Anchored to Prices Past: Managerial Beliefs about Stock Value*

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Abstract

Using novel data on *explicit undervaluation claims* in earnings calls, we study how managers form beliefs about their firms' stock value. Appearing in only 4.7% of calls, these claims seem to capture genuine managerial beliefs: they generate strong positive price reactions followed by higher earnings and operating cash flows, predict opportunistic repurchases, and are more common when managers have greater long-term equity exposure. Yet these beliefs are anchored to salient past prices: drawdowns from prior peaks predict claims beyond recent returns. Consistent with persistent anchoring, technology firms that experienced extreme dot-com valuations remain more likely than peers listed after the dot-com bubble to claim undervaluation and repurchase shares opportunistically, with both effects weakening as dot-com-era managers leave. Our findings suggest that financial-market bubbles can leave a lasting imprint on managerial beliefs, thereby shaping corporate financial policy long after bubble prices recede.

Keywords: Managerial beliefs; equity valuation; price anchoring; undervaluation claims; share repurchases; financial market bubbles.

JEL classification: G12, G32, G35, G41.

How do managers assess the value of their firms' stock? In particular, do salient past prices anchor their valuation beliefs and influence corporate financial policy? Although a growing literature studies managerial expectations and their formation,[1] direct evidence on how managers form beliefs about the fundamental value of their own firms' stock—and the reference points that shape those beliefs—remains limited. One reason is that such beliefs are rarely observed directly: corporate actions can reflect motives other than perceived misvaluation, while anonymous surveys generally cannot be linked to subsequent firm and manager outcomes.

In this paper, we use managers' *explicit undervaluation claims* in quarterly earnings calls to study how managers form and act on beliefs about their firms' stock value. These claims provide direct, precisely timed expressions of those beliefs in a high-stakes public setting and can be linked to firm and manager characteristics and subsequent corporate actions. Although natural, this approach was previously difficult to implement at scale: manual coding would be prohibitively costly, while keyword searches can miss indirectly phrased claims or fail to distinguish stock-price claims from similar language used in other contexts.[2] Using LLMs, we identify explicit undervaluation claims in 9,435 (4.7%) of 199,884 earnings calls from 2001 to 2024. Our evidence reveals a striking combination: these claims contain price-moving information and predict corporate action, yet the beliefs they express are systematically anchored to salient past prices.

A central concern is that these undervaluation claims reflect strategic promotion rather than genuine managerial beliefs. Three findings alleviate this concern. The claims generate strong positive price reactions followed by higher earnings and operating cash flows, predict opportunistic repurchases defined as share repurchases that coincide with insider net buying, and are more common when managers have stronger long-term—but not short-term—equity incentives. Taken together, these findings suggest that the claims convey meaningful managerial beliefs rather than cheap talk, consistent with models in which informed market scrutiny

[1]The literature studies managerial expectations and belief formation using surveys, forecasts, and managers' past experiences (Ben-David, Graham, and Harvey, 2013; Bordalo, Gennaioli, and Shleifer, 2018; Coibion, Gorodnichenko, and Kumar, 2018; Gormsen and Huber, 2025). Graham (2022) surveys managers' views of their own firms' stock valuation.

[2]Keyword searches can miss indirectly phrased claims: e.g., "our PE multiple still has significant room for expansion to be valued consistent with our top-tier biotech peers" (AbbVie, Oct. 27, 2017).

disciplines selective disclosure of undervaluation (Almazan, Banerji, and Motta, 2008).

We next examine how managers form these undervaluation beliefs. Low valuation multiples and large drawdowns from 52-week or historical price peaks strongly raise claim probability. A stock price one standard deviation farther below its 52-week high raises the probability of a claim by 1.44 percentage points—around one-third of the 4.7% unconditional rate. Among the six valuation signals we consider, the 52-week drawdown is the leading price-history variable and ranks second only to earnings-to-price in incremental explanatory power. In direct horse races, drawdowns subsume recent returns: the 52-week drawdown remains strongly predictive after conditioning on 12-month or 1-month returns, while the reverse is not true. The result is therefore not simply that managers become contrarian after poor returns. Their beliefs are tied to salient prior price levels, and the relation weakens as the peak recedes into the past.

The anchoring pattern also appears in managers' actions. The same 52-week and historical-price drawdowns predict opportunistic repurchases, indicating that salient past prices are associated not only with managers' stated beliefs but also with decisions that commit both corporate and personal capital.

The dot-com bubble provides a sharper setting for studying persistent anchoring. Technology, media, and telecommunications (TMT) firms listed before March 10, 2000 experienced exceptionally high own-stock prices, whereas firms first listed after the peak did not. Consistent with persistent anchoring on dot-com-era valuations long after the bubble burst, pre-peak TMT firms are 1.56 percentage points more likely to claim undervaluation and 1.50 percentage points more likely to undertake opportunistic repurchases, approximately one-third of the respective base rates. Both effects are stronger when the current CEO or CFO also served at the firm during the bubble. Together, the results point to personal managerial memory as a channel through which bubble-era prices continue to influence beliefs and corporate policy.

That undervaluation claims are both informative and biased is not contradictory. A claim can incorporate managers' private information about fundamental value while also reflecting a biased response to public price anchors. Because the return regressions condition

on publicly observable valuation signals, the positive market response captures incremental information beyond those signals, whereas the drawdown, dot-com, and managerial-turnover results identify the salient-price anchors shaping managers' valuation beliefs.

Overall, our findings on managerial anchoring on salient past prices suggest that financial-market bubbles can leave a lasting imprint on managerial beliefs. Beyond their contemporaneous effects on prices and financing conditions, bubbles can distort subsequent corporate financial policy by anchoring managerial beliefs to bubble-era prices.

Related literature. Our first contribution is to provide a new dataset containing managers' explicit beliefs that their own firms' stock is undervalued. Each claim has a precise timestamp and can be linked to firm and manager characteristics, public valuation signals, and subsequent actions. These features enable tests of managerial belief formation and its real consequences generally unavailable in anonymous surveys (Graham and Harvey, 2001; Brav, Graham, Harvey, and Michaely, 2005; Graham, 2022) or when beliefs are inferred from insider portfolios and corporate transactions (Jenter, 2005; Dittmar and Field, 2015; Ben-David, Kim, Moussawi, and Roulstone, 2023; Cho and Salarkia, 2025).

