payoff is more uncertain (Hypothesis 3) and management's costs for issuing a deceptive forecast are low (Hypothesis 4). Based on the prior literature on management guidance, which clearly identifies when managers are more myopic and when their personal costs are lower, we test these hypotheses. Lending support to the catering hypothesis, Table 3 shows that the predictive power of *CGO* indeed increases in these situations.

To test Hypothesis 2, management's presence preference has to be captured. Seybert and Yang (2012) show that firms with transient institutional holdings are more likely to omit guidance when it would dampen excessive earnings expectations. Similarly, Polk and Sapienza (2008) find that catering via firms' investment choices is stronger among firms with shorter investor horizons. Therefore, we argue that managers of firms with a highly

[11] In addition to its inclusion in prospect theory (Kahneman and Tversky, 1979; Tversky and Kahneman, 1992), asymmetric behavior in gain versus loss domain has been both documented among individual investors (Odean, 1998) and also shown to influence stock market prices (Wang et al., 2017; An et al., 2020).

Table 3. Guidance Bias and Capital Gains Overhang - Catering Incentives
This table reports coefficient estimates from OLS regression for the sample period from January 2002 to December 2018. The dependent variable is *Guidance Bias*, which is the difference between forecasted EPS and realized EPS, divided by the stock price at the beginning of the fiscal year. Our main explanatory variable, the capital gains measure *CGO*, is defined as stock price change since the average investor's purchase. Further explanatory variables are described in Table 1 of the paper. A constant term is included but not reported. t-statistics, which are reported in parentheses, are calculated using the method by White (1980) to account for heteroskedasticity.

	Dependent Variable: *Guidance Bias*				
	(1)	(2)	(3)	(4)	(5)
CGO	-0.4980**	-1.0424***	-1.1787***	-1.9952***	-1.8604***
	(-2.0435)	(-5.5163)	(-4.2501)	(-7.6551)	(-10.3585)
CGO x *Share Turnover*	-6.9653***				
	(-5.2809)				
CGO x *Relative Short Interest*		-13.5267***			
		(-3.8824)			
CGO x *IVOL*			-1.9640*		
			(1.8835)		
CGO x *Analyst Coverage*				0.0258*	
				(1.6792)	
CGO x *Process Risk*					0.5213*
					(1.8031)
Firm Controls	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes	Yes
N	8,499	8,499	8,499	8,499	8,499
Adjusted R^2	0.0994	0.1001	0.0941	0.0938	0.0939

transient base of investors, measured via share turnover, are more likely to be myopic and thus engage in managerial catering, i.e. adjust their *Guidance Bias* based on their investors' satisfaction with their performance. Additionally, we argue that myopia is also induced by the risk of a further stock price deterioration as negative stock returns are associated with CEO turnover (Puffer and Weintrop, 1991; Jenter and Kanaan, 2015). Thus, we expect catering to be particularly strong among firms facing strong downward price pressure as measured via short interest.

Columns (1) and (2) of Table 3 report results of regressions of the interaction of *CGO* with *Share Turnover* and *Relative Short Interest*, respectively. In both specifications, the interaction effect is significantly negative at the 1%-level and economically large. Hence, as hypothesized, the effect of *CGO* on *Guidance Bias* becomes stronger as *Share Turnover*

increase and *Relative Short Interest* increase. Focusing on specification (1), an increase in *CGO* by one standard deviation is associated with a decrease in *Guidance Bias* of 0.2526 percentage points if *Share Turnover* is at its mean. If *Share Turnover* is increased by one standard deviation, the effect of *CGO* on *Guidance Bias* increases substantially to -0.3774 percentage points. Similarly, the effect of *CGO* on *Guidance Bias* strengthens from -0.2475 to -0.3511 when *Relative Short Interest* is raised by one standard deviation. These results underline that managers with a strong presence preference are particularly responsive to their shareholders' perception of the firm's performance and try to attenuate it with strategically issued forecasts. Therefore, we can confirm Hypothesis 2.

Hypothesis 3 predicts that catering is stronger among firms with uncertain payoffs. To test the proposition, we use $IVOL$, the stock's volatility beyond the Fama and French (1992) 3-factor model to measure the uncertainty associated with the firm.

Column (3) of Table 2 details regression results of an interaction between *CGO* and $IVOL$. The interaction coefficient is significantly negative at the 10%-level, indicating that catering is stronger among uncertain firms. The effect is also economically meaningful. If $IVOL$ is at its mean, a one standard deviation increase in *CGO* yields a decrease in *Guidance Bias* by 0.2303 percentage points. The effect of *CGO* strengthens to 0.2638 if $IVOL$ is raised by one standard deviation. Thus, our interaction evidence yields support for Hypothesis 2.

Management's costs for issuing biased forecasts have to be quantified to test Hypothesis 4. To impose costs on deceptive managers, the market has to recognize deceptive guidance. One market mechanism to verify management guidance are earnings forecasts provided by outside analysts (Baginski and Hassell, 1997). While interdependencies between analysts' and managers' earnings predictions exist (Cotter et al., 2006; Bergman and Roychowdhury, 2008; Feng and McVay, 2010), analysts' forecasts have been shown to be an important

control on management (Basi et al., 1976; Hutton et al., 2012). Importantly, Rogers and Stocken (2005) show that managers' willingness to issue deceptive guidance is constrained by the ability of the market to recognise such deception. Therefore, we argue that, if intentional managerial catering drives the association between *CGO* and *Guidance Bias*, the effect will be stronger when fewer analysts serve as outside check on management. Moreover, litigation is one potential avenue of investors to impose costs onto management for inaccurate forecasts (Cheng and Warfield, 2005; Rogers and Stocken, 2005). Hence, we expect firms exposed to litigation risk, as proxied via *Process Risk*, to be less heavily engaged in catering.

Columns (4) and (5) of Table 3 report results of regressions of the interaction of *CGO* with *Analyst Coverage* and *Process Risk*, respectively. The interaction effect is significantly positive at the 10% level in both specifications. In column (4), an increase in *CGO* by one standard deviation is associated with a decrease in *Guidance Bias* of 0.2366 percentage points, if *Analyst Coverage* is at its mean. Increasing the number of analysts by one standard deviation, diminishes the effect of *CGO* on *Guidance Bias* to -0.2059 percentage points. Focusing on specification (5), the effect of a one standard deviation increase of *CGO* on *Guidance Bias* equals -0.2677 percentage points for low- and -0.1927 for high-risk firms. As predicted by a managerial catering framework, managers reduce excessive optimism in forecasts when personal costs for issuing biased guidance are higher. Our results strongly support Hypothesis 4.

4.3. Additional Analyses

Newly Appointed CEOs Beyond Table 2 and Table 3, which test predictions directly derived from our theoretical framework, we provide additional evidence for catering via earnings

guidance as causal driver of the observed relation between *CGO* and *Guidance Bias*. Specifically, CEOs should only engage in catering if the underlying stock performance can be attributed to them. Therefore, recently employed CEOs, who could not have affected prior firm performance, face substantially smaller incentives to cater via systematically biased earnings guidance.

To test this implication, we obtain information on corporate CEOs via Execucomp's annual compensation data set and merge it with our guidance data. We focus on CEO-year observations with non-missing information on the date the manager joined the company and the date when she became CEO. We create a *New CEO* dummy variable equal to 1, if the manager has become CEO in the 180 days before the initial management guidance. After excluding CEOs, who ascended to their role after the initial guidance date, 3.19% of the remaining 2,794 forecasts are classified as having been made by a *New CEO*.

Table 4 reports regression results of the interaction between the *New CEO* dummy and *CGO* on *Guidance Bias*, using the same control variables as in Table 2. Across all specifications, we find a significantly positive interaction effect. Importantly, the interaction effect is also economically meaningful: based on column (5), recently appointed CEOs give earnings guidance that is on average 0.0525 percentage points more biased than other executives. A one standard deviation increase in *CGO*, however, leads to a decrease of *Guidance Bias* of 0.2690 percentage points for established CEOs and an increase of 0.2837 percentage points for managers classified as *New CEO*. Thus, the negative association between prior stock performance and bias in management forecasts vanishes, and even flips signs, among newly elevated CEOs. As predicted, managers only engage in catering via earnings guidance when it affects the investors' perception of their performance. In sum,

Table 4. Guidance Bias and Capital Gains Overhang - CEO Turnover
This table reports coefficient estimates from OLS regressions for the sample period from January 2002 to December 2018. The dependent variable is the difference between forecasted EPS and realized EPS, divided by the stock price at the beginning of the fiscal year. Our main explanatory variable, the capital gains measure *CGO*, is defined as stock price change since the average investor's purchase. Further explanatory variables are described in Table 1 of the paper. A constant term is included but not reported. t-statistics, which are reported in parentheses, are calculated using the method by White (1980) to account for heteroskedasticity.

	Dependent Variable: *Guidance Bias*				
	(1)	(2)	(3)	(4)	(5)
CGO	-2.2761	-1.9838	-1.9196	-1.8827	-1.8695
	(-9.1355)***	(-7.9338)***	(-7.6211)***	(-6.9067)***	(-6.2444)***
CGO x *New CEO*	2.6504	2.7861	2.4135	2.4236	3.8407
	(2.6399)***	(2.7447)***	(2.4605)**	(2.4420)**	(2.9565)***
New CEO	-0.3086	-0.3554	-0.4079	-0.3365	-0.2121
	(-1.7874)*	(-2.0277)**	(-2.3772)**	(-1.9806)**	(-1.1403)
Beta		0.0250	0.0347	0.0320	-0.1065
		(0.5215)	(0.7369)	(0.6753)	(-1.4748)
Size		-0.0358	-0.0360	-0.0527	0.5559
		(-1.7506)*	(-1.7792)*	(-1.7562)*	(4.5035)***
Book-to-Market		0.4533	0.3207	0.3866	1.2869
		(2.6060)***	(1.8065)*	(2.0998)**	(3.8251)***
Horizon			0.1241	0.0911	0.1689
			(2.5856)***	(1.9542)*	(2.7996)***
Loss Indicator			-0.2405	-0.1774	-0.2307
			(-1.8011)*	(-1.2793)	(-1.6287)
Process Risk			-0.1146	-0.1305	
			(-1.4128)	(-1.5771)	
Prior Error			0.1391	0.1479	-0.0049
			(3.7458)***	(3.8556)***	(-0.1224)
Operating Profitability				0.0210	0.0526
				(0.2985)	(0.7155)
Analyst Coverage				0.0024	0.0155
				(0.5637)	(1.6460)*
Analyst Dispersion				-0.0187	-0.0339
				(-1.3790)	(-1.9484)*
IVOL				0.3491	0.2267
				(0.9370)	(0.5715)
Net Equity Issuer Dummy				-0.1268	-0.1623
				(-2.1644)**	(-2.4627)**
Investor Sentiment				0.0111	0.0083
				(2.0226)**	(1.3958)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes	No
Firm Fixed Effects	No	No	No	No	Yes
N	2,794	2,758	2,758	2,710	2,710
Adjusted R^2	0.0886	0.1010	0.1142	0.1186	0.2149

the CEO-based tests provide strong evidence that managerial catering drives the association between *CGO* and *Guidance Bias*.

Flat Return The prior tests consistently and robustly establish that *CGO* affects *Guidance Bias* as predicted by our model. Since we mainly employ regressions to test our theoretically derived hypotheses, one might argue that we are just capturing correlations between *CGO* and *Guidance Bias* and thus fail to identify a causal relation. It is important to note that we do not claim that managers sit down with a calculator and compute the rate of return of each investor as basis for their guidance strategy. Rather, we theoretically motivate *CGO* as a central determinant for the investors' utility function and therefore argue that it will also affect management's considerations. Consequently, alternative proxies will also be related to the *Guidance Bias*. Indeed, we use two of these measures - the percentage of investors in the gain domain and the 52-week high - in the Online Appendix to demonstrate the robustness of our findings.

We do, however, conduct a further test of the importance of *CGO*, namely a horserace in regressions against the *Flat Return* over the past 5 years. While both *CGO* and the flat return utilize the same return information about the past 5 years, *CGO* is turnover-weighted to capture how investors experience these returns. Thus, it should be a better measure of their utility. If *CGO* remains significantly negative and economically large while controlling for the *Flat Return*, it is another causal indication for catering through earnings guidance.

Table 5 reports regression results on the *Guidance Bias* with both *CGO* and *Flat Return* as explanatory variables. Notably, both coefficients and significance levels of *CGO* remain virtually unchanged from Table 2 when *Flat Return* is included. The effect of the *Flat Return* on *Guidance Bias* is negative across all specifications, although only significantly so in two out of five regressions. These results emphasize that managers are clearly more responsive to the returns experienced by investors than the overall return over the past years, which provides further robust evidence for the catering framework.

Table 5. Guidance Bias and Capital Gains Overhang - Flat Return
This table reports coefficient estimates from OLS regressions for the sample period from January 2002 to December 2018. The dependent variable is the difference between forecasted EPS and realized EPS, divided by the stock price at the beginning of the fiscal year. Our main explanatory variable, the capital gains measure *CGO*, is defined as stock price change since the average investor's purchase. Further explanatory variables are described in Table 1 of the paper. A constant term is included but not reported. t-statistics, which are reported in parentheses, are calculated using the method by White (1980) to account for heteroskedasticity.