Our findings contribute to behavioral corporate finance. Prior work shows that managerial biases and formative experiences shape corporate decisions (Malmendier and Tate, 2005; Ben-David, Graham, and Harvey, 2013; Dittmar and Duchin, 2016; Schoar and Zuo, 2017), while a related literature studies how reference prices and memory affect investor behavior and corporate transactions (George and Hwang, 2004; Grinblatt and Han, 2005; Baker, Pan, and Wurgler, 2012; Barberis and Xiong, 2012; Hovakimian and Hu, 2020; Nagel and Xu, 2022). In transaction settings, however, past prices may serve as transaction-specific benchmarks—including focal points in bargaining—so observed outcomes do not isolate managers' beliefs about intrinsic value. Our large panel of undervaluation claims allows us to observe managerial beliefs directly, trace those beliefs to past experiences, and link them to later actions in a single setting, as we do in our analysis of the dot-com experience.

Our analysis also relates to the growing literature that measures subjective valuation beliefs. Work using professional forecasts studies how expected cash flows, expected returns, and errors in those expectations relate to prices (Delao and Myers, 2021; Couts, Gonçalves,

and Loudis, 2023; Dahlquist and Ibert, 2024; Dècaire and Graham, 2024; Delao and Myers, 2024; Andonov, Couts, S Gonçalves, Loudis, and Rossi, 2025; Bastianello, Decaire, and Guenzel, 2025; Chaudhry, 2025; Dahlquist and Ibert, 2026; Delao, Han, and Myers, 2026). Our approach of eliciting managerial beliefs directly from earnings call transcripts is similar to Gormsen and Huber (2024, 2025), who measure firms' perceived cost of capital and discount rates, and Ran (2025), who measures managerial attention to financial markets. Our focus directly on perceived undervaluation allows us to study which public valuation signals enter managers' own-stock beliefs, whether a claim contains value-relevant private information, and how the undervaluation belief maps into corporate action.

Finally, we contribute to work on the real effects of stock-market mispricing and bubbles (Baker, Stein, and Wurgler, 2003; Gilchrist, Himmelberg, and Huberman, 2005; Campello and Graham, 2013). Whereas that literature emphasizes how contemporaneous market valuations and financing conditions affect investment, our findings provide evidence consistent with an additional persistence channel: bubble-era prices can remain anchors for managerial beliefs and corporate financial policy after the bubble has receded, with the effect weakening as exposed managers leave.

1 An Organizing Framework for Valuation Beliefs

This section provides a simple framework linking managerial undervaluation claims to the two empirical tests at the center of our analysis: which observable signals predict claims and whether claims predict subsequent abnormal returns beyond observable firm characteristics and contemporaneous news.

Let $V_{i,t}^m$ and $P_{i,t}$ respectively denote manager m's subjective valuation of firm i and the market price, and define perceived undervaluation as

$$\nu_{i,t}^m \equiv \log V_{i,t}^m - \log P_{i,t} = \gamma' X_{i,t} + \xi_{i,t}^m, \tag{1}$$

where $X_{i,t}$ contains publicly observable valuation signals, such as valuation multiples, past returns, and drawdowns from salient prices, and $\xi_{i,t}^m$ captures information available to the manager but not contained in those signals. The public-information component, $\gamma' X_{i,t}$,

may reflect both information embedded in observable signals and behavioral biases in how managers interpret them. Accordingly, the weights γ need not be rational; managers may, for example, place excessive weight on salient historical prices, consistent with price anchoring.

We do not observe perceived undervaluation ($\nu_{i,t}^m$) directly. Instead, we observe whether the manager publicly claims that the stock is undervalued, denoted $C_{i,t} \in \{0, 1\}$:

$$C_{i,t} = \mathbf{1}\left\{\nu_{i,t}^m \geq \phi' D_{i,t} + \delta_{i,t}^m\right\}, \tag{2}$$

where $D_{i,t}$ captures observable incentives and disclosure considerations, and $\delta_{i,t}^m$ is an unobserved disclosure cost. A claim therefore indicates that perceived undervaluation is sufficiently strong to cross the disclosure threshold; the absence of a claim does not necessarily imply that the manager considers the stock fairly valued or overvalued.

This framework motivates regressions of claim probability on observable valuation signals and disclosure-related controls:[3]

$$C_{i,t} = \beta_0 + \beta_X' X_{i,t} + \beta_D' D_{i,t} + u_{i,t}. \tag{3}$$

Under the assumption that managers' private information is conditionally unrelated to the observable signals, the signs and relative magnitudes of β_X reveal how those signals enter managerial valuation beliefs. This interpretation also requires that the signals affect claims primarily by changing perceived valuation rather than merely managers' willingness to speak. Our analyses of volunteered claims and managerial incentives help assess this condition, while the finding that claims predict opportunistic repurchases provides complementary evidence that the claims reflect underlying beliefs.

Finally, we test whether claims contain value-relevant information beyond observable firm characteristics and news released during the call:

$$CAR_{i,t+h} = b_0 + b_1 C_{i,t} + b_X' X_{i,t} + b_D' D_{i,t} + b_Z' Z_{i,t} + e_{i,t+h}, \tag{4}$$

[3]Appendix A derives the mapping from the disclosure rule in equation (2) to the claim regression in equation (3) and states the conditions under which β_X is proportional to γ. The same appendix section derives the regression model for abnormal returns shown in the next paragraph.

where $Z_{i,t}$ includes earnings news and other contemporaneous disclosures. A positive b_1, without subsequent reversal, is consistent with claims revealing favorable information about firm value not captured by the included observables. This interpretation requires that, conditional on the included observables, no omitted public news or disclosure shock both raises the likelihood of a claim and predicts subsequent abnormal returns.

2 Measuring Managerial Valuation Beliefs and Data

We construct a new dataset of firm managers' valuation claims about their own firms' equity from conference call transcripts. Our data source is a comprehensive set of earnings call transcripts downloaded from Refinitiv Workspace. Conference calls are a high-stakes disclosure setting in which managers face direct scrutiny from analysts and investors who can compare stated views to observable market data and subsequent firm decisions, providing strong incentives for managers to speak deliberately (Gormsen and Huber, 2025). Importantly for our purposes, explicit managerial statements about the valuation of the firm's own equity are relatively rare in this setting; when they do occur, they are most often claims that the stock is undervalued relative to its intrinsic worth.

2.1 Earnings-call transcripts and sample construction

A central challenge in working with Refinitiv transcript data is that the ticker reported in the transcript metadata is affected by backfilling. When a firm changes its ticker following a name change, merger, or acquisition, Refinitiv retrospectively assigns the updated ticker to historical transcripts. As a result, a direct merge based only on the reported ticker can misclassify the historical firm associated with a transcript.

To address this, we implement a two-stage matching procedure. In the first stage, we use the Refinitiv ticker to identify all candidate firms in CRSP-Compustat that have ever been associated with that ticker. In the second stage, we resolve ambiguities by comparing the company name recorded in the transcript header to the historical company names of the candidate firms and selecting the closest match. This combination of ticker-based candidate generation and name-based disambiguation allows us to recover the historically correct firm identity despite ticker backfilling. After applying this procedure and merging the resulting

transcript-level data with our cleaned CRSP-Compustat database, we obtain a final sample of 199,884 transcripts, as detailed in Appendix B.

2.2 Extracting undervaluation claims using an LLM

Our measurement objective is to identify cases in which a company representative makes an explicit statement about the valuation of the firm's own stock. This task is not well suited to keyword-based text analysis. Managers can express the same idea in many different ways: one may say the stock is "undervalued," another that the share price "does not reflect the strength of the business," and another that the stock is "trading at an unjustified discount." At the same time, conference calls contain many discussions of "value" or "valuation" that have nothing to do with the firm's own equity, such as the valuation of an acquisition target, a business segment, a real asset, or the market more broadly. A keyword-based approach would therefore generate both substantial false positives and substantial false negatives.

We instead rely on a structured large language model extraction procedure. For each transcript, we submit the full text to GPT-5.2 via the OpenAI Batch API using a prompt designed to identify explicit valuation claims made by company representatives about their own firm's stock. At the time of writing, GPT-5.2 was one of the leading general-purpose LLMs available and was designed for strong instruction following and disciplined execution on structured tasks. We set the temperature to zero to remove deliberate sampling and improve the consistency of the extraction.[4] The full prompt and output schema are reported in Appendix C.

The extraction procedure records an event only when a company representative—rather than an analyst—makes an explicit valuation judgment about the firm's own shares. Generic statements about creating shareholder value do not qualify, nor does a repurchase announcement in isolation unless the speaker explicitly links it to a valuation view. Beyond identifying the claim and recording its supporting passage, the LLM-based approach extracts a richer set of related information. In particular, the schema captures whether the statement is

[4]Recent work notes that zero-temperature outputs from proprietary LLMs need not be fully deterministic, however (Coqueret, Llull, Oswald, Pérignon, Scheuch, and Vilhuber, 2026). A useful robustness check would be to re-run the extraction using a comparable model from another provider and report cross-model agreement and the sensitivity of our main results.

prompted by an analyst question, whether the manager provides explicit reasons for the belief, whether the argument relies on valuation anchors such as price multiples, discounted cash flow arguments, or peer comparisons, and the strength and precision of the valuation language. For every transcript, the procedure additionally records a call-level indicator of whether any company representative discusses repurchasing the firm's own shares, independently of whether a valuation-belief event is identified.

2.3 Additional data sources

We supplement the earnings-call transcripts with data from several additional sources. Executive employment histories are obtained from BoardEx, while executive compensation, equity holdings, and unvested equity awards are obtained from ExecuComp. Insider transactions are obtained from LSEG. Analyst forecasts and realized earnings are from I/B/E/S. We define earnings surprise as realized earnings minus the mean analyst forecast, scaled by the standard deviation of outstanding analyst forecasts.

Stock prices, returns, and security identifiers are obtained from the Center for Research in Security Prices (CRSP). Accounting- and market-based firm characteristics are drawn from the data library of Jensen, Kelly, and Pedersen (2023).

2.4 Sample description and summary statistics

Among 199,884 earnings call transcripts, 9,435 (4.7%) contain at least one undervaluation claim.[5] Explicit claims are thus rare, suggesting that managers use such language selectively.[6] Table 1 illustrates the variety of these statements: they may be direct or indirect, volunteered or prompted, and accompanied by reasons, valuation anchors, or references to corporate actions. This linguistic variety highlights the value of an LLM-based approach over a narrow keyword search.

Figure 1 and Appendix Table A1 summarize the claims' content. Roughly half are prompted by analysts and half are classified as strong, meaning that they make a direct

[5] Only 120 transcripts contain a fair-valuation claim, and 24 contain an overvaluation claim.

[6] Graham (2022) reports that, in a typical quarter, 50–80% of public-company CFOs believe their stock is undervalued. The much lower incidence of explicit claims in our sample is consistent with such public statements being made selectively, potentially only when managers hold stronger convictions.

and unambiguous valuation claim rather than using milder language that only implies attractive value; 43% provide an explicit reason, 39% invoke a valuation anchor, and more than 80% refer to a related corporate action. The reasons most often concern fundamentals and cash flows, the anchors are typically multiples, price targets, or peer comparisons, and the linked actions are most commonly repurchases. Table 2 shows that claiming firms tend to have higher earnings-to-price and book-to-market ranks and substantially weaker recent stock returns—patterns examined more systematically in the multivariate analysis below.