	Dependent Variable: *Guidance Bias*				
	(1)	(2)	(3)	(4)	(5)
CGO	-1.8874	-1.6545	-1.4956	-1.6051	-1.9831
	(-12.1886)***	(-10.6825)***	(-9.7288)***	(-10.0768)***	(-11.8899)***
Flat Return	-0.0158	-0.0087	-0.0040	-0.0052	-0.0164
	(-2.5273)**	(-1.4167)	(-0.6713)	(-0.8496)	(-2.0201)**
Beta		-0.0151	-0.0061	0.0114	-0.0202
		(-0.4849)	(-0.1989)	(0.3708)	(-0.4485)
Size		-0.0967	-0.0912	-0.0896	0.5076
		(-7.4149)***	(-7.1246)***	(-4.6471)***	(7.1043)***
Book-to-Market		0.2871	0.1691	0.1690	0.7923
		(3.0901)***	(1.8083)*	(1.7130)*	(4.6974)***
Horizon			0.1531	0.1221	0.1288
			(5.0523)***	(4.0550)***	(3.7005)***
Loss Indicator			-0.1095	-0.1267	-0.2685
			(-1.3875)	(-1.5749)	(-2.7198)***
Process Risk			-0.0331	-0.0343	
			(-0.6278)	(-0.6409)	
Prior Error			0.1788	0.1771	-0.0211
			(7.0372)***	(6.7322)***	(-0.8187)
Operating Profitability				0.0326	0.0828
				(0.7564)	(1.9146)*
Analyst Coverage				0.0016	0.0093
				(0.5092)	(1.5922)
Analyst Dispersion				0.0025	-0.0109
				(0.3164)	(-1.1776)
IVOL				-0.0280	-0.0958
				(-0.1182)	(-0.3875)
Net Equity Issuer Dummy				-0.0105	-0.0563
				(-0.2753)	(-1.2996)
Investor Sentiment				0.0096	0.0052
				(2.6876)***	(1.4237)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes	No
Firm Fixed Effects	No	No	No	No	Yes
N	8,130	8,127	8,127	7,893	7,893
Adjusted R^2	0.0564	0.0686	0.0889	0.0913	0.2310

In addition to Tables 2, 3, 4 and 5, we present further evidence for intentional managerial catering and against alternative hypotheses in our Online Appendix. Specifically, Seybert and Yang (2012) strategically respond to the market-wide sentiment to resolve excessively

optimistic earnings expectations. In contrast, if managers cater to investors, they should exploit investor's propensity for optimistic earnings expectations during times of high investor sentiment. Our Online Appendix interaction tests show that the effect of *CGO* on *Guidance Bias* is stronger when investors are particularly susceptible to catering.

Furthermore, opportunistically biased earnings forecasts might also be driven by managements' performance-based incentives as, for example, equity holdings profit from excessively optimistic forecasts. We document in our Online Appendix that the relation between *CGO* and *Guidance Bias* is unaffected by the CEO's equity share, yielding further support for the catering mechanism.

5. Stock Market Implications

In this section, we examine the implications of catering through earnings guidance for capital markets. In addition to non-parametric portfolio sorts, we employ multivariate analyses to examine how *CGO* around affects stock prices around guidance dates and earnings announcements. Our results suggest that catering biases market prices such that a convergence towards fundamental values is delayed until the earnings announcement.

5.1. Univariate Evidence

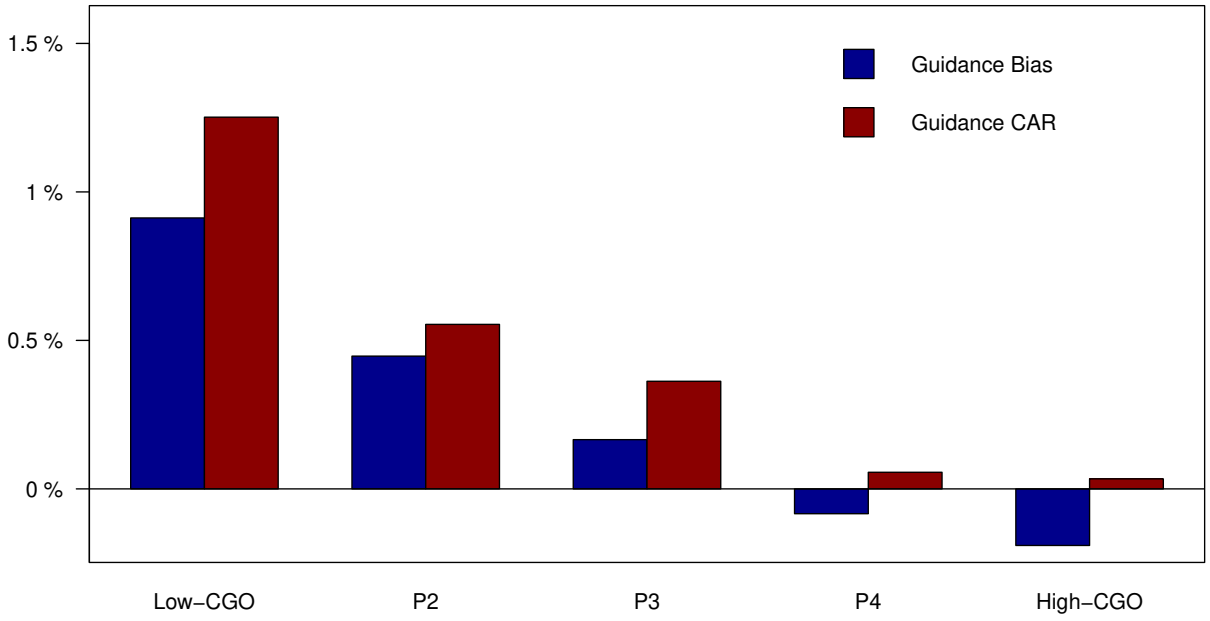
To test the capital market implications of catering via earnings guidance, we conduct cross-sectional quintile portfolio sorts based on *CGO*. More precisely, for each month in our sample, we define portfolio breakpoints based on all common ordinary US stocks trading on NYSE, AMEX or NASDAQ. Using these breakpoints, each observation is assigned to one of the five portfolios. Consequently, also non-guiding firms are considered for portfolio construction, while our reported figures naturally focus on guiding firms. We follow

Seybert and Yang (2012) in adopting a purely cross-sectional approach for two reasons. First, investors usually judge on their investments relative to the market or the performance of other investments at a given point such that the cross-sectional positioning of a stock should be relevant for managers' catering decisions. Second, we do not want nearly all observations in a given month to be allocated to the top (bottom) portfolio simply because the overall market has substantially increased (decreased) in the recent past. Nonetheless, the Online Appendix reports qualitatively the same results if we pool all observations from our sample to form portfolios.

The average *Guidance Bias* for each *CGO* quintile portfolio is presented in Figure 2. The blue bars show that the *Guidance Bias* monotonically decreases across the five *CGO*-quintiles. While low-*CGO* firms exhibit the largest average bias of 0.9123%, managers of high-*CGO* firms issue forecasts with a negative bias of -0.1905% on average. Thus, Figure 2 supports our results from Section 4 that guidance is too optimistic for low-*CGO* firms and too pessimistic for high-*CGO* firms, yielding additional support for Hypothesis 1. Moreover, Figure 2 confirms that these biases have a disproportionate effect on low-*CGO* firms. First, these forecasts are prone to the largest bias in absolute magnitude. Second, even after subtracting managers' overall tendency to predict too high earnings (0.1135%, see Table 1), the *Guidance Bias* is more pronounced for low-*CGO* compared to high-*CGO* firms.

If the stock market fails to anticipate managers' incentives to provide systematically biased guidance, we expect catering to succeed in influencing short-term stock prices. Therefore, we predict firms with relatively low *CGO*-values to experience relatively high *Guidance CAR* and vice versa. The red bars in Figure 2 support this conjecture: the average excess returns around the guidance dates decrease monotonically from 1.2517% for low-*CGO* firms to 0.0338% for high-*CGO* firms. In conclusion, Figure 2 indicates that the

Figure 2. Capital Gains Overhang and Managerial Guidance
This figure depicts cross-sectional portfolio sorts based on CGO and managerial guidance outcomes. The left axis plots the average *Guidance Bias*, defined as difference between forecasted EPS and realized EPS, divided by the stock price at the beginning of the fiscal year, across the portfolio quintiles. We report average cumulative excess returns associated with managerial guidance calculated for a [-1;1] event window. Abnormal returns are calculated using a 255-day estimation with at least 30 observations and a 31-day gap before the event window, controlling for the Fama and French (1992) 3-factor model. The sample period lasts from 2002 to 2018.



Guidance Bias declines as *CGO* increases and that this relationship translates to systematic patterns in *Guidance CAR*. This connection is further supported as both *Guidance Bias* and *Guidance CAR* tend to show a convex relation across *CGO*-quintiles.

Table 6 quantifies the graphical evidence from Figure 2 and provides evidence on the statistical significance of our findings. The difference in *Guidance Bias* between low- and high-*CGO* firms of -1.1029% is statistically significant with a t-value of -8.3853 and also economically large as it equals 71.52% of the bias's standard deviation. Managers of low-*CGO* firms issue excessively optimistic forecasts, while high-*CGO* firms tend to moderately

Table 6. Portfolio Sort based on Capital Gains Overhang
This table reports cross-sectional portfolio sorts on CGO for the sample period from 2002 to 2018. The table presents the average *Guidance Bias*, defined as difference between forecasted EPS and realized EPS, divided by the stock price at the beginning of the fiscal year, across the portfolio quintiles as well as average cumulative excess returns associated with managerial guidance calculated for a [-1;1] event window. Abnormal returns are calculated using a 255-day estimation with at least 30 observations and a 31-day gap before the event window, controlling for the Fama and French (1992) 3-factor model. The number of observations, which are included in each quintile are listed below. t-statistics, which are reported in parentheses, refer to the difference between the high- and low-*CGO* portfolios and are based on standard errors corrected for heteroskedasticity.

	Low-*CGO*	P2	P3	P4	High-*CGO*	5-1	t(5-1)
Guidance Bias	0.9123	0.4471	0.1658	-0.0836	-0.1905	–1.1029	(-8.3853)
Guidance CAR	1.2517	0.5540	0.3623	0.0560	0.0338	-1.2179	(-2.1330)
Earnings Announcement CAR	-0.3372	0.1576	0.5408	0.4114	0.9905	1.3277	(2.3863)
Observations	346	1,855	2,551	2,682	1,645		

underestimate future earnings. Moreover, low-*CGO* firms' *Guidance CAR* exceeds high-*CGO* firms' by 1.2179%, which is statistically significant with a t-value of -2.1330. Hence, the reaction of investors to management guidance are strongly affected by the conveyed bias in earnings forecasts, indicating that the market fails to anticipate the systematic effect of *CGO* on *Guidance Bias*.

Moreover, the negative relationship between *CGO* and both *Guidance Bias* and *Guidance CAR* does not only match qualitatively, but also in terms of magnitude. Recall that *Guidance Bias* is measured relative to the firm's market capitalization and that *Guidance CAR* reflects relative changes in the firm's market capitalization. Hence, the identical scaling of the two variables in Figure 2 and the comparable effect magnitudes (1.1029% versus 1.2179%) imply that managerial overestimation of earnings by one dollar increases the firm's market capitalization by approximately one dollar. These observations suggest that market participants indeed react to the biased earnings guidance, but that they interpret the biased component of earnings forecasts as transitory rather than persistent.

As we hypothesize that managerial catering conveys erroneous earnings expectations to the market, thereby inducing systematic stock mispricing, we are also concerned about

the resolution of the associated mispricing. We argue that those managers, who have the strongest incentives to cater, are also the least likely to correct mispricing themselves due to the potentially adverse impact on their investors' attitude towards the firm. Nevertheless, some proportion of the evoked mispricing will presumably be corrected during the fiscal year as investors acquire more information on the firm's fundamental performance. The remaining biases in earnings expectations will eventually be corrected when the actual earnings are announced. Thus, we expect that low-*CGO* firms experience lower *Earnings Announcement CAR* than high-*CGO* firms. The third row in Table 6 supports this hypothesis: high-*CGO* firms, which have previously understated future earnings, experience significantly positive *Earnings Announcement CAR* of 0.9905%. Conversely, low-*CGO* firms, which issued excessively optimistic forecasts and experienced high *Guidance CAR*, yield far lower earnings announcement returns of -0.3372% only. Thus, low-*CGO* firms exhibit *Earnings Announcement CAR* far below the sample mean of 0.4723% (see Table 1). The difference between high- and low-*CGO* firms of 1.3277% is statistically significant with a t-value of 2.3863 and economically large as it even slightly exceeds the initial reaction to management guidance.

In summary, our univariate results show that managers of low-*CGO* firms issue excessively optimistic earnings guidance, which is associated with a strongly positive initial market reaction as well as subpar market reception to the subsequent earnings announcement.

5.2. Capital Gains Overhang and Guidance Announcement Returns

To delve deeper into the stock price implications of managerial catering via earnings guidance, we examine cumulative excess returns around guidance dates based on multivariate regressions. Table 7 displays regression results for five specifications with different sets of covariates. While columns (1) to (4) include the same control variables as in Table 2, column (5) adds *Illiquidity* and MAX as additional characteristics previously identified to impact stock returns.

In each regression specification, we find a significantly negative coefficient of *CGO* between -1.1369 and -2.0109 The effect of *CGO* is economically large. A one standard deviation increase in *CGO* decreases the cumulative excess returns by 0.1636 to 0.2894 percentage points. Since *CGO* incorporates exclusively public information on prior stock price movements, the effect is surprisingly strong.

Our regression evidence strongly supports the univariate results presented in Section 5.1. The preceding returns experienced by investors are strongly predictive of the market reaction around guidance dates, indicating that systematically biased information communicated by managements induces biased expectations. Firms which give systematically optimistic forecasts experience systematically better market reactions around the dates of these forecasts and vice versa. This finding has two important implications for the stock market. First, it indicates that markets fail to anticipate the systematic *CGO*-dependent deception by managers and consequently incorporate the biased forecasts into market prices. Second, it underlines that managerial catering succeeds in the short-term by generating excessively positive returns for low-*CGO* firms and, thus, alleviating pressure on management.

Table 7. Guidance Returns and Capital Gains Overhang
This table reports coefficient estimates from OLS regression for the sample period from January 2002 to December 2018. The dependent variable are cumulative announcement excess returns around the [-1;+1] event window of a fiscal year's initial management guidance. Abnormal returns are calculated using a 255-day estimation with at least 30 observations and a 31-day gap before the event window, controlling for the Fama and French (1992) 3-factor model. Our main explanatory variable, the capital gains measure *CGO*, is defined as stock price change since the average investor's purchase. Further explanatory variables are described in Table 1 of the paper. A constant term is included but not reported. t-statistics, which are reported in parentheses, are calculated using the method by White (1980) to account for heteroskedasticity.