3 Managerial Undervaluation Claims: News or Noise?

A natural starting point is whether managerial undervaluation claims are news that convey genuine managerial beliefs or noise. Indeed, managers may have incentives to describe their shares as undervalued in an attempt to support the stock price, reassure investors, or justify corporate actions such as share repurchases. If these statements are merely promotional language or cheap talk, they should contain little incremental information beyond the earnings announcement and other observable characteristics of the call and the firm. We therefore begin by testing how the stock market reacts to managerial undervaluation claims. A positive abnormal return following a claim would indicate that investors treat the statement as informative, although it would not by itself establish that managers possess fully rational or unbiased estimates of intrinsic value.

3.1 Fact #1: Stock prices react strongly to undervaluation claims

To test stock price reactions, we regress post-call cumulative abnormal returns (CARs) on an indicator for whether the earnings-call transcript contains a managerial undervaluation claim. The dependent variables are Fama–French three-factor CARs measured over the 1-day, 5-day, and 21-day windows following the call. For each horizon, we first estimate a specification without additional controls and then include controls for valuation ratios, prior stock-price performance, earnings news, transcript language, profitability, investment, equity issuance, and return volatility. All specifications include date fixed effects, use equal-quarter weights, and cluster standard errors by firm and conference call date.

Panel A of Table 3 shows that managerial undervaluation claims are followed by positive

and statistically significant abnormal returns across all three horizons. This remains true after controlling for observable information that could jointly explain the claim and subsequent returns.[7] In particular, the estimated response cannot be attributed solely to claiming firms having lower valuation multiples, weaker prior stock performance, larger drawdowns, different earnings surprises, or distinctive call tone and uncertainty. Moreover, the response is not confined to the immediate trading day: abnormal returns continue to accumulate over the 5-day and 21-day windows, consistent with gradual incorporation of the information conveyed by the claim.[8]

Two features of the disclosure context sharpen the interpretation of the return response. Analyst questions may elicit claims that managers would not otherwise disclose, while an associated corporate action may itself move prices. Panel B of Table 3 shows that the incremental response to volunteered claims is positive and significant at all three horizons. By contrast, the response does not differ detectably according to whether the claim is linked to an action. Thus, the market reaction is not confined to action-related claims and is strongest when managers choose to voice the belief themselves, consistent with volunteered claims conveying greater conviction or incremental information.

Appendix Table A3 extends the analysis to 3-, 12-, and 24-month horizons. Uncontrolled abnormal returns continue to increase, but controls for the value-like characteristics of claiming firms absorb most of this additional gain. The controlled estimates nevertheless remain positive and close in magnitude to the initial post-call response. Thus, we find no evidence that prices subsequently fall back toward their pre-claim levels, as would be expected if the claims generated only temporary price pressure or investor overreaction.

The absence of a subsequent return reversal suggests that the claims contain incremental information about firm fundamentals. Indeed, Appendix Table A4 shows that undervaluation claims predict higher future net income and operating cash flow relative to assets, with the effects strengthening over the next several fiscal quarters and remaining statistically

[7] Appendix Table A2 also reports the coefficients on control variables suppressed in Panel A of Table 3 for brevity. The estimated response to a one-standard-deviation increase in earnings surprise is close to the magnitude implied by Hirshleifer, Lim, and Teoh (2009).

[8] The results remain qualitatively and quantitatively similar when firm fixed effects are included; however, we omit them from the baseline because full-sample demeaning can introduce look-ahead contamination into market-based controls, particularly valuation multiples.

significant through the sixth quarter. Claims also predict temporarily higher sales relative to book enterprise value and improved operating cash-flow margins. These results are consistent with managers possessing favorable information about future operating performance that is not fully captured by contemporaneous observable characteristics.

Taken together, these findings are difficult to reconcile with managerial undervaluation claims as entirely uninformative promotional statements. Conditional on earnings news, transcript characteristics, prior returns, and standard firm characteristics, the claims predict a positive and persistent price response, suggesting that they reveal some private information about firm value not fully reflected in contemporaneous prices. The return evidence therefore supports treating these claims as an economically meaningful measure of managers' valuation beliefs rather than merely rhetorical language used during earnings calls.

3.2 Fact #2: Actions are consistent with stated beliefs

To assess whether managers act on their stated beliefs, we examine *opportunistic repurchases*, defined as firm-quarters in which the firm repurchases shares while insiders are net buyers of the firm's stock (Bonaimé and Ryngaert, 2013; Dittmar and Field, 2015).[9] Neither action alone provides a clean signal of perceived undervaluation: firms repurchase shares for a variety of reasons, including payout, capital-structure management, and dilution management, while insider trades may reflect liquidity, diversification, or compensation. Their coincidence is more informative because two distinct actions point in the same direction. Consistent with an undervaluation motive, Appendix Figure A1 shows that, whereas overall repurchases are procyclical (Jagannathan, Stephens, and Weisbach, 2000), opportunistic repurchases are sharply countercyclical, peaking during the Great Recession and the Covid-19 pandemic. Appendix Table A5 further shows that they are concentrated among firms with higher book-to-market ratios and weaker prior returns. We therefore use opportunistic repurchases to test whether managers act on their public claims of undervaluation.

Managerial undervaluation claims and opportunistic repurchases move together in the aggregate. Figure 2 plots their quarterly frequencies, which have a correlation of 0.69 and

[9] In the full firm-quarter sample, 50.5% of observations involve a repurchase, 12.1% involve insider net buying, and 5.4% involve both. Thus, opportunistic repurchases are approximately as rare as explicit undervaluation claims.

rise sharply during episodes of market stress, including the Great Recession and the Covid-19 pandemic. This comovement is consistent with the two measures capturing common variation in managerial perceptions of mispricing.

At the firm level, Table 4 shows that managerial undervaluation claims are associated with opportunistic repurchases in the same quarter and predict additional activity one quarter ahead. In specifications with controls, claims are associated with increases of 2.9 percentage points contemporaneously and 1.1 percentage points one quarter ahead, equivalent to 54% and 20% of the unconditional opportunistic-repurchase rate of 5.4%, respectively. Thus, the claims align with economically meaningful joint corporate and insider purchases indicative of perceived undervaluation.

3.3 Fact #3: Managerial incentives and skin in the game

We next examine whether managerial undervaluation claims are associated with managers' personal financial incentives. This analysis helps distinguish genuine valuation beliefs from strategic attempts to support the stock price. If managers make such claims primarily to boost the share price before exercising options or realizing other imminent personal gains, claims should be more common when managers have strong short-term incentives to influence the stock price. If instead they reflect genuine beliefs about firm value, they should be more closely related to managers' long-term equity exposure. We therefore relate claim probability to managerial ownership and compensation incentives.

Table 5 reveals a clear distinction between long- and short-term incentives. The three columns measure incentives for the CEO, the CEO and CFO jointly, and the five highest-paid executives, respectively. All incentive variables are standardized, so each coefficient measures the percentage-point change in claim probability associated with a one-standard-deviation increase in the corresponding measure. A one-standard-deviation increase in unvested equity is associated with an approximately 0.5 percentage-point increase in claim probability across all three specifications, roughly one-tenth of the 4.7% full-sample claim rate. By contrast, stronger short-term option incentives, if anything, are associated with a lower likelihood of making a claim, with the estimate statistically significant for the five highest-paid executives. One possible interpretation is that managers hesitate to make such claims when they stand to

benefit immediately from a higher stock price because investors may perceive the statements as self-serving.

3.4 Undervaluation claims capture genuine managerial beliefs

Taken together, the return, action, and incentive evidence supports interpreting explicit undervaluation claims as economically meaningful measures of managers' perceived undervaluation rather than baseless promotional rhetoric. This validation does not establish that managerial claims are fully rational: a claim can contain private, valuation-relevant information while also reflecting biased processing of public signals. Section 4 therefore turns from whether the claims capture genuine beliefs to how those beliefs are formed, asking which valuation signals managers use and whether they anchor on salient past prices.

4 How Do Firm Managers Form Valuation Beliefs?

Having established that managerial undervaluation claims convey economically meaningful beliefs, we ask which public signals predict those beliefs. We compare drawdowns from salient price peaks, returns over fixed past windows, and conventional valuation ratios. We first examine the signals in the order in which they appear in Table 6 and then place price anchors and past returns in direct horse races.

4.1 Price anchors, past returns, and valuation ratios

Prior evidence points to each of these inputs, although largely through surveys or observed decisions. Past prices serve as reference points in corporate transactions (Baker, Pan, and Wurgler, 2012; Hovakimian and Hu, 2020), and many CFOs report comparing their current stock price with historical highs and lows (Graham, 2022). CFOs also report that recent price appreciation affects equity-issuance decisions (Graham and Harvey, 2001), while insider portfolios suggest that managers view firms with low valuation ratios as undervalued (Jenter, 2005). Our setting allows us to compare these signals directly as predictors of managers' explicit valuation beliefs.

Panel A of Table 6 reports linear probability regressions of claim probability on four price-history measures. Columns (1)–(4) include each measure separately, while column (5)

includes all four jointly. Every specification also includes book-to-market (B/M), earnings-to-price (E/P), the remaining controls in Table 2, and earnings-call date fixed effects. The date fixed effects absorb aggregate market movements, so the drawdown coefficients are identified from differences in firms' price declines relative to other firms observed on the same date.[10] More negative distance measures indicate that the stock price is farther below the corresponding peak, and all continuous variables are standardized.

Columns (1) and (2) show that price anchors are economically important predictors of claims. A one-standard-deviation movement farther below the 52-week high is associated with a 1.44 percentage-point increase in claim probability, while the corresponding estimate for the historical high is 0.85 percentage points. These effects equal approximately 31% and 18% of the unconditional claim rate of 4.7%. The 52-week-high estimate is nearly identical in magnitude to the E/P coefficient in column (1). Because both valuation ratios are included in these specifications, the drawdown coefficients do not simply capture that firms far below their peaks also tend to trade at low prices relative to book value or earnings.

Past returns predict claims when considered separately. In columns (3) and (4), one-standard-deviation declines in the past 12-month and 1-month returns increase claim probability by 0.47 and 0.57 percentage points, respectively. Column (5), however, shows that these relations change once drawdowns are included; we examine this horse race in the next subsection.

Figure 3 provides a nonparametric counterpart to columns (1)–(4). Claim probabilities rise sharply as firms move farther below their recent and historical highs, whereas the gradients across past-return quintiles are weaker.

The valuation ratios remain strong predictors across specifications. A one-standard-deviation increase in B/M raises claim probability by 0.81–1.07 percentage points, while the corresponding range for E/P is 1.42–1.53 percentage points. Managers' valuation beliefs therefore appear to incorporate both conventional measures of value and the stock's position relative to salient historical prices.

[10]Date fixed effects remove the component common to all firms on a given date, although differences in market beta or industry exposure can still generate cross-sectional variation in drawdowns. A potential analysis is to check whether market-driven effects are partly responsible for our findings.

Panel B of Table 6 compares the six signals using forward selection based on incremental within-(R^2). Starting from a baseline model containing the controls and date fixed effects, E/P is selected first, increasing within-(R^2) by 0.40 percentage points. The distance from the 52-week high is selected second and adds a further 0.26 percentage points, exceeding the conditional contribution of B/M and every other price-history measure. B/M enters third, adding 0.09 percentage points, while the remaining three signals collectively contribute only about 0.03 percentage points. The 52-week-high distance is therefore the leading price-history predictor and ranks second only to E/P among all six signals. Conventional valuation ratios remain important, but a salient prior peak contributes substantial independent explanatory power.

Appendix Table A6 asks whether the same valuation signals also predict opportunistic repurchases, repeating the analysis in Panel A of Table 6 using opportunistic repurchases as the dependent variable. With firm and quarter fixed effects, a stock price one standard deviation farther below its 52-week high is associated with a 1.23-percentage-point higher probability of an opportunistic repurchase; the corresponding estimate for the historical high is 1.04 percentage points. These effects equal 23% and 19% of the unconditional opportunistic-repurchase rate of 5.4%. Both drawdown measures remain economically and statistically significant when included jointly with valuation ratios and recent returns. The 12-month-return coefficient again reverses sign once drawdowns are included, although the 1-month-return coefficient remains negative. Thus, the same price anchors that predict managers' stated beliefs also predict decisions that commit both corporate and personal capital.