	Dependent Variable: *Guidance CAR*				
	(1)	(2)	(3)	(4)	(5)
CGO	-1.1369*	-1.4609**	-1.7638**	-2.0109***	-1.9094**
	(-1.6629)	(-2.0543)	(-2.4635)	(-2.5874)	(-2.4149)
Beta		-0.0045	0.0574	0.0274	0.0342
		(-0.0319)	(0.4017)	(0.1830)	(0.2281)
Size		-0.0266	-0.0701	-0.0955	-0.1007
		(-0.4442)	(-1.1589)	(-0.9948)	(-1.0087)
Book-to-Market		-0.0980	0.1680	0.0281	0.0314
		(-0.2587)	(0.4322)	(0.0684)	(0.0763)
Horizon			0.9597***	0.9367***	0.9361***
			(4.6994)	(4.4491)	(4.4462)
Loss Indicator			-0.6424*	-0.6468*	-0.6426*
			(-1.8014)	(-1.7424)	(-1.7313)
Process Risk			-0.2670	-0.3023	-0.3008
			(-0.8926)	(-0.9808)	(-0.9744)
Prior Error			-0.2099***	-0.2068**	-0.2065**
			(-2.7014)	(-2.5171)	(-2.5104)
Operating Profitability			0.2336	0.2363	0.2357
			(1.0916)	(1.0814)	(1.0784)
Analyst Coverage				0.0111	0.0106
				(0.6611)	(0.6306)
Analyst Dispersion				0.0192	0.0197
				(0.7872)	(0.8030)
IVOL				0.7077	1.4247
				(0.6891)	(1.0093)
Net Equity Issuer Dummy				-0.0298	-0.0286
				(-0.1580)	(-0.1517)
Investor Sentiment				0.0346*	0.0333*
				(1.9594)	(1.8745)
Illiquidity					-2.2156
					(-0.2844)
MAX					-0.0426
					(-0.7024)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes	Yes
N	9,079	8,746	8,745	8,499	8,499
Adjusted R^2	0.0025	0.0024	0.0071	0.0067	0.0065

The documented stock market reactions raises the question how sophisticated market participants react to catering via earnings guidance. As discussed before, analysts serve

as important check on management forecasts (Rogers and Stocken, 2005). In our Online Appendix, we provide regression evidence modeled after Feng and McVay (2010), indicating that that analysts fail to discount the catering-induced bias. Thus, while the presence of analysts seems to caution managers as discussed in Section 4.2, analysts themselves fail to recognize the remaining bias, leaving market expectations biased.

5.3. Capital Gains Overhang and Earnings Announcement Returns

The prior sections establish that managerial catering via guidance induces strong market reactions, thereby biasing stock prices. Therefore, the question how the consequential misvaluation gets resolved has to be addressed. In the context of sentiment-induced overvaluation, Seybert and Yang (2012) examine two channels. While subsequent guidance reduces overvaluation partially, some proportion of mispricing persists until the subsequent earnings announcement, when the remaining biases in earnings expectations are settled.

We provide evidence in our Online Appendix that managers fail to fully correct market expectations via repeated guidance, leaving a substantial portion of the *Guidance Bias* unresolved around the last forecast. Consequently, managers correct the biases of their one-year forecasts largely at the final earnings announcement. Hence, *CGO* should be positively related to cumulative excess returns around these earnings announcement.

Table 8 reports results of regressions with *Earnings Announcement CAR* as dependent variable, using the same explanatory variables as in Table 7. The coefficient of *CGO* is significantly positive across all specifications with coefficients between 1.8098 and 2.5296. The implied economic effect is large as an increase of *CGO* by one standard deviation is associated with an increase of cumulative excess returns of 0.2604 to 0.3640 percentage points. Interestingly, the effect is of a comparable size as the initial market reaction,

Table 8. Earnings Announcement Returns and Capital Gains Overhang
This table reports coefficient estimates from OLS regression for the sample period from January 2002 to December 2018. The dependent variable are cumulative announcement excess returns around the [-1;+1] event window of a fiscal year's earnings announcement. Abnormal returns are calculated using a 255-day estimation with at least 30 observations and a 31-day gap before the event window, controlling for the Fama and French (1992) 3-factor model. Our main explanatory variable, the capital gains measure *CGO*, is defined as stock price change since the average investor's purchase. Further explanatory variables are described in Table 1 of the paper. All explanatory variables are calculated as of the month before the initial management guidance. A constant term is included but not reported. t-statistics, which are reported in parentheses, are calculated using the method by White (1980) to account for heteroskedasticity.

	Dependent Variable: *Earnings Announcement CAR*				
	(1)	(2)	(3)	(4)	(5)
CGO	2.0050***	1.8098***	1.8366***	2.5296***	2.4495***
	(3.0019)	(2.6061)	(2.6183)	(3.3547)	(3.2227)
Beta		0.2627*	0.3145**	0.2350	0.2183
		(1.8206)	(2.1585)	(1.5441)	(1.4322)
Size		0.0300	0.0121	0.0692	0.0560
		(0.4962)	(0.1981)	(0.7041)	(0.5551)
Book-to-Market		-0.6489*	-0.6140*	-0.5917	-0.5907
		(-1.7968)	(-1.6507)	(-1.5230)	(-1.5204)
Horizon			0.0526	0.0313	0.0366
			(0.2873)	(0.1677)	(0.1952)
Loss Indicator			-0.5898*	-0.5584	-0.5589
			(-1.6719)	(-1.5398)	(-1.5406)
Process Risk			0.2781	0.3175	0.3194
			(0.9446)	(1.0517)	(1.0578)
Prior Error			0.0003	0.0093	0.0099
			(0.0033)	(0.1114)	(0.1181)
Operating Profitability			0.0696	0.0706	0.0703
			(0.3203)	(0.3197)	(0.3186)
Analyst Coverage				-0.0135	-0.0124
				(-0.7904)	(-0.7267)
Analyst Dispersion				-0.0030	-0.0032
				(-0.1166)	(-0.1273)
IVOL				1.2270	0.0787
				(1.1246)	(0.0504)
Net Equity Issuer Dummy				0.1384	0.1332
				(0.7156)	(0.6885)
Investor Sentiment				-0.0222	-0.0198
				(-1.2341)	(-1.0948)
Illiquidity					-1.9282
					(-0.3301)
MAX					0.0755
					(1.1919)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes	Yes
N	9,079	8,746	8,745	8,499	8,499
Adjusted R^2	0.0050	0.0061	0.0061	0.0062	0.0062

indicating that a large proportion of the *CGO*-dependent guidance announcement return is reversed around the subsequent earnings announcement. Taken together with Tables 2 and 7, these findings indicate that the systematic effect of *CGO* on *Guidance Bias* causes an overvaluation of low-*CGO* firms, which is alleviated around the earnings announcement.

6. Conclusion

In this paper, we propose a catering theory of earnings guidance. Our theory implies that managers cater to referent-dependent investors by issuing excessively optimistic forecasts when investors have experienced disappointing stock returns and vice versa. Both regression evidence and univariate analyses support this conjecture. Consistent with managerial catering, the relation between investors' prior returns and biased guidance is particularly strong if managers are myopic, face low personal costs for issuing biased forecasts and their firm's stock is volatile. Moreover, the negative effect of *CGO* on *Guidance Bias* disappears among firms under control of newly appointed CEOs, who have no incentives to cater to their investors. Lastly, we document that the effect of *CGO* on *Guidance Bias* is distinct from the stock's flat return, supporting the view that the investor perspective of firm performance drives catering.

We also find that *CGO* is strongly predictive of cumulative excess returns around guidance dates as low-*CGO* firms experience significantly higher returns than high-*CGO* firms. The empirical evidence suggests that the market fails to anticipate managers' incentives to cater to their investors, allowing biased forecasts to succeed in attenuating the investor mood. Additionally, we document how the valuation error induced by biased guidance resolves subsequently. While managers of low-*CGO* firms fail to fully correct market expectations via repeated guidance, a strong reversal of market prices can be observed around earnings

announcements. Taken together, these results strongly suggest that managerial incentives to appease their investors result in an increased overvaluation of low-*CGO* firms which is corrected afterwards.

References

Ajinkya, B., Bhojraj, S. and Sengupta, P. (2005), The association between outside directors, institutional investors and the properties of management earnings forecasts, *Journal of Accounting Research* **43**(3), 343–376.

Amihud, Y. (2002), Illiquidity and stock returns: Cross–section and time–series effects, *Journal of Financial Markets* **5**(1), 31–56.

An, L., Wang, H., Wang, J. and Yu, J. (2020), Lottery–related anomalies: the role of reference–dependent preferences, *Management Science* **66**(1), 473–501.

Baginski, S. P. and Hassell, J. M. (1997), Determinants of management forecast precision, *The Accounting Review* pp. 303–312.

Baik, B., Farber, D. B. and Lee, S. (2011), CEO ability and management earnings forecasts, *Contemporary Accounting Research* **28**(5), 1645–1668.

Baker, M. and Wurgler, J. (2004), A catering theory of dividends, *Journal of Finance* **59**(3), 1125–1165.

Baker, M., Greenwood, R. and Wurgler, J. (2009), Catering through nominal share prices, *Journal of Finance* **64**(6), 2559–2590.

Baker, M., Mendel, B. and Wurgler, J. (2016), Dividends as reference points: A behavioral signaling approach, *The Review of Financial Studies* **29**(3), 697–738.

Baker, M., Pan, X. and Wurgler, J. (2012), The effect of reference point prices on mergers and acquisitions, *Journal of Financial Economics* **106**(1), 49–71.

Bali, T. G., Cakici, N. and Whitelaw, R. F. (2011), Maxing out: Stocks as lotteries and the cross–section of expected returns, *Journal of Financial Economics* **99**(2), 427–446.

Ball, R. and Brown, P. (1968), An empirical evaluation of accounting income numbers, *Journal of Accounting Research* **6**(2), 159–178.

Ball, R. and Kothari, S. P. (1991), Security returns around earnings announcements, *The Accounting Review* **66**(4), 718–738.

Ball, R. and Shivakumar, L. (2008), How much new information is there in earnings?, *Journal of Accounting Research* **46**(5), 975–1016.

Bamber, L. S. and Cheon, Y. S. (1998), Discretionary management earnings forecast disclosures: Antecedents and outcomes associated with forecast venue and forecast specificity choices, *Journal of Accounting Research* **36**(2), 167–190.

Barberis, N., Shleifer, A. and Vishny, R. W. (1998), A model of investor sentiment, *Journal of Financial Economics* **49**(3), 307–343.

Bartov, E. (1993), The timing of asset sales and earnings manipulation, *The Accounting Review* **68**(4), 840–855.

Basi, B. A., Carey, K. J. and Twark, R. D. (1976), A comparison of the accuracy of corporate and security analysts' forecasts of earnings, *The Accounting Review* **51**(2), 244–254.

Bebchuk, L. A. and Stole, L. A. (1993), Do short-term objectives lead to under-or overinvestment in long-term projects?, *Journal of Finance* **48**(2), 719–729.

Ben-David, I. and Hirshleifer, D. (2012), Are investors really reluctant to realize their losses? Trading responses to past returns and the disposition effect, *Review of Financial Studies* **25**(8), 2485–2532.

Bergman, N. K. and Roychowdhury, S. (2008), Investor sentiment and corporate disclosure, *Journal of Accounting Research* **46**(5), 1057–1083.

Bergstresser, D. and Philippon, T. (2006), CEO incentives and earnings management, *Journal of Financial Economics* **80**(3), 511–529.

Beyer, A., Guttman, I. and Marinovic, I. (2019), Earnings management and earnings quality: Theory and evidence, *The Accounting Review* **94**(4), 77–101.

Burgstahler, D. and Dichev, I. (1997), Earnings management to avoid earnings decreases and losses, *Journal of Accounting and Economics* **24**(1), 99–126.

Bushee, B. J. (1998), The influence of institutional investors on myopic R&D investment behavior, *The Accounting Review* pp. 305–333.

Chan, W. S. (2003), Stock price reaction to news and no–news: drift and reversal after headlines, *Journal of Financial Economics* **70**(2), 223–260.

Cheng, Q. and Warfield, T. D. (2005), Equity incentives and earnings management, *The Accounting Review* **80**(2), 441–476.

Cotter, J., Tuna, I. and Wysocki, P. D. (2006), Expectations management and beatable targets: How do analysts react to explicit earnings guidance?, *Contemporary Accounting Research* **23**(3), 593–624.

Daniel, K., Hirshleifer, D. and Subrahmanyam, A. (1998), Investor psychology and security market under-and overreactions, *Journal of Finance* **53**(6), 1839–1885.

De Long, J. B., Shleifer, A., Summers, L. H. and Waldmann, R. J. (1990), Noise trader risk in financial markets, *Journal of Political Economy* **98**(4), 703–738.

Degeorge, F., Patel, J. and Zeckhauser, R. (1999), Earnings Management to Exceed Thresholds, *Journal of Business* **72**(1), 1–33.

Dittmar, A., Duchin, R. and Zhang, S. (2020), The timing and consequences of seasoned equity offerings: A regression discontinuity approach, *Journal of Financial Economics* **138**(1), 254–276.

Dye, R. A. and Sridhar, S. S. (2008), A positive theory of flexibility in accounting standards, *Journal of Accounting and Economics* **46**(2-3), 312–333.

Engelberg, J., McLean, R. D. and Pontiff, J. (2018), Anomalies and news, *Journal of Finance* **73**(5), 1971–2001.

Fama, E. and French, K. (1992), The cross-section of expected stock returns, *Journal of Finance* **47**(2), 427–465.

Fama, E. F. (1970), Efficient capital markets: A review of theory and empirical work, *Journal of Finance* **25**(2), 383–417.

Fama, E. F. and French, K. R. (1993), Common risk factors in the returns on stocks and bonds, *Journal of Financial Economics* **33**(1), 3–56.

Faurel, L., Haight, T. D. and Simon, A. (2018), The issuance and informativeness of management long-term earnings growth forecasts, *Accounting Horizons* **32**(3), 1–27.

Feng, M. and McVay, S. (2010), Analysts' incentives to overweight management guidance when revising their short-term earnings forecasts, *The Accounting Review* **85**(5), 1617–1646.

Feng, M., Li, C. and McVay, S. (2009), Internal control and management guidance, *Journal of Accounting and Economics* **48**(2-3), 190–209.

Frazzini, A. (2006), The disposition effect and underreaction to news, *Journal of Finance* **61**(4), 2017–2046.

Frazzini, A. and Pedersen, L. H. (2014), Betting against beta, *Journal of Financial Economics* **111**(1), 1–25.

Gaver, J. J., Gaver, K. M. and Austin, J. R. (1995), Additional evidence on bonus plans and income management, *Journal of Accounting and Economics* **19**(1), 3–28.

George, T. J. and Hwang, C.-Y. (2004), The 52-week high and momentum investing, *Journal of Finance* **59**(5), 2145–2176.