4.2 Price anchors versus past returns

Drawdowns and past returns are correlated, but they are not the same variable. A return compares the current price with the price on a fixed earlier date, whereas a drawdown compares it with the maximum price attained on an endogenously determined date. Dividends create an additional difference, but they are not the central distinction. Even absent dividends, a drawdown equals a fixed-window return only when the relevant peak occurs exactly at the beginning of that return window—52 weeks before the call for a 12-month return or one month before the call for a 1-month return. A historical peak will often be much older still. The horse race therefore distinguishes anchoring on a salient price level from a more

general contrarian or mean-reversion response to poor past performance.

The joint specification in column (5) of Panel A (Table 6) provides the regression horse race. Distance from the 52-week high remains the strongest predictor at −1.56 percentage points, while distance from the historical high remains significant at −0.40. The 12-month-return coefficient does not merely attenuate: it flips from −0.47 in column (3) to a statistically significant 0.45 in column (5). Thus, conditional on drawdowns and the other signals, higher—not lower—past annual returns predict claims. The 1-month-return coefficient shrinks from −0.57 to −0.14 and is only marginally significant, while B/M and E/P remain strong at 0.80 and 1.49, respectively. These results sharpen prior evidence that managers hold contrarian valuation views (Jenter, 2005): explicit undervaluation beliefs are associated primarily with conventional valuation signals and salient price anchors, rather than with a generic expectation that poor past returns will reverse.

Because the price-based signals are correlated and may relate nonlinearly to undervaluation claims, Table 7 repeats the horse race using conditional double sorts conducted separately by earnings-call date. Each column reports the predictive spread for that signal after sorting within terciles of the row signal. The 52-week drawdown remains strongly predictive after conditioning on the historical drawdown, the past 12-month return, or the past 1-month return, with bottom-minus-top spreads ranging from 1.48 to 2.20 percentage points. In the reverse direction, the historical drawdown and both return measures produce small, statistically insignificant spreads after conditioning on the 52-week drawdown. The 52-week high is therefore the empirically dominant price reference point.

Appendix Table A7 presents the 52-week-high and 12-month-return pairwise comparison in detail. The far-below-minus-near-high spread is positive and statistically significant within every return tercile. When the sorting order is reversed, the low-minus-high-return spread is insignificant among firms near or at intermediate distances from their 52-week highs and is only 0.61 percentage points among firms far below the high. The regression and sort evidence therefore indicates that drawdown is not simply a repackaging of past return: managers' claims are tied specifically to salient prior price levels, particularly the 52-week high.

5 The Dot-Com Bubble as a Quasi-Experiment

The preceding evidence distinguishes drawdowns from past returns and conventional valuation ratios, but a firm's historical peak may still contain information about fundamentals, including information privately observed by managers. The relation between drawdowns and claims could therefore reflect informative price histories rather than anchoring.

The dot-com bubble provides a useful quasi-experimental setting for addressing this concern. The episode produced an unusually large and salient valuation cycle among technology, media, and telecommunications (TMT) firms: average IPO first-day returns reached approximately 65% during 1999–2000 and 89% among internet IPOs (Loughran and Ritter, 2004; Ljungqvist and Wilhelm Jr, 2003). TMT firms already listed before the March 10, 2000 peak experienced these exceptional valuations in their own shares; firms first listed afterward lacked a comparable pre-crash price history. Figure 4 shows that TMT firms recovered these peaks substantially more slowly and less frequently than non-TMT firms, whether we condition on continued listing or treat delisting as non-recovery. We test whether this exposure predicts managerial beliefs and actions long after the bubble.

5.1 Empirical design

We define *Dot-com-exposed TMT* as an indicator for a TMT firm that was publicly listed before March 10, 2000.[11] Our baseline specification is

$$Y_{i,t} = \alpha_t + \delta_{j(i)} + \lambda_{\tau(i)} + \beta\, DotComExposedTMT_i + \Gamma' X_{i,t} + \varepsilon_{i,t}, \tag{5}$$

where $Y_{i,t}$ is an indicator for an undervaluation claim or one of the trading outcomes examined below. The terms α_t, $\delta_{j(i)}$, and $\lambda_{\tau(i)}$ denote earnings-call date fixed effects for claims or quarter fixed effects for trading outcomes, three-digit SIC industry fixed effects, and CRSP-entry-year fixed effects, respectively.[12] The vector $X_{i,t}$ contains the applicable controls in

[11] We define TMT using three-digit SIC codes 357, 366, 367, 481, and 737, covering computer and office equipment, communications equipment, electronic components, telephone communications, and computer programming and data-processing services.

[12] A firm's first appearance in CRSP generally corresponds to an IPO, although it may instead follow a business combination or another listing event; in either case, it marks the first observable public-market price for the resulting entity.

Table 2, excluding earnings surprise, and an indicator for pre-peak listing.[13] Regressions use equal-quarter weights and cluster standard errors by firm and date or quarter, as appropriate.

Because exposure is time invariant, the specification omits firm fixed effects; β captures the incremental difference for pre-peak-listed TMT firms beyond general industry and listing-cohort differences. We estimate the specification using all earnings calls and then restrict the outcome period to calls after 2005 and after 2015 to assess persistence. In a narrower design, we retain the full sample but replace the broad exposure indicator with separate indicators for TMT firms entering CRSP within six months before and after the peak. The key comparison is the asymmetry between these adjacent listing cohorts.

5.2 Bubble exposure and subsequent undervaluation claims

Table 8 shows that TMT firms listed before the dot-com peak are subsequently more likely to claim that their shares are undervalued. In the full sample, *Dot-com-exposed TMT* is associated with a 1.56 percentage-point increase in claim probability, approximately 33% of the unconditional rate. The estimate remains similar after 2005 and positive after 2015, indicating persistence well beyond the bubble's immediate aftermath.

The narrow-window estimates display the same asymmetry. TMT firms entering CRSP within six months before the peak are 2.63 percentage points more likely to make a claim, whereas the estimate for firms entering within six months afterward is essentially zero. This contrast is consistent with exposure to bubble-era own-stock prices leaving a persistent reference point rather than merely capturing the common post-bubble environment.