Golubov, A., Lasfer, M. and Vitkova, V. (2020), Active catering to dividend clienteles: Evidence from takeovers, *Journal of Financial Economics* **137**(3), 815–836.

Graham, J. R., Harvey, C. R. and Rajgopal, S. (2005), The economic implications of corporate financial reporting, *Journal of Accounting and Economics* **40**(1-3), 3–73.

Grinblatt, M. and Han, B. (2005), Prospect theory, mental accounting, and momentum, *Journal of Financial Economics* **78**(2), 311–339.

Hassell, J. M. and Jennings, R. H. (1986), Relative forecast accuracy and the timing of earnings forecast announcements, *The Accounting Review* pp. 58–75.

Healy, P. M. and Wahlen, J. M. (1999), A review of the earnings management literature and its implications for standard setting, *Accounting Horizons* **13**(4), 365–383.

Hilary, G. and Hsu, C. (2011), Endogenous overconfidence in managerial forecasts, *Journal of Accounting and Economics* **51**(3), 300–313.

Hirshleifer, D., Hou, K. and Teoh, S. H. (2012), The accrual anomaly: Risk or mispricing?, *Management Science* **58**(2), 320–335.

Hirshleifer, D., Lim, S. S. and Teoh, S. H. (2009), Driven to distraction: Extraneous events and underreaction to earnings news, *Journal of Finance* **64**(5), 2289–2325.

Hirshleifer, D., Teoh, S. H. and Yu, J. J. (2011), Short arbitrage, return asymmetry, and the accrual anomaly, *Review of Financial Studies* **24**(7), 2429–2461.

Houston, J. F., Lev, B. and Tucker, J. W. (2010), To guide or not to guide? Causes and consequences of stopping quarterly earnings guidance, *Contemporary Accounting Research* **27**(1), 143–185.

Hovakimian, A. and Hu, H. (2020), Anchoring on historical high prices and seasoned equity offerings, *Journal of Financial and Quantitative Analysis* **55**(8), 2588–2612.

Hribar, P. and Yang, H. (2016), CEO overconfidence and management forecasting, *Contemporary Accounting Research* **33**(1), 204–227.

Huang, S., Ng, J., Ranasinghe, T. and Zhang, M. (2021), Do innovative firms communicate more? Evidence from the relation between patenting and management guidance, *The Accounting Review* **96**(1), 273–297.

Hutton, A. P., Lee, L. F. and Shu, S. Z. (2012), Do managers always know better? The relative accuracy of management and analyst forecasts, *Journal of Accounting Research* **50**(5), 1217–1244.

Ikenberry, D. L. and Ramnath, S. (2002), Underreaction to self-selected news events: The case of stock splits, *Review of Financial Studies* **15**(2), 489–526.

Jenter, D. and Kanaan, F. (2015), CEO turnover and relative performance evaluation, *Journal of Finance* **70**(5), 2155–2184.

Jiang, G. J. and Zhu, K. X. (2017), Information shocks and short-term market underreaction, *Journal of Financial Economics* **124**(1), 43–64.

Johnson, T. C. (2004), Forecast dispersion and the cross section of expected returns, *Journal of Finance* **59**(5), 1957–1978.

Kahneman, D. and Tversky, A. (1979), Prospect theory: An analysis of decision under risk, *Econometrica* **47**(2), 263–292.

Leland, H. E. and Pyle, D. H. (1977), Informational asymmetries, financial structure, and financial intermediation, *Journal of Finance* **32**(2), 371–387.

Leuz, C., Nanda, D. and Wysocki, P. D. (2003), Earnings management and investor protection: an international comparison, *Journal of Financial Economics* **69**(3), 505–527.

Li, O. Z. and Zhuang, Z. (2012), Management guidance and the underpricing of seasoned equity offerings, *Contemporary Accounting Research*.

Li, W. and Lie, E. (2006), Dividend changes and catering incentives, *Journal of Financial Economics* **80**(2), 293–308.

Libby, R., Rennekamp, K. M. and Seybert, N. (2015), Regulation and the interdependent roles of managers, auditors, and directors in earnings management and accounting choice, *Accounting, Organizations and Society* **47**, 25–42.

Ljungqvist, A. and Wilhelm Jr, W. J. (2005), Does prospect theory explain IPO market behavior?, *Journal of Finance* **60**(4), 1759–1790.

Loughran, T. and Ritter, J. R. (2002), Why don't issuers get upset about leaving money on the table in IPOs?, *Review of Financial Studies* **15**(2), 413–444.

Matsumoto, D. A. (2002), Management's incentives to avoid negative earnings surprises, *The Accounting Review* **77**(3), 483–514.

McNichols, M. (1989), Evidence of informational asymmetries from management earnings forecasts and stock returns, *The Accounting Review* pp. 1–27.

Miller, M. H. and Rock, K. (1985), Dividend policy under asymmetric information, *Journal of Finance* **40**(4), 1031–1051.

Odean, T. (1998), Are investors reluctant to realize their losses?, *Journal of Finance* **53**(5), 1775–1798.

Peng, L. and Xiong, W. (2006), Investor attention, overconfidence and category learning, *Journal of Financial Economics* **80**(3), 563–602.

Penman, S. H. (1980), An empirical investigation of the voluntary disclosure of corporate earnings forecasts, *Journal of Accounting Research* pp. 132–160.

Polk, C. and Sapienza, P. (2008), The stock market and corporate investment: A test of catering theory, *Review of Financial Studies* **22**(1), 187–217.

Pritamani, M. and Singal, V. (2001), Return predictability following large price changes

and information releases, *Journal of Banking & Finance* **25**(4), 631–656.

Puffer, S. M. and Weintrop, J. B. (1991), Corporate performance and CEO turnover: The role of performance expectations, *Administrative Science Quarterly* **36**(1), 1–19.

Riley, C., Summers, B. and Duxbury, D. (2020), Capital gains overhang with a dynamic reference point, *Management Science* **66**(10), 4726–4745.

Rogers, J. L. and Stocken, P. C. (2005), Credibility of management forecasts, *The Accounting Review* **80**(4), 1233–1260.

Roychowdhury, S. (2006), Earnings management through real activities manipulation, *Journal of Accounting and Economics* **42**(3), 335–370.

Sadka, R. and Scherbina, A. (2007), Analyst disagreement, mispricing, and liquidity, *Journal of Finance* **62**(5), 2367–2403.

Savor, P. and Wilson, M. (2016), Earnings announcements and systematic risk, *Journal of Finance* **71**(1), 83–138.

Savor, P. G. (2012), Stock returns after major price shocks: The impact of information, *Journal of Financial Economics* **106**(3), 635–659.

Seybert, N. and Yang, H. I. (2012), The party's over: The role of earnings guidance in resolving sentiment-driven overvaluation, *Management Science* **58**(2), 308–319.

Shefrin, H. and Statman, M. (1985), The disposition to sell winners too early and ride losers too long: Theory and evidence, *Journal of Finance* **40**(3), 777–790.

Shleifer, A. and Vishny, R. W. (1997), The limits of arbitrage, *Journal of Finance* **52**(1), 35–55.

Sloan, R. G. (1996), Do stock prices fully reflect information in accruals and cash flows about future earnings?, *The Accounting Review* **71**(3), 289–315.

Stein, J. (1989), Overreactions in the options market, *Journal of Finance* **44**(4), 1011–1023.

Tetlock, P. C. (2010), Does public financial news resolve asymmetric information?, *Review of*

Financial Studies **23**(9), 3520–3557.

Tversky, A. and Kahneman, D. (1992), Advances in prospect theory: Cumulative representation of uncertainty, *Journal of Risk and Uncertainty* **5**(4), 297–323.

Wang, H., Yan, J. and Yu, J. (2017), Reference–dependent preferences and the risk–return trade–off, *Journal of Financial Economics* **123**(2), 395–414.

White, H. (1980), A heteroskedasticity-consistent covariance matrix estimator and a direct test for heteroskedasticity, *Econometrica* pp. 817–838.

Online Appendix for

"A Catering Theory of Earnings Guidance: Empirical Evidence and Stock Market Implications"

Nils Lohmeier[†] Hannes Mohrschladt[‡]

[†]Finance Center Münster, University of Münster, Universitätsstr. 14-16, 48143 Münster, Germany; Email: nils.lohmeier@wiwi.uni-muenster.de.

[‡]Finance Center Münster, University of Münster, Universitätsstr. 14-16, 48143 Münster, Germany; Email: hannes.mohrschladt@wiwi.uni-muenster.de.

1. Variable Definitions

Agree is a dummy variable equal to 1 if *MGUIDE* and *Guidance CAR* have the same sign.

Analyst Coverage equals the number of unique analysts making a EPS forecast for the guidance year.

Analyst Dispersion is the standard deviation of analysts' EPS estimates over the absolute mean EPS estimate (Sadka and Scherbina, 2007; Johnson, 2004).

Beta is the stock's sensitivity regarding the market excess returns estimated according to Frazzini and Pedersen (2014).

Book-to-Market is the ratio of the shareholder's book equity to market capitalization.

CEO Equity Stake is the percentage of total shares owned by the CEO as reported by Execucomp. When missing, we set it to 0.

CGO is defined as stock price change since the average investor's purchase, estimated via return and turnover dynamics.

Down is a dummy variable equal to 1 if management's EPS forecast is lower than the median analyst forecast in the 30 days before the guidance date.

Earnings Announcement CAR are abnormal announcement returns (in %) computed using a [-1, +1] event and a [-286, -31] estimation window, using the Fama and French (1992) 3-factor model around the earnings announcement date.

Female CEO is a dummy variable equal to 1 if the CEO's gender is recorded as female by Execucomp.

Flat Return is the flat return over the five years until the month's end before the guidance date.

Guidance Bias is the difference between forecasted and realized EPS, deflated by the stock price at the beginning of the fiscal year (in %). *Guidance CAR* are abnormal announcement returns (in %) computed using a [-1, +1] event and a [-286, -31] estimation window, using the Fama and French (1992) 3-factor model around the guidance date.

Horizon is the natural logarithm of the number of days between guidance date and associated period-end.

Illiquidity is the Amihud (2002) measure of stock illiquidity over the prior year.

Investor Sentiment is the consumer sentiment index from the Michigan Consumer Confidence Index. The index aggregates consumer responses in opinion surveys on financial well-being as well as economic strength.

IVOL is the stock's idiosyncratic return volatility beyond the Fama and French (1993) 3-factor model.

Loss Indicator is a dummy variable equal to 1 if the firm experienced a loss in the previous year.

MAX is the maximum daily stock return of the prior month (Bali et al., 2011).

MGUIDE is the difference between management's EPS forecast and the median analyst forecast in the 30 days before the guidance date, deflated by the stock price at the end of the prior month.

Net Equity Issuer is a dummy variable equal to 1 if the firm has raised a positive net amount of equity during the previous year.

New CEO is a dummy variable equal to 1 if the CEO has joint the company in the six months before the guidance date.

PercGain is the percentage of investors in the capital gain domain. The estimation is conducted similarly to *CGO* based on past return and turnover dynamics.

Prior Error is the one-period lag of *Guidance Bias*. We set *Prior Error* equal to 0 when the observation is missing.

Process Risk is a dummy variable equal to 1 for firms operating in the SIC industries Biotechnology (SIC 2833 to 2836), Computer Hardware (SIC 3570 to 3577), Electronics (SIC 3600 to 3674), Retailing (SIC 5200 to 5961) and Computer Software (SIC 7371 to 7379).

Operating Profitability is the ratio of ratio revenue minus costs of goods, selling, general and administrative expenses and interest expenses to book equity.

Range is the difference between the high and low-end of range forecasts by management, deflated by the stock price at the end of the prior month. We set it to 0 for point forecasts.

Relative Short Interest is the number of shorted shares relative to the number of shares outstanding at the end of the prior month.

REVISE is the difference between the median analyst forecast in the 30 days before and after the guidance date, deflated by the stock price at the end of the prior month. We exclude analyst forecasts within the 3-day guidance window.

Size is the natural logarithm of the stock's market capitalization.

Turnover is the number of shares traded in the prior month relative to relative shares outstanding.

52-*Week High* is the ratio of a stock's current stock price and its maximum stock price over the past 52 weeks (George and Hwang, 2004).

2. Robustness Tests

Table A1. Guidance Bias and the Percentage of Investors in the Gain Domain
This table reports coefficient estimates from OLS regression for the sample period from January 2002 to December 2018. The dependent variable is the difference between forecasted EPS and realized EPS, divided by the stock price at the beginning of the fiscal year. The main explanatory variable, *PercGain* is defined as percentage of investors in the gain domain. Further explanatory variables are described in Section 1 of the Online Appendix. A constant term is included but not reported. t-statistics, which are reported in parentheses, are calculated using the method by White (1980) to account for heteroskedasticity. *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively.

	Dependent Variable: *Guidance Bias*				
	(1)	(2)	(3)	(4)	(5)
PercGain	-0.8136***	-0.6829***	-0.6360***	-0.6437***	-0.6613***
	(-13.5265)	(-11.2180)	(-10.5168)	(-10.3334)	(-10.1492)
Beta		-0.0075	0.0035	0.0236	0.0125
		(-0.2598)	(0.1211)	(0.8125)	(0.2907)
Size		-0.0777***	-0.0727***	-0.0868***	0.4372***
		(-6.2695)	(-5.9616)	(-4.7415)	(6.5573)
Book-to-Market		0.4001***	0.2449***	0.2646***	0.9634***
		(4.6746)	(2.8356)	(2.8945)	(6.0963)
Horizon			0.1358***	0.1091***	0.1039***
			(4.6732)	(3.7606)	(2.9687)
Loss Indicator			-0.1047	-0.1109	-0.2547***
			(-1.4413)	(-1.4800)	(-2.6785)
Process Risk			-0.0345	-0.0332	
			(-0.6954)	(-0.6546)	
Prior Error			0.1904***	0.1886***	-0.0109
			(7.7509)	(7.4446)	(-0.4306)
Operating Profitability				0.0582	0.0808**
				(1.4199)	(1.9971)
Analyst Coverage				0.0037	0.0169***
				(1.2533)	(2.9968)
Analyst Dispersion				0.0028	-0.0139
				(0.3825)	(-1.6024)
IVOL				-0.1732	-0.2062
				(-0.7860)	(-0.8532)
Net Equity Issuer Dummy				-0.0308	-0.0812*
				(-0.8348)	(-1.8838)
Investor Sentiment				0.0078**	0.0036
				(2.2667)	(1.0006)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes	No
Firm Fixed Effects	No	No	No	No	Yes
N	9,079	8,746	8,746	8,499	8,499
Adjusted R^2	0.0508	0.0641	0.0864	0.0884	0.2171

Table A2. Guidance Bias and Percentage of Investors in the Gain Domain - Catering Incentives
This table reports coefficient estimates from OLS regression for the sample period from January 2002 to December 2018. The dependent variable is *Guidance Bias*, which is the difference between forecasted EPS and realized EPS, divided by the stock price at the beginning of the fiscal year. The main explanatory variable, *PercGain* is defined as percentage of investors in the gain domain. Further explanatory variables are described in Section 1 of the Online Appendix. A constant term is included but not reported. t-statistics, which are reported in parentheses, are calculated using the method by White (1980) to account for heteroskedasticity. *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively.