5.3 Bubble exposure and opportunistic repurchases

If bubble exposure leaves a lasting imprint on managerial beliefs, it should also predict actions indicative of perceived undervaluation. We therefore examine insider buying and repurchases at the firm-quarter level, using firm characteristics measured at the beginning of the quarter, quarter fixed effects, and standard errors clustered by firm and quarter. Table 9 shows that the estimate for repurchases overall is positive but imprecise. By contrast,

[13] We exclude earnings surprise because its substantial missingness would reduce the estimation sample and statistical precision.

exposure is associated with 2.63- and 1.50-percentage-point increases in insider buying and opportunistic repurchases, respectively, approximately 22% and 28% of their unconditional rates. The contrast is consistent with overall repurchases combining multiple motives, while the latter outcomes more specifically capture managers committing personal and corporate capital based on perceived undervaluation.

The opportunistic-repurchase effect remains 1.32 percentage points and statistically significant after 2005. In the narrow-window specification, the estimate is 3.52 percentage points for TMT firms entering CRSP shortly before the peak and 0.40 percentage points for those entering shortly afterward. Together with the claim results, this evidence suggests that exposure to bubble-era own-stock prices leaves a persistent imprint on both managerial statements and actions.

5.4 Additional evidence on bubble exposure

We find that the results are robust to alternative measures of share repurchases (Appendix Table A8). Panel A focuses on material repurchases, while Panel B uses the number of common shares repurchased during the quarter, as reported by firms, instead of the baseline cash-flow-based measure.

Appendix Table A9 and Appendix Table A10 report instrumental-variable estimates corresponding to the reduced-form specifications in Table 8 and Table 9, respectively. In both cases, historical drawdown is instrumented using exposure to dot-com bubble valuations, allowing us to isolate the component of historical price anchoring associated with managers' exposure to the bubble. The IV estimates indicate that larger instrumented historical drawdowns are associated with a higher likelihood of both undervaluation claims and opportunistic repurchases, with statistically significant effects in the full sample and post-2005 specifications; estimates are less precise in the post-2015 and narrow-window specifications, where the first stage is also weaker.

Appendix Table A11 examines how firms finance repurchases following stock-price drawdowns. In general, larger drawdowns are associated with both reductions in cash holdings and increases in debt. Firms exposed to the dot-com bubble do not exhibit systematically

different changes in cash holdings overall, although they are somewhat more likely to increase debt. Across firms, repurchases are generally associated with both lower cash holdings and higher debt. Importantly, however, the incremental repurchasing activity of dot-com-exposed firms is accompanied by significantly greater cash depletion. By contrast, exposure does not significantly amplify the increase in debt associated with repurchases in the same quarter. Thus, while exposed firms appear somewhat more inclined to increase debt generally, their incremental repurchasing activity appears to be financed disproportionately through cash rather than concurrent borrowing.

Finally, we examine whether the market responds differently to undervaluation claims that are more likely to reflect anchored valuation beliefs. Appendix Table A12 shows that the interaction between an undervaluation claim and dot-com exposure is negative at every horizon, with the attenuation generally becoming larger over longer horizons. Although these estimates are imprecise and statistically insignificant, their consistently negative sign is suggestive of a weaker market response to claims made by dot-com-exposed firms. This pattern is consistent with such claims containing less information about fundamental value when managers' valuation beliefs are more strongly influenced by salient historical prices.

6 Managerial Memory

If persistent price anchors operate through memory, their influence should fade as the reference price recedes and be stronger when managers who experienced the dot-com episode remain at the firm. We test these two implications below.

6.1 Fading salience of price peaks

Table 10 interacts each standardized drawdown measure with the log number of days since the relevant peak. The negative coefficients on the 52-week and historical drawdowns reproduce the strong relation documented above: larger drawdowns are associated with a higher probability of an undervaluation claim. More importantly, the interactions with time since the peak are positive and statistically significant. Thus, a given drawdown is more strongly associated with a claim when its reference peak is recent, consistent with fading salience rather than a permanent firm-specific effect.

6.2 Personal exposure of managers to the dot-com bubble

The dot-com results may reflect organizational memory that survives managerial turnover or the personal memories of managers who experienced the episode. To distinguish personal from organizational memory, we define *CEO/CFO same as bubble* as an indicator for whether a current CEO or CFO also served as a CEO or CFO at the firm during the bubble and interact it with *Exposed*. Panel A of Table 11 shows that the exposure effect is substantially stronger when a bubble-era manager remains. In the interaction specification, managerial continuity adds 1.16 percentage points to the exposure effect. The interaction remains positive and significant with firm fixed effects and in the post-2005 and post-2015 samples, while the exposure main effect becomes smaller and statistically insignificant.

Panel B of Table 11 provides parallel evidence for opportunistic repurchases. The interaction is positive and significant in the baseline and later-period samples. Overall, the continuity results are consistent with personal managerial memory as one channel through which bubble-era prices continue to shape beliefs and actions.

7 Conclusion

Using explicit undervaluation claims from earnings-call transcripts, we study how managers assess the value of their firms' shares. The claims are rare but economically meaningful: they are followed by positive stock-price reactions without reversal, are more common when managers have greater long-term equity exposure, and predict opportunistic repurchases. This evidence suggests that the claims reflect genuine managerial beliefs rather than generic promotional language.

Managers are more likely to claim undervaluation when valuation multiples are low and when prices have fallen sharply from salient prior peaks. Distance from the 52-week high remains strongly predictive after conditioning on recent returns, while the reverse is not true, and the relation weakens as the peak recedes. These findings are consistent with managers using salient historical prices as anchors when assessing intrinsic value.

The dot-com bubble provides complementary evidence as well as implications for corpo-

rate actions. TMT firms publicly listed before the March 2000 peak remain more likely to make undervaluation claims and undertake opportunistic repurchases years later, particularly when bubble-era managers remain at the firm. Overall, the results suggest that salient market experiences can persist in managerial memory and continue to shape valuation beliefs and corporate actions long after the original episode.