	Dependent Variable: *Guidance Bias*				
	(1)	(2)	(3)	(4)	(5)
PercGain	-0.1801	-0.4100***	-0.2549**	-0.9175***	-0.7153***
	(-1.6253)	(-5.0334)	(-2.0971)	(-7.4316)	(-9.5542)
PercGain x *Share Turnover*	-2.3526***				
	(-4.1700)				
PercGain x *Relative Short Interest*		-3.9818***			
		(-2.9943)			
PercGain x *IVOL*			-1.7889***		
			(-3.1403)		
PercGain x *Analyst Coverage*				0.0194***	
				(2.9269)	
PercGain x *Process Risk*					0.2097*
					(1.6939)
Firm Controls	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes	Yes
N	8,499	8,499	8,499	8,499	8,499
Adjusted R^2	0.0920	0.0941	0.0901	0.0893	0.0887

Table A3. Guidance Bias and Percentage of Investors in the Gain Domain - CEO Turnover
This table reports coefficient estimates from OLS regressions for the sample period from January 2002 to December 2018. The dependent variable is the difference between forecasted EPS and realized EPS, divided by the stock price at the beginning of the fiscal year. The main explanatory variable, *PercGain* is defined as percentage of investors in the gain domain. Further explanatory variables are described in Section 1 of the Online Appendix. A constant term is included but not reported. t-statistics, which are reported in parentheses, are calculated using the method by White (1980) to account for heteroskedasticity. *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively.

	Dependent Variable: *Guidance Bias*				
	(1)	(2)	(3)	(4)	(5)
PercGain	-0.7540	-0.6369	-0.6264	-0.5966	-0.5246
	(-7.5320)***	(-6.3955)***	(-6.3052)***	(-5.5958)***	(-4.6419)***
PercGain x *New CEO*	0.9453	0.9798	0.7673	0.7868	1.1461
	(2.0308)**	(2.1071)**	(1.6983)*	(1.7378)*	(2.3086)**
New CEO	-0.6958	-0.7750	-0.7287	-0.6708	-0.6948
	(-1.9810)**	(-2.1622)**	(-2.1262)**	(-1.9650)**	(-1.8693)*
Beta		0.0297	0.0394	0.0348	-0.1001
		(0.6207)	(0.8371)	(0.7333)	(-1.3796)
Size		-0.0312	-0.0314	-0.0638	0.5026
		(-1.5162)	(-1.5453)	(-2.0987)**	(4.1151)***
Book-to-Market		0.5783	0.4268	0.5023	1.4444
		(3.3441)***	(2.4116)**	(2.7446)***	(4.2776)***
Horizon			0.1240	0.0937	0.1650
			(2.5771)***	(2.0092)**	(2.7223)***
Loss Indicator			-0.2318	-0.1661	-0.2441
			(-1.7281)*	(-1.1953)	(-1.7265)*
Process Risk			-0.0922	-0.1112	
			(-1.1454)	(-1.3499)	
Prior Error			0.1496	0.1571	0.0002
			(4.0103)***	(4.0644)***	(0.0060)
Operating Profitability				0.0496	0.0769
				(0.7107)	(1.0342)
Analyst Coverage				0.0057	0.0203
				(1.3191)	(2.1395)**
Analyst Dispersion				-0.0192	-0.0346
				(-1.4186)	(-1.9903)**
IVOL				0.3033	0.2220
				(0.7931)	(0.5446)
Net Equity Issuer Dummy				-0.1281	-0.1496
				(-2.1819)**	(-2.2457)**
Investor Sentiment				0.0083	0.0055
				(1.5255)	(0.9242)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes	No
Firm Fixed Effects	No	No	No	No	Yes
N	2,794	2,758	2,758	2,710	2,710
Adjusted R^2	0.0721	0.0887	0.1033	0.1084	0.2040

Table A4. Guidance Bias and Percentage of Investors in the Gain Domain - Flat Return
This table reports coefficient estimates from OLS regressions for the sample period from January 2002 to December 2018. The dependent variable is the difference between forecasted EPS and realized EPS, divided by the stock price at the beginning of the fiscal year. The main explanatory variable, *PercGain* is defined as percentage of investors in the gain domain. Further explanatory variables are described in Section 1 of the Online Appendix. A constant term is included but not reported. t-statistics, which are reported in parentheses, are calculated using the method by White (1980) to account for heteroskedasticity. *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively.

	Dependent Variable: *Guidance Bias*				
	(1)	(2)	(3)	(4)	(5)
PercGain	-0.7667	-0.6385	-0.5923	-0.5888	-0.6486
	(-12.0711)***	(-10.1340)***	(-9.4702)***	(-9.1051)***	(-9.6168)***
Flat Return	-0.0238	-0.0138	-0.0083	-0.0096	-0.0195
	(-3.5694)***	(-2.1932)**	(-1.4007)	(-1.5629)	(-2.3317)**
Beta		-0.0082	-0.000003	0.0163	-0.0164
		(-0.2642)	(-0.0001)	(0.5258)	(-0.3612)
Size		-0.0888	-0.0836	-0.0984	0.4526
		(-6.7925)***	(-6.5121)***	(-5.0998)***	(6.3900)***
Book-to-Market		0.3618	0.2274	0.2421	0.9356
		(3.8991)***	(2.4333)**	(2.4665)**	(5.5523)***
Horizon			0.1499	0.1209	0.1253
			(4.9424)***	(4.0168)***	(3.5817)***
Loss Indicator			-0.1124	-0.1261	-0.2867
			(-1.4222)	(-1.5658)	(-2.8998)***
Process Risk			-0.0218	-0.0259	
			(-0.4142)	(-0.4835)	
Prior Error			0.1864	0.1854	-0.0116
			(7.3449)***	(7.0457)***	(-0.4469)
Operating Profitability				0.0513	0.1017
				(1.1904)	(2.3110)**
Analyst Coverage				0.0047	0.0159
				(1.5045)	(2.7265)***
Analyst Dispersion				0.0021	-0.0133
				(0.2672)	(-1.4299)
IVOL				-0.0651	-0.1248
				(-0.2708)	(-0.4927)
Net Equity Issuer Dummy				-0.0146	-0.0518
				(-0.3809)	(-1.1851)
Investor Sentiment				0.0074	0.0022
				(2.0737)**	(0.5991)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes	No
Firm Fixed Effects	No	No	No	No	Yes
N	8,130	8,127	8,127	7,893	7,893
Adjusted R^2	0.0505	0.0633	0.0852	0.0865	0.2229

Table A5. Portfolio Sort based on Percentage of Investors in the Gain Domain
This table reports cross-sectional portfolio sorts on the percentage of investors in the gain domain for the sample period from 2002 to 2018. The table presents the average *Guidance Bias*, defined as difference between forecasted EPS and realized EPS, divided by the stock price at the beginning of the fiscal year, across the portfolio quintiles as well as average cumulative excess returns associated with managerial guidance calculated for a [-1;1] event window. Abnormal returns are calculated using a 255-day estimation with at least 30 observations and a 31-day gap before the event window, controlling for the Fama and French (1992) 3-factor model. The number of observations, which are included in each quintile are listed below. t-statistics, which are reported in parentheses, refer to the difference between the high- and low-*CGO* portfolios and are based on standard errors corrected for heteroskedasticity.

	P1	P2	P3	P4	P5	5-1	t(5-1)
Guidance Bias	0.6307	0.3545	0.1302	0.0010	-0.1503	-0.7811	(-11.0521)
Guidance CAR	0.8804	0.3464	0.3053	0.1895	0.0906	-0.7898	(-2.4545)
Earnings Announcement CAR	0.1515	0.2841	0.3244	0.4060	0.8981	0.7466	(2.3947)
Observations	925	1,568	1,929	2,247	2,410		

Table A6. Guidance Returns and Percentage of Investors in the Gain Domain
This table reports coefficient estimates from OLS regression for the sample period from January 2002 to December 2018. The dependent variable are cumulative announcement excess returns around the [-1;+1] event window of a fiscal year's initial management guidance. Abnormal returns are calculated using a 255-day estimation with at least 30 observations and a 31-day gap before the event window, controlling for the Fama and French (1992) 3-factor model. The main explanatory variable, *PercGain* is defined as percentage of investors in the gain domain. Further explanatory variables are described in Section 1 of the Online Appendix. A constant term is included but not reported. t-statistics, which are reported in parentheses, are calculated using the method by White (1980) to account for heteroskedasticity. *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively.

	Dependent Variable: *Guidance CAR*				
	(1)	(2)	(3)	(4)	(5)
PercGain	-0.5643	-0.6154	-0.7015	-0.6878	-0.6345
	(-1.9039)*	(-2.0134)**	(-2.2915)**	(-2.1411)**	(-1.9589)*
Beta		-0.00002	0.0637	0.0322	0.0382
		(-0.0001)	(0.4456)	(0.2153)	(0.2545)
Size		-0.0191	-0.0613	-0.1083	-0.1173
		(-0.3196)	(-1.0146)	(-1.1337)	(-1.1831)
Book-to-Market		-0.0289	0.2547	0.1441	0.1439
		(-0.0772)	(0.6618)	(0.3549)	(0.3539)
Horizon			0.9546	0.9323	0.9326
			(4.6737)***	(4.4273)***	(4.4287)***
Loss Indicator			-0.6385	-0.6431	-0.6380
			(-1.7911)*	(-1.7328)*	(-1.7188)*
Process Risk			-0.2519	-0.2916	-0.2899
			(-0.8428)	(-0.9467)	(-0.9400)
Prior Error			-0.2006	-0.1952	-0.1952
			(-2.5932)***	(-2.3869)**	(-2.3850)**
Operating Profitability			0.2469	0.2591	0.2574
			(1.1531)	(1.1860)	(1.1783)
Analyst Coverage				0.0153	0.0146
				(0.9251)	(0.8835)
Analyst Dispersion				0.0188	0.0193
				(0.7691)	(0.7900)
IVOL				0.6777	1.4499
				(0.6530)	(1.0172)
Net Equity Issuer Dummy				-0.0373	-0.0362
				(-0.1979)	(-0.1921)
Investor Sentiment				0.0314	0.0302
				(1.7850)*	(1.7053)*
Illiquidity					-3.3345
					(-0.4317)
MAX					-0.0441
					(-0.7281)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes	Yes
N	9,079	8,746	8,745	8,499	8,499
Adjusted R^2	0.0026	0.0023	0.0068	0.0062	0.0061

Table A7. Earnings Announcement Returns and Percentage of Investors in the Gain Domain
This table reports coefficient estimates from OLS regression for the sample period from January 2002 to December 2018. The dependent variable are cumulative announcement excess returns around the [-1;+1] event window of a fiscal year's earnings announcement. Abnormal returns are calculated using a 255-day estimation with at least 30 observations and a 31-day gap before the event window, controlling for the Fama and French (1992) 3-factor model. The main explanatory variable, *PercGain* is defined as percentage of investors in the gain domain. Further explanatory variables are described in Section 1 of the Online Appendix. All explanatory variables are calculated as of the month before the initial management guidance. A constant term is included but not reported. t-statistics, which are reported in parentheses, are calculated using the method by White (1980) to account for heteroskedasticity. *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively.

	Dependent Variable: *Earnings Announcement CAR*				
	(1)	(2)	(3)	(4)	(5)
PercGain	0.9345	0.8822	0.8896	1.0702	1.0132
	(3.1616)***	(2.9233)***	(2.9346)***	(3.3680)***	(3.1664)***
Beta		0.2590	0.3106	0.2285	0.2136
		(1.7959)*	(2.1324)**	(1.5012)	(1.4012)
Size		0.0194	0.0012	0.0797	0.0712
		(0.3215)	(0.0203)	(0.8143)	(0.7097)
Book-to-Market		-0.7106	-0.6728	-0.6982	-0.6977
		(-1.9874)**	(-1.8260)*	(-1.8158)*	(-1.8137)*
Horizon			0.0546	0.0339	0.0383
			(0.2984)	(0.1813)	(0.2045)
Loss Indicator			-0.5927	-0.5659	-0.5672
			(-1.6818)*	(-1.5609)	(-1.5639)
Process Risk			0.2660	0.3026	0.3043
			(0.9048)	(1.0029)	(1.0083)
Prior Error			-0.0072	-0.0029	-0.0023
			(-0.0900)	(-0.0348)	(-0.0276)
Operating Profitability			0.0632	0.0523	0.0521
			(0.2912)	(0.2370)	(0.2362)
Analyst Coverage				-0.0174	-0.0164
				(-1.0326)	(-0.9698)
Analyst Dispersion				-0.0023	-0.0027
				(-0.0914)	(-0.1063)
IVOL				1.3676	0.2301
				(1.2449)	(0.1457)
Net Equity Issuer Dummy				0.1468	0.1422
				(0.7590)	(0.7347)
Investor Sentiment				-0.0197	-0.0173
				(-1.0949)	(-0.9598)
Illiquidity					-0.7972
					(-0.1384)
MAX					0.0725
					(1.1371)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes	Yes
N	9,079	8,746	8,745	8,499	8,499
Adjusted R^2	0.0050	0.0062	0.0062	0.0060	0.0060

Table A8. Guidance Bias and the 52-Week High
This table reports coefficient estimates from OLS regression for the sample period from January 2002 to December 2018. The dependent variable is *Guidance Bias*, which is the difference between forecasted EPS and realized EPS, divided by the stock price at the beginning of the fiscal year. The main explanatory variable, the 52-*Week High*, is defined as ratio of the stock price at the end of the prior month and the maximum stock price over the past 52 weeks. Further explanatory variables are described in Section 1 of the Online Appendix. A constant term is included but not reported. t-statistics, which are reported in parentheses, are calculated using the method by White (1980) to account for heteroskedasticity. *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively.