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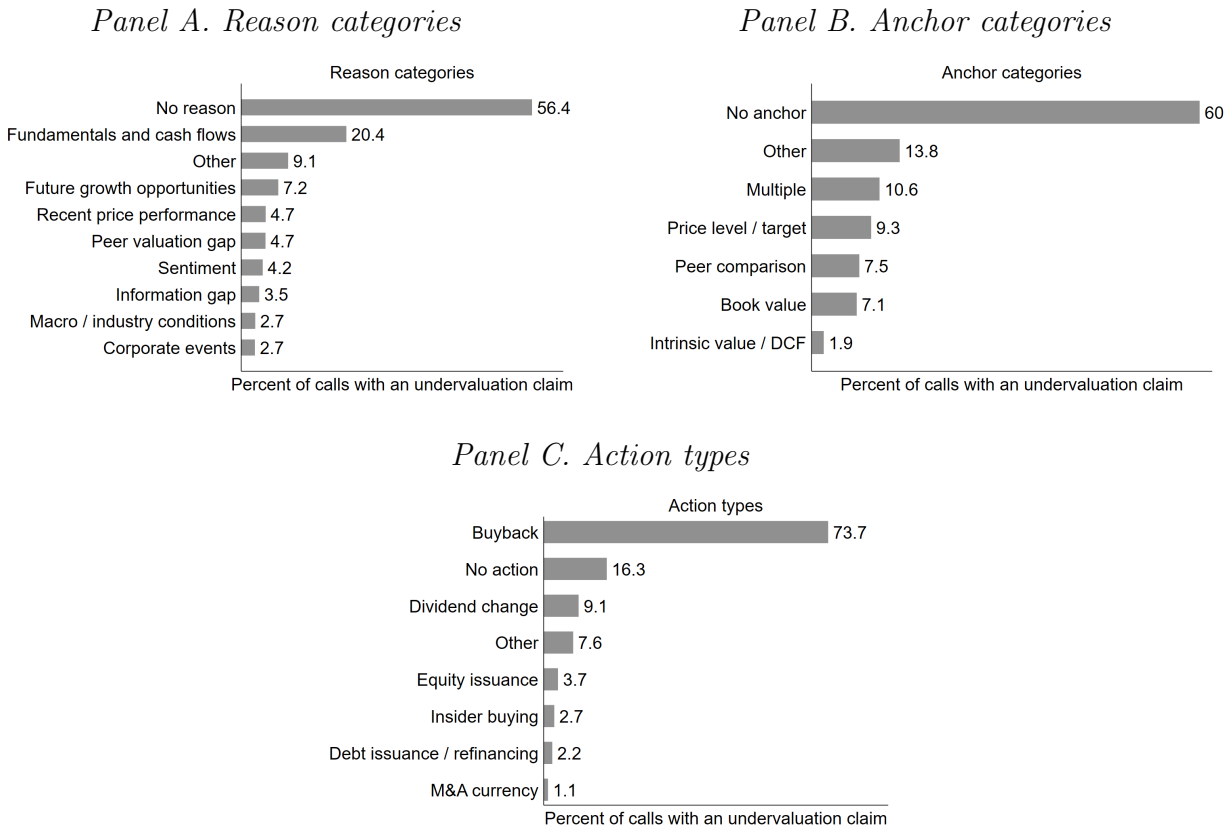


Figure 1: **Characteristics of Extracted Undervaluation Claims**

Panel A reports the distribution of reason categories associated with undervaluation claims, allowing each event to include multiple reasons. Panel B reports the corresponding distribution of valuation-anchor categories, also allowing multiple anchors per event. Panel C reports the distribution of corporate actions linked to managerial undervaluation claims.

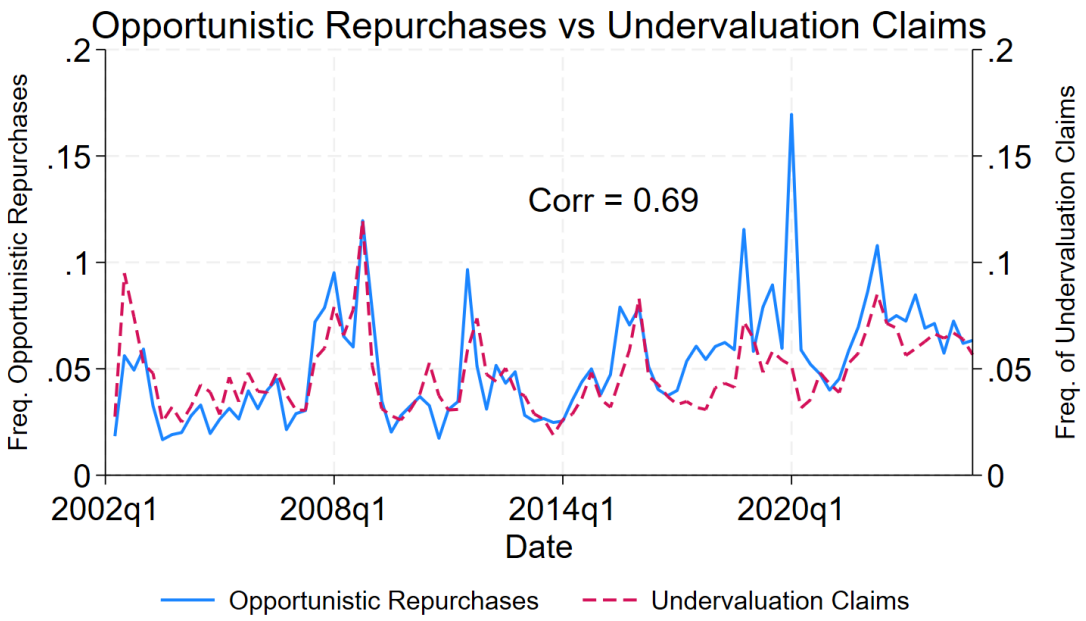


Figure 2: **Time-Series Comovement of Opportunistic Repurchases and Undervaluation Claims**

This figure