	Dependent Variable: *Guidance Bias*				
	(1)	(2)	(3)	(4)	(5)
52-*Week High*	-2.3358	-2.0924	-1.9123	-2.0452	-2.2667
	(-13.6790)***	(-11.4829)***	(-10.6296)***	(-10.5477)***	(-11.0818)***
Beta		-0.0504	-0.0347	-0.0041	-0.0174
		(-1.7344)*	(-1.1995)	(-0.1415)	(-0.4072)
Size		-0.0500	-0.0481	-0.0547	0.5169
		(-3.9820)***	(-3.8912)***	(-2.9657)***	(7.6941)***
Book-to-Market		0.2894	0.1553	0.1515	0.7219
		(3.4355)***	(1.8299)*	(1.6953)*	(4.5966)***
Horizon			0.1344	0.1043	0.0955
			(4.6252)***	(3.6033)***	(2.7615)***
Loss Indicator			-0.1169	-0.1135	-0.2291
			(-1.6172)	(-1.5234)	(-2.4309)**
Process Risk			-0.0598	-0.0394	
			(-1.2014)	(-0.7782)	
Prior Error			0.1793	0.1775	-0.0187
			(7.3509)***	(7.0271)***	(-0.7401)
Operating Profitability				0.0409	0.0610
				(1.0214)	(1.5437)
Analyst Coverage				0.0001	0.0100
				(0.0202)	(1.7726)*
Analyst Dispersion				0.0018	-0.0130
				(0.2526)	(-1.4897)
IVOL				-0.5530	-0.5508
				(-2.4753)**	(-2.2714)**
Net Equity Issuer Dummy				-0.0297	-0.0847
				(-0.8075)	(-1.9835)**
Investor Sentiment				0.0104	0.0069
				(3.0145)***	(1.9202)*
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes	No
Firm Fixed Effects	No	No	No	No	Yes
N	9,079	8,746	8,746	8,499	8,499
Adjusted R^2	0.0663	0.0740	0.0939	0.0960	0.2260

Table A9. Guidance Bias and the 52-Week High - Catering Incentives
This table reports coefficient estimates from OLS regression for the sample period from January 2002 to December 2018. The dependent variable is *Guidance Bias*, which is the difference between forecasted EPS and realized EPS, divided by the stock price at the beginning of the fiscal year. The main explanatory variable, the 52-*Week High*, is defined as ratio of the stock price at the end of the prior month and the maximum stock price over the past 52 weeks. Further explanatory variables are described in Section 1 of the Online Appendix. A constant term is included but not reported. t-statistics, which are reported in parentheses, are calculated using the method by White (1980) to account for heteroskedasticity. *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively.

	Dependent Variable: *Guidance Bias*				
	(1)	(2)	(3)	(4)	(5)
52-*Week High*	-1.4702***	-1.6772***	-1.7226***	-2.9271***	-2.3387***
	(-4.8273)	(-6.9502)	(-5.0243)	(-8.8428)	(-9.9936)
52-*Week High* x *Share Turnover*	-2.3561**				
	(-2.0010)				
52-*Week High* x *Relative Short Interest*		-4.5204			
		(-1.5191)			
52-*Week High* x *IVOL*			-1.1629		
			(-1.0164)		
52-*Week High* x *Analyst Coverage*				0.0658***	
				(3.7149)	
52-*Week High* x *Process Risk*					0.7962**
					(2.4137)
Firm Controls	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes	Yes
N	8,499	8,499	8,499	8,499	8,499
Adjusted R^2	0.0971	0.1000	0.0961	0.0982	0.0971

Table A10. Portfolio Sort based on the 52-Week High
This table reports cross-sectional portfolio sorts on the distance to the stock's 52-week high for the sample period from 2002 to 2018. The table presents the average *Guidance Bias*, defined as difference between forecasted EPS and realized EPS, divided by the stock price at the beginning of the fiscal year, across the portfolio quintiles as well as average cumulative excess returns associated with managerial guidance calculated for a [-1;1] event window. Abnormal returns are calculated using a 255-day estimation with at least 30 observations and a 31-day gap before the event window, controlling for the Fama and French (1992) 3-factor model. The number of observations, which are included in each quintile are listed below. t-statistics, which are reported in parentheses, refer to the difference between the high- and low-*CGO* portfolios and are based on standard errors corrected for heteroskedasticity.

	P1	P2	P3	P4	P5	5-1	t(5-1)
Guidance Bias	1.0433	0.4768	0.1549	-0.0204	-0.1843	-1.2276	(-10.0647)
Guidance CAR	1.0652	0.2572	0.5567	0.1627	0.04152	-1.0227	(-1.9154)
Earnings Announcement CAR	0.1137	0.05540	0.3333	0.5879	0.7967	0.6831	(1.3494)
Observations	472	1,485	2,142	2,536	2,444		

Table A11. Guidance Returns and the 52-Week High
This table reports coefficient estimates from OLS regression for the sample period from January 2002 to December 2018. The dependent variable are cumulative announcement excess returns around the [-1;+1] event window of a fiscal year's initial management guidance. Abnormal returns are calculated using a 255-day estimation with at least 30 observations and a 31-day gap before the event window, controlling for the Fama and French (1992) 3-factor model. The main explanatory variable, the 52-*Week High*, is defined as ratio of the stock price at the end of the prior month and the maximum stock price over the past 52 weeks. Further explanatory variables are described in Section 1 of the Online Appendix. A constant term is included but not reported. t-statistics, which are reported in parentheses, are calculated using the method by White (1980) to account for heteroskedasticity. *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively.

	Dependent Variable: *Guidance CAR*				
	(1)	(2)	(3)	(4)	(5)
52-*Week High*	-1.5099	-1.8936	-2.2407	-2.4561	-2.3463
	(-1.9213)*	(-2.2522)**	(-2.6547)***	(-2.6451)***	(-2.4821)**
Beta		-0.0388	0.0180	-0.0009	0.0060
		(-0.2718)	(0.1250)	(-0.0057)	(0.0402)
Size		0.0060	-0.0317	-0.0674	-0.0761
		(0.0999)	(-0.5212)	(-0.6998)	(-0.7595)
Book-to-Market		-0.1296	0.1374	-0.0081	-0.0045
		(-0.3490)	(0.3604)	(-0.0201)	(-0.0112)
Horizon			0.9538	0.9278	0.9283
			(4.6687)***	(4.4017)***	(4.4041)***
Loss Indicator			-0.6555	-0.6450	-0.6404
			(-1.8387)*	(-1.7380)*	(-1.7254)*
Process Risk			-0.2839	-0.2985	-0.2967
			(-0.9500)	(-0.9689)	(-0.9618)
Prior Error			-0.2140	-0.2095	-0.2091
			(-2.7509)***	(-2.5481)**	(-2.5405)**
Operating Profitability			0.2313	0.2340	0.2329
			(1.0824)	(1.0734)	(1.0686)
Analyst Coverage				0.0104	0.0099
				(0.6245)	(0.5962)
Analyst Dispersion				0.0176	0.0182
				(0.7217)	(0.7412)
IVOL				0.1789	0.8678
				(0.1684)	(0.5924)
Net Equity Issuer Dummy				-0.0355	-0.0345
				(-0.1887)	(-0.1832)
Investor Sentiment				0.0352	0.0341
				(1.9896)**	(1.9116)*
Illiquidity					-2.7691
					(-0.3569)
MAX					-0.0387
					(-0.6366)
Constant	1.6451	1.7405	-2.1299	-4.3868	-4.1517
	(1.2227)	(0.9222)	(-0.9801)	(-1.4255)	(-1.3335)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes	Yes
N	9,079	8,746	8,745	8,499	8,499
Adjusted R^2	0.0028	0.0027	0.0074	0.0068	0.0067

Table A12. Earnings Announcement Returns and the 52-Week High
This table reports coefficient estimates from OLS regression for the sample period from January 2002 to December 2018. The dependent variable are cumulative announcement excess returns around the [-1;+1] event window of a fiscal year's earnings announcement. Abnormal returns are calculated using a 255-day estimation with at least 30 observations and a 31-day gap before the event window, controlling for the Fama and French (1992) 3-factor model. The main explanatory variable, the 52-*Week High*, is defined as ratio of the stock price at the end of the prior month and the maximum stock price over the past 52 weeks. Further explanatory variables are described in Section 1 of the Online Appendix. All explanatory are calculated as of the month before the initial management guidance. A constant term is included but not reported. t-statistics, which are reported in parentheses, are calculated using the method by White (1980) to account for heteroskedasticity. *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively.

	Dependent Variable: *Earnings Announcement CAR*				
	(1)	(2)	(3)	(4)	(5)
52-*Week High*	2.1273	1.8809	1.8985	2.5787	2.4458
	(2.7976)***	(2.2663)**	(2.2658)**	(2.8387)***	(2.6727)***
Beta		0.2933	0.3444	0.2639	0.2465
		(2.0141)**	(2.3437)**	(1.7276)*	(1.6104)
Size		-0.0027	-0.0208	0.0462	0.0388
		(-0.0446)	(-0.3342)	(0.4671)	(0.3835)
Book-to-Market		-0.6648	-0.6317	-0.6054	-0.6089
		(-1.8508)*	(-1.7101)*	(-1.5669)	(-1.5750)
Horizon			0.0612	0.0436	0.0477
			(0.3340)	(0.2332)	(0.2544)
Loss Indicator			-0.5804	-0.5590	-0.5607
			(-1.6443)	(-1.5407)	(-1.5449)
Process Risk			0.2865	0.3123	0.3136
			(0.9727)	(1.0342)	(1.0382)
Prior Error			-0.0001	0.0080	0.0081
			(-0.0009)	(0.0962)	(0.0973)
Operating Profitability			0.0626	0.0610	0.0605
			(0.2882)	(0.2763)	(0.2744)
Analyst Coverage				-0.0146	-0.0136
				(-0.8590)	(-0.8015)
Analyst Dispersion				-0.0013	-0.0017
				(-0.0497)	(-0.0673)
IVOL				1.7165	0.5126
				(1.5279)	(0.3193)
Net Equity Issuer Dummy				0.1467	0.1419
				(0.7586)	(0.7331)
Investor Sentiment				-0.0212	-0.0187
				(-1.1753)	(-1.0320)
Illiquidity					-0.8492
					(-0.1472)
MAX					0.0757
					(1.1891)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes	Yes
N	9,079	8,746	8,745	8,499	8,499
Adjusted R^2	0.0051	0.0060	0.0060	0.0059	0.0059

Table A13. Guidance Bias and Capital Gains Overhang - Quarterly Sample
This table reports coefficient estimates from OLS regression for the sample period from January 2002 to December 2018. The dependent variable is *Guidance Bias*, which is the difference between forecasted EPS and realized EPS, divided by the stock price at the beginning of the fiscal year. Our main explanatory variable, the capital gains measure *CGO*, is defined as stock price change since the average investor's purchase. Further explanatory variables are described in Section 1 of the Online Appendix. A constant term is included but not reported. t-statistics, which are reported in parentheses, are calculated using the method by White (1980) to account for heteroskedasticity. *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively.

	Dependent Variable: *Guidance Bias*				
	(1)	(2)	(3)	(4)	(5)
CGO	-0.2109***	-0.2702***	-0.1752***	-0.1887***	-0.2693***
	(-11.1727)	(-13.8574)	(-9.0658)	(-9.1787)	(-12.2335)
Beta		-0.0275***	-0.0174***	-0.0168***	-0.0169***
		(-7.1892)	(-4.6804)	(-4.3943)	(-3.1706)
Size		0.0026	-0.0002	-0.0031	0.0846***
		(1.4060)	(-0.1214)	(-1.1449)	(9.8755)
Book-to-Market		-0.0412***	-0.0405***	-0.0473***	0.0103
		(-3.3792)	(-3.4473)	(-3.8142)	(0.4722)
Horizon			0.0530***	0.0528***	0.0605***
			(9.1044)	(8.9530)	(8.5484)
Loss Indicator			-0.0317***	-0.0369***	-0.0151
			(-3.6983)	(-4.1829)	(-1.4220)
Process Risk			-0.0106*	-0.0145**	
			(-1.6952)	(-2.2872)	
Prior Error			0.3202***	0.3172***	0.1225***
			(22.4208)	(22.0424)	(8.4896)
Operating Profitability				-0.0340***	0.0214*
				(-3.8023)	(1.9551)
Analyst Coverage				0.0008**	0.0011
				(2.1165)	(1.5536)
Analyst Dispersion				-0.0009	-0.0003
				(-1.5648)	(-0.3963)
IVOL				-0.0123	-0.0238
				(-0.4209)	(-0.7655)
Net Equity Issuer Dummy				0.0044	-0.0085
				(0.8553)	(-1.5368)
Investor Sentiment				0.0012**	0.0012**
				(2.2068)	(2.1892)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes	No
Firm Fixed Effects	No	No	No	No	Yes
N	19,470	18,776	18,776	18,459	18,459
Adjusted R^2	0.0384	0.0449	0.1289	0.1316	0.2451

Table A14. Guidance Bias and Capital Gains Overhang - Catering Incentives in the Quarterly Sample

This table reports coefficient estimates from OLS regression for the sample period from January 2002 to December 2018. The dependent variable is *Guidance Bias*, which is the difference between forecasted EPS and realized EPS, divided by the stock price at the beginning of the fiscal year. Our main explanatory variable, the capital gains measure *CGO*, is defined as stock price change since the average investor's purchase. Further explanatory variables are described in Section 1 of the Online Appendix. A constant term is included but not reported. t-statistics, which are reported in parentheses, are calculated using the method by White (1980) to account for heteroskedasticity. *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively.

	Dependent Variable: *Guidance Bias*				
	(1)	(2)	(3)	(4)	(5)
CGO	-0.0838**	-0.1587***	-0.0658*	-0.2438***	-0.2050***
	(-2.5545)	(-5.8173)	(-1.7724)	(-7.0681)	(-8.1295)
CGO x *Share Turnover*	-0.6074***				
	(-3.9239)				
CGO x *Relative Short Interest*		-0.6933			
		(-1.5187)			
CGO x *IVOL*			-0.4563***		
			(-3.3831)		
CGO x *Analyst Coverage*				0.0044**	
				(2.3868)	
CGO x *Process Risk*					0.0407
					(1.1228)
Firm Controls	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes	Yes
N	18,459	18,459	18,459	18,459	18,459
Adjusted R^2	0.1335	0.1317	0.1323	0.1318	0.1316

Table A15. Guidance Returns and Capital Gains Overhang - Quarterly Sample
This table reports coefficient estimates from OLS regression for the sample period from January 2002 to December 2018. The dependent variable are cumulative announcement excess returns around the [-1;+1] event window of a fiscal year's initial management guidance. Abnormal returns are calculated using a 255-day estimation with at least 30 observations and a 31-day gap before the event window, controlling for the Fama and French (1992) 3-factor model. Our main explanatory variable, the capital gains measure *CGO*, is defined as stock price change since the average investor's purchase. Further explanatory variables are described in Section 1 of the Online Appendix. A constant term is included but not reported. t-statistics, which are reported in parentheses, are calculated using the method by White (1980) to account for heteroskedasticity. *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively.

	Dependent Variable: *Guidance CAR*				
	(1)	(2)	(3)	(4)	(5)
CGO	-0.3241***	-0.2885**	-0.3369***	-0.4335***	-0.4806***
	(-2.7686)	(-2.3632)	(-2.7113)	(-3.2525)	(-3.5754)
Beta		-0.0053	-0.0116	-0.0174	-0.0155
		(-0.2354)	(-0.5088)	(-0.7469)	(-0.6638)
Size		-0.0243**	-0.0238**	-0.0248	-0.0134
		(-2.2420)	(-2.1740)	(-1.4931)	(-0.7873)
Book-to-Market		0.0248	0.0270	-0.0043	-0.0129
		(0.3691)	(0.3886)	(-0.0600)	(-0.1779)
Horizon			0.0410	0.0382	0.0394
			(1.2077)	(1.1204)	(1.1556)
Loss Indicator			0.0268	0.0007	0.0003
			(0.5210)	(0.0137)	(0.0048)
Process Risk			0.0015	-0.0060	-0.0034
			(0.0369)	(-0.1452)	(-0.0810)
Prior Error			-0.1433**	-0.1563***	-0.1571***
			(-2.5572)	(-2.7570)	(-2.7692)
Operating Profitability			-0.0044	-0.0077	-0.0061
			(-0.0756)	(-0.1302)	(-0.1029)
Analyst Coverage				0.0006	0.0005
				(0.2397)	(0.1929)
Analyst Dispersion				0.0031	0.0030
				(1.2203)	(1.1742)
IVOL				-0.0391	-0.2400
				(-0.2183)	(-1.0070)
Net Equity Issuer Dummy				-0.0191	-0.0184
				(-0.6277)	(-0.6066)
Investor Sentiment				0.0117***	0.0121***
				(3.5481)	(3.6424)
Illiquidity					2.8912*
					(1.8345)
MAX					0.0099
					(0.9305)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes	Yes
N	19,470	18,776	18,776	18,459	18,459
Adjusted R^2	0.0003	0.0006	0.0009	0.0018	0.0021

Table A16. Guidance Bias and Capital Gains Overhang - Execucomp Controls
This table reports coefficient estimates from OLS regression for the sample period from January 2002 to December 2018. The dependent variable is *Guidance Bias*, which is the difference between forecasted EPS and realized EPS, divided by the stock price at the beginning of the fiscal year. Our main explanatory variable, the capital gains measure *CGO*, is defined as stock price change since the average investor's purchase. Further explanatory variables are described in Section 1 of the Online Appendix. A constant term is included but not reported. t-statistics, which are reported in parentheses, are calculated using the method by White (1980) to account for heteroskedasticity. *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively.

	Dependent Variable: *Guidance Bias*				
	(1)	(2)	(3)	(4)	(5)
CGO	-2.0134***	-1.9777***	-1.8361***	-1.8659***	-1.9951***
	(-10.6785)	(-10.4362)	(-9.5715)	(-9.2261)	(-9.4463)
CEO Equity Stake	-0.0032	-0.0041	-0.0040	-0.0038	-0.0047
	(-0.8568)	(-1.0495)	(-0.9932)	(-0.9503)	(-0.5119)
Female CEO	-0.3742***	-0.3776***	-0.3548***	-0.3528***	-0.4713**
	(-4.4118)	(-4.3220)	(-4.0480)	(-3.9912)	(-2.4514)
Beta		-0.0166	-0.0003	0.0004	-0.0223
		(-0.3921)	(-0.0082)	(0.0093)	(-0.4041)
Size		-0.0339**	-0.0316**	-0.0528**	0.3355***
		(-2.1893)	(-2.0453)	(-2.1528)	(3.8973)
Book-to-Market		0.0182	-0.0544	-0.0212	0.5713***
		(0.1539)	(-0.4492)	(-0.1668)	(2.8459)
Horizon			0.0266	0.0138	0.0452
			(0.7117)	(0.3661)	(1.0507)
Loss Indicator			-0.1939*	-0.1885	-0.2589*
			(-1.6566)	(-1.5981)	(-1.9568)
Process Risk			-0.0806	-0.0834	
			(-1.2619)	(-1.3212)	
Prior Error			0.1234***	0.1254***	-0.0607*
			(3.4243)	(3.3554)	(-1.6663)
Operating Profitability				0.0035	0.0599
				(0.0677)	(1.0253)
Analyst Coverage				0.0037	0.0168**
				(0.8793)	(2.4085)
Analyst Dispersion				0.0008	-0.0020
				(0.0670)	(-0.1520)
IVOL				-0.0818	0.0731
				(-0.2827)	(0.2385)
Net Equity Issuer Dummy				-0.0621	-0.0727
				(-1.2540)	(-1.2552)
Investor Sentiment				0.0093**	0.0070
				(2.1957)	(1.6024)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes	No
Firm Fixed Effects	No	No	No	No	Yes
N	4,495	4,395	4,395	4,347	4,347
Adjusted R^2	0.0700	0.0724	0.0832	0.0863	0.2010

Table A17. Guidance Bias and Capital Gains Overhang - Panel Regressions
This table reports coefficient estimates from OLS regression for the sample period from January 2002 to December 2018. The dependent variable is *Guidance Bias*, which is the difference between forecasted EPS and realized EPS, divided by the stock price at the beginning of the fiscal year. Our main explanatory variable, the capital gains measure *CGO*, is defined as stock price change since the average investor's purchase. Further explanatory variables are described in Section 1 of the Online Appendix. A constant term is included but not reported. t-statistics, which are reported in parentheses, are calculated using the method by White (1980) to account for heteroskedasticity. *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively.

	Dependent Variable: *Guidance Bias*			
	(1)	(2)	(3)	(4)
CGO	-2.1010***	-2.2538***	-2.2560***	-2.1542***
	(-14.7337)	(-15.2184)	(-15.1245)	(-14.4094)
Beta		-0.0051	0.0066	0.0197
		(-0.1161)	(0.1470)	(0.4348)
Size		0.4358***	0.4104***	0.3833***
		(10.3603)	(9.6522)	(7.3826)
Book-to-Market		0.5168***	0.5829***	0.5897***
		(3.5424)	(3.8055)	(3.7726)
Horizon			0.1319***	0.0981***
			(3.5884)	(2.8004)
Loss Indicator			-0.2906***	-0.2918***
			(-3.1450)	(-3.0971)
Prior Error			-0.0436**	-0.0285
			(-2.0807)	(-1.2766)
Operating Profitability				0.0249
				(0.5634)
Analyst Coverage				0.0025
				(0.4374)
Analyst Dispersion				-0.0127
				(-1.3518)
IVOL				0.0499
				(0.2241)
Net Equity Issuer Dummy				-0.0733*
				(-1.7685)
Investor Sentiment				0.0001
				(0.0597)
Year-Fixed Effects	Yes	Yes	Yes	Yes
Firm-Fixed Effects	Yes	Yes	Yes	Yes
N	9,079	8,746	8,746	8,499

Table A18. Guidance Bias and Capital Gains Overhang - Firm-Clustered Standard Errors
This table reports coefficient estimates from OLS regression for the sample period from January 2002 to December 2018. The dependent variable is *Guidance Bias*, which is the difference between forecasted EPS and realized EPS, divided by the stock price at the beginning of the fiscal year. Our main explanatory variable, the capital gains measure *CGO*, is defined as stock price change since the average investor's purchase. Further explanatory variables are described in Section 1 of the Online Appendix. A constant term is included but not reported. t-statistics, which are reported in parentheses, are calculated using the method by White (1980) to account for heteroskedasticity. *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively.

	Dependent Variable: *Guidance Bias*				
	(1)	(2)	(3)	(4)	
CGO	-1.9108***	-1.7052***	-1.5470***	-1.6917***	-1.9984***
	(-16.1201)	(-13.5600)	(-12.3547)	(-12.7169)	(-13.7547)
Beta		-0.0133	-0.0015	0.0194	0.0072
		(-0.5308)	(-0.0583)	(0.7552)	(0.1952)
Size		-0.0862***	-0.0809***	-0.0778***	0.4952***
		(-7.0041)	(-6.5883)	(-4.0731)	(8.6130)
Book-to-Market		0.3123***	0.1757***	0.1795***	0.8177***
		(4.9027)	(2.7486)	(2.6955)	(7.2561)
Horizon			0.1397***	0.1119***	0.1095**
			(3.7528)	(2.9791)	(2.5709)
Loss Indicator			-0.1060*	-0.1150*	-0.2377***
			(-1.8120)	(-1.9122)	(-3.3806)
Process Risk			-0.0462	-0.0426	-0.0639
			(-0.8499)	(-0.7787)	(-0.0676)
Prior Error			0.1824***	0.1796***	-0.0206
			(13.5409)	(13.0419)	(-1.4113)
Operating Profitability				0.0423	0.0641
				(0.9726)	(1.2487)
Analyst Coverage				0.0006	0.0099*
				(0.1811)	(1.7513)
Analyst Dispersion				0.0032	-0.0116**
				(0.8224)	(-2.4778)
IVOL				-0.1154	-0.1681
				(-0.6643)	(-0.8677)
Net Equity Issuer Dummy				-0.0248	-0.0852**
				(-0.6921)	(-2.1464)
Investor Sentiment				0.0100***	0.0066*
				(2.9675)	(1.9171)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes	No
Firm Fixed Effects	No	No	No	No	Yes
N	9,079	8,746	8,746	8,499	8,499
Adjusted R^2	0.0563	0.0694	0.0899	0.0935	0.2255

Table A19. Guidance Bias and Capital Gains Overhang - Sentiment-Dependence
This table reports coefficient estimates from OLS regression for the sample period from January 2002 to December 2018. The dependent variable is *Guidance Bias*, which is the difference between forecasted EPS and realized EPS, divided by the stock price at the beginning of the fiscal year. Our main explanatory variable, the capital gains measure *CGO*, is defined as stock price change since the average investor's purchase. Further explanatory variables are described in Section 1 of the Online Appendix. A constant term is included but not reported. t-statistics, which are reported in parentheses, are calculated using the method by White (1980) to account for heteroskedasticity. *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively.

	Dependent Variable: *Guidance Bias*				
	(1)	(2)	(3)	(4)	(5)
CGO	-0.9255***	-0.7534***	-0.6740**	-0.9029***	-1.0807***
	(-3.3217)	(-2.6298)	(-2.4199)	(-3.2490)	(-3.8136)
CGO x *Investor Sentiment Decile*	-0.5189***	-0.5012***	-0.4579***	-0.3788***	-0.4382***
	(-3.9663)	(-3.7572)	(-3.5721)	(-2.8990)	(-3.5723)
Investor Sentiment Decile	0.0162	0.0247	0.0076	0.0071	0.0173
	(0.7702)	(1.1532)	(0.3517)	(0.3242)	(0.7980)
Beta		-0.0123	-0.0010	0.0202	0.0055
		(-0.4266)	(-0.0347)	(0.6983)	(0.1298)
Size		-0.0844***	-0.0784***	-0.0748***	0.4945***
		(-6.8077)	(-6.4644)	(-4.0733)	(7.3375)
Book-to-Market		0.3200***	0.1817**	0.1809**	0.8327***
		(3.7383)	(2.1061)	(1.9765)	(5.2701)
Horizon			0.1600***	0.1407***	0.1286***
			(5.0822)	(4.5370)	(3.5233)
Loss Indicator			-0.0934	-0.1047	-0.2264**
			(-1.2848)	(-1.3964)	(-2.3825)
Process Risk			-0.0567	-0.0527	
			(-1.1441)	(-1.0445)	
Prior Error			0.1802***	0.1792***	-0.0218
			(7.3105)	(7.0558)	(-0.8680)
Operating Profitability				0.0433	0.0662*
				(1.0636)	(1.6701)
Analyst Coverage				0.0004	0.0099*
				(0.1247)	(1.7542)
Analyst Dispersion				0.0032	-0.0121
				(0.4476)	(-1.3929)
IVOL				-0.1217	-0.1926
				(-0.5620)	(-0.8197)
Net Equity Issuer Dummy				-0.0133	-0.0742*
				(-0.3615)	(-1.7299)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes	No
Firm Fixed Effects	No	No	No	No	Yes
N	9,079	8,746	8,746	8,499	8,499
Adjusted R^2	0.0593	0.0719	0.0923	0.0943	0.2272

Table A20. Portfolio Sort based on Capital Gains Overhang - In-Sample
This table reports in-sample portfolio sorts on CGO for the sample period from 2002 to 2018. The table presents the average *Guidance Bias*, defined as difference between forecasted EPS and realized EPS, divided by the stock price at the beginning of the fiscal year, across the portfolio quintiles as well as average cumulative excess returns associated with managerial guidance calculated for a [-1;1] event window. Abnormal returns are calculated using a 255-day estimation with at least 30 observations and a 31-day gap before the event window, controlling for the Fama and French (1992) 3-factor model. The number of observations, which are included in each quintile are listed below. t-statistics, which are reported in parentheses, refer to the difference between the high- and low-*CGO* portfolios and are based on standard errors corrected for heteroskedasticity.

	Low-*CGO*	P2	P3	P4	High-*CGO*	5-1	t(5-1)
Guidance Bias	0.6339	0.2538	0.0050	-0.1053	-0.2201	-0.8541	(-15.0350)
Guidance CAR	0.5081	0.4922	0.2924	0.0705	0.0636	-0.4445	(-1.6450)
Earnings Announcement CAR	-0.1100	0.4101	0.4518	0.6586	0.9510	1.0610	(3.9864)
Observations	1,816	1,816	1,815	1,816	1,816		

Table A21. Guidance Bias and Capital Gains Overhang - Unwinsorized Variables
This table reports coefficient estimates from OLS regression for the sample period from January 2002 to December 2018. The dependent variable is *Guidance Bias*, which is the difference between forecasted EPS and realized EPS, divided by the stock price at the beginning of the fiscal year. Our main explanatory variable, the capital gains measure *CGO*, is defined as stock price change since the average investor's purchase. Further explanatory variables are described in Section 1 of the Online Appendix. A constant term is included but not reported. t-statistics, which are reported in parentheses, are calculated using the method by White (1980) to account for heteroskedasticity. *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively.

	Dependent Variable: *Guidance Bias*				
	(1)	(2)	(3)	(4)	(5)
CGO	-2.2306	-1.9537	-1.7113	-1.9226	-1.9663
	(-8.3601)***	(-7.1890)***	(-6.6780)***	(-6.9839)***	(-7.6859)***
Beta		0.0066	0.0180	0.0464	-0.0196
		(0.1535)	(0.4216)	(1.1211)	(-0.2441)
Size		-0.1310	-0.1174	-0.1047	0.5443
		(-5.4767)***	(-5.2233)***	(-3.9685)***	(3.0518)***
Book-to-Market		0.3483	0.2370	0.2382	1.1942
		(1.8914)*	(1.4996)	(1.3825)	(3.1330)***
Horizon			0.1468	0.1190	0.1099
			(3.1114)***	(2.5040)**	(2.4078)**
Loss Indicator			-0.1316	-0.1563	-0.3012
			(-1.2952)	(-1.4794)	(-1.9180)*
Process Risk			-0.0708	-0.0757	
			(-0.8813)	(-0.9166)	
Prior Error			0.2657	0.2633	-0.0140
			(5.5462)***	(5.3240)***	(-0.3308)
Operating Profitability				-0.000001	-0.000005
				(-0.0647)	(-0.1420)
Analyst Coverage				0.0002	0.0115
				(0.0393)	(1.3907)
Analyst Dispersion				0.0012	-0.0005
				(0.7426)	(-0.3379)
IVOL				0.0733	0.0548
				(0.2231)	(0.1589)
Net Equity Issuer Dummy				-0.0544	-0.0898
				(-0.8691)	(-1.2603)
Investor Sentiment				0.0112	0.0078
				(2.2405)**	(1.5805)
Constant	0.1563	2.9431	1.9195	0.7617	-13.3228
	(0.7577)	(5.0425)***	(3.4743)***	(0.8920)	(-3.7586)***
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes	No
Firm Fixed Effects	No	No	No	No	Yes
N	9,079	8,746	8,746	8,499	8,499
Adjusted R^2	0.0387	0.0496	0.0670	0.0709	0.2857

Table A22. Guidance Bias and Capital Gains Overhang - Catering Incentives with Unwinsorized Variables

This table reports coefficient estimates from OLS regression for the sample period from January 2002 to December 2018. The dependent variable is *Guidance Bias*, which is the difference between forecasted EPS and realized EPS, divided by the stock price at the beginning of the fiscal year. Our main explanatory variable, the capital gains measure *CGO*, is defined as stock price change since the average investor's purchase. Further explanatory variables are described in Section 1 of the Online Appendix. A constant term is included but not reported. t-statistics, which are reported in parentheses, are calculated using the method by White (1980) to account for heteroskedasticity. *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively.

	Dependent Variable: *Guidance Bias*				
	(1)	(2)	(3)	(4)	(5)
CGO	-0.5249	-0.8500**	-2.0424***	-3.0160***	-2.3984***
	(-1.0991)	(-2.4487)	(-4.6703)	(-5.1926)	(-6.2126)
CGO x *Share Turnover*	-9.1120***				
	(-3.4927)				
CGO x *Relative Short Interest*		-26.3952***			
		(-2.9279)			
CGO x *IVOL*			-0.0742		
			(-0.0515)		
CGO x *Analyst Coverage*				0.0854**	
				(2.5226)	
CGO x *Process Risk*					1.0119**
					(2.0272)
Firm Controls	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes	Yes
N	8,499	8,499	8,499	8,499	8,499
Adjusted R^2	0.0668	0.0713	0.0618	0.0635	0.0626

Table A23. Market Reactions and Capital Gains Overhang - Unwinsorized Variables
This table reports coefficient estimates from OLS regression for the sample period from January 2002 to December 2018. The dependent variables are cumulative announcement excess returns around the [-1;+1] event window of a fiscal year's earnings guidance and earnings announcement date, respectively. Abnormal returns are calculated using a 255-day estimation with at least 30 observations and a 31-day gap before the event window, controlling for the Fama and French (1992) 3-factor model. Our main explanatory variable, the capital gains measure *CGO*, is defined as stock price change since the average investor's purchase. Further explanatory variables are described in Section 1 of the Online Appendix. A constant term is included but not reported. t-statistics, which are reported in parentheses, are calculated using the method by White (1980) to account for heteroskedasticity. *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively.

Dependent Variable:	*Guidance CAR*		*Earnings Announcement CAR*	
	(4)	(5)	(4)	(5)
CGO	-1.5587*	-1.4976*	2.1614***	2.0468**
	(-1.8836)	(-1.7805)	(2.6731)	(2.4969)
Beta	-0.0084	-0.0075	0.3282*	0.3084*
	(-0.0546)	(-0.0489)	(1.7735)	(1.6664)
Size	-0.1504	-0.1567	0.0655	0.0527
	(-1.5007)	(-1.5457)	(0.6459)	(0.5129)
Book-to-Market	-0.0421	-0.0419	-0.7383**	-0.7289**
	(-0.0961)	(-0.0953)	(-2.5434)	(-2.5292)
Horizon	0.8274***	0.8259***	0.0660	0.0793
	(3.9858)	(3.9764)	(0.3845)	(0.4609)
Loss Indicator	-0.5733	-0.5705	-0.7088*	-0.7176*
	(-1.3952)	(-1.3889)	(-1.7835)	(-1.8058)
Process Risk	-0.4376	-0.4368	0.3635	0.3635
	(-1.3359)	(-1.3334)	(1.1444)	(1.1449)
Prior Error	-0.1810**	-0.1806**	0.0674	0.0677
	(-2.0066)	(-2.0009)	(0.7131)	(0.7160)
Operating Profitability	0.0001	0.0001	0.0001	0.0001
	(0.5056)	(0.5255)	(0.9730)	(0.8251)
Analyst Coverage	0.0175	0.0176	-0.0166	-0.0149
	(1.0183)	(1.0248)	(-0.9278)	(-0.8317)
Analyst Dispersion	-0.0035	-0.0035	0.0023	0.0023
	(-0.4627)	(-0.4654)	(0.5923)	(0.6158)
IVOL	0.9511	1.1302	1.6994	0.1669
	(0.8990)	(0.7655)	(1.4856)	(0.0971)
Net Equity Issuer Dummy	-0.1216	-0.1223	0.0923	0.0860
	(-0.6116)	(-0.6152)	(0.4413)	(0.4110)
Investor Sentiment	0.0366*	0.0363*	-0.0241	-0.0208
	(1.9163)	(1.8954)	(-1.2226)	(-1.0500)
Illiquidity		-0.9715		-0.6031
		(-0.3274)		(-0.4063)
MAX		-0.0094		0.0969
		(-0.1616)		(1.5011)
Year Fixed Effects	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes
N	8,499	8,499	8,499	8,499
Adjusted R^2	0.0064	0.0062	0.0064	0.0066

Table A24. Analyst Revisions and Capital Gains Overhang
This table reports coefficient estimates from OLS regression for the sample period from January 2002 to December 2018. The dependent variable is *REVISE*, which is the difference between the consensus EPS forecasts in the 30 days after and before the guidance date, divided by the stock price at the end of month before the guidance date. Our main explanatory variable, the capital gains measure *CGO*, is defined as stock price change since the average investor's purchase. Further explanatory variables are described in Section 1 of the Online Appendix. A constant term is included but not reported. t-statistics, which are reported in parentheses, are calculated using the method by White (1980) to account for heteroskedasticity. *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively.

	Dependent Variable: *REVISE*		
	(1)	(2)	(3)
MGUIDE	0.4354**	0.4351**	0.3670**
	(2.3568)	(2.3958)	(2.1047)
MGUIDE x *CGO*	-0.1242	-0.1246	-0.1496
	(-0.9176)	(-0.9631)	(-1.1959)
MGUIDE x *Down*	0.3624***	0.3226***	0.3488***
	(6.5373)	(5.7163)	(6.3791)
MGUIDE x *Prior Error*	-0.0261**	-0.0243*	-0.0248*
	(-1.9852)	(-1.8848)	(-1.9434)
MGUIDE x *Agree*	0.2566***	0.2657***	0.2666***
	(5.1038)	(5.4149)	(5.5643)
MGUIDE x *Horizon*	-0.0598*	-0.0629*	-0.0506
	(-1.6481)	(-1.7582)	(-1.4705)
MGUIDE x *Range*	9.3036**	10.3893**	9.2016**
	(2.1325)	(2.4455)	(2.2657)
MGUIDE x *Analyst Coverage*	-0.0075***	-0.0075***	-0.0070***
	(-2.7806)	(-2.8697)	(-2.6592)
Main Effects	No	Yes	Yes
Year Fixed Effects	No	No	Yes
Industry Fixed Effects	No	No	Yes
N	3,504	3,504	3,504
Adjusted R^2	0.5391	0.5549	0.5663

Table A25. Change in Guidance Bias and CGO

This table reports coefficient estimates from OLS regression for the sample period from January 2002 to December 2018. The dependent variable is the difference between the initial and last *Gudiance Bias* in a given fiscal year. Our main explanatory variable, the capital gains measure *CGO*, is defined as stock price change since the average investor's purchase. Further explanatory variables are described in Section 1 of the Online Appendix. A constant term is included but not reported. t-statistics, which are reported in parentheses, are calculated using the method by White (1980) to account for heteroskedasticity. *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively.

	Dependent Variable: *Change in Guidance Bias*				
	(1)	(2)	(3)	(4)	(5)
CGO	0.3061***	0.2336**	0.2047**	0.2570***	0.1487
	(3.0777)	(2.4321)	(2.1222)	(2.6178)	(1.3435)
Beta		-0.0296	-0.0322*	-0.0152	-0.0271
		(-1.6129)	(-1.7182)	(-0.8337)	(-0.9858)
Size		-0.0148*	-0.0165**	-0.0255**	-0.0063
		(-1.8954)	(-2.1247)	(-2.1706)	(-0.1456)
Book-to-Market		-0.1418**	-0.1354**	-0.1526**	-0.4280***
		(-2.1032)	(-2.0320)	(-2.2294)	(-3.4302)
Horizon			0.1839***	0.1879***	0.1678***
			(6.3020)	(6.6955)	(5.4988)
Loss Indicator			0.0504	0.0539	0.0400
			(1.1194)	(1.1551)	(0.6635)
Process Risk			-0.0476	-0.0384	
			(-1.4757)	(-1.1503)	
Prior Error			0.0042	0.0026	-0.0385**
			(0.2389)	(0.1470)	(-1.9921)
Operating Profitability				-0.0205	-0.0218
				(-0.8002)	(-0.8722)
Analyst Coverage				0.0014	0.0034
				(0.7330)	(0.8611)
Analyst Dispersion				-0.0005	-0.0041
				(-0.1068)	(-0.7497)
IVOL				-0.4693***	-0.5321***
				(-2.9679)	(-2.9618)
Net Equity Issuer Dummy				0.0383	-0.0246
				(1.6044)	(-0.8533)
Investor Sentiment				-0.0059**	-0.0042*
				(-2.4572)	(-1.7207)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes	No
Firm Fixed Effects	No	No	No	No	Yes
N	7,793	7,507	7,507	7,336	7,336
Adjusted R^2	0.0033	0.0060	0.0125	0.0160	0.0918

Table A26. Last Guidance Bias and CGO

This table reports coefficient estimates from OLS regression for the sample period from January 2002 to December 2018. The dependent variable is the last *Gudiance Bias* in a given fiscal year. Our main explanatory variable, the capital gains measure *CGO*, is defined as stock price change since the average investor's purchase. Further explanatory variables are described in Section 1 of the Online Appendix. A constant term is included but not reported. t-statistics, which are reported in parentheses, are calculated using the method by White (1980) to account for heteroskedasticity. *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively.

	Dependent Variable: *Last Guidance Bias*				
	(1)	(2)	(3)	(4)	(5)
CGO	-2.1130***	-1.7682***	-1.6638***	-1.8115***	-1.8644***
	(-14.3804)	(-12.0458)	(-11.4007)	(-12.3101)	(-12.2125)
Beta		-0.0055	0.0136	0.0116	0.0377
		(-0.1954)	(0.4771)	(0.4016)	(0.9022)
Size		-0.0588***	-0.0530***	-0.0542***	0.3130***
		(-5.0088)	(-4.5546)	(-3.0868)	(5.0653)
Book-to-Market		0.5180***	0.3864***	0.4012***	1.2011***
		(5.9241)	(4.4267)	(4.3127)	(7.2685)
Horizon			0.0051	-0.0284	0.0031
			(0.1341)	(-0.7730)	(0.0787)
Loss Indicator			-0.1657**	-0.1758**	-0.2612***
			(-2.4134)	(-2.5117)	(-2.8948)
Process Risk			-0.0680	-0.0796*	
			(-1.4152)	(-1.6459)	
Prior Error			0.2000***	0.1948***	-0.0061
			(7.1860)	(6.9176)	(-0.2210)
Operating Profitability				0.0600	0.0639
				(1.5672)	(1.6294)
Analyst Coverage				0.0026	0.0102*
				(0.9008)	(1.8504)
Analyst Dispersion				0.0045	0.0023
				(0.6962)	(0.2907)
IVOL				0.2463	0.1114
				(1.0748)	(0.4299)
Net Equity Issuer Dummy				-0.0325	-0.0410
				(-0.8901)	(-0.9427)
Investor Sentiment				0.0151***	0.0134***
				(4.0198)	(3.4704)
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes	No
Firm Fixed Effects	No	No	No	No	Yes
N	7,793	7,507	7,507	7,336	7,336
Adjusted R^2	0.0630	0.0795	0.1000	0.1081	0.2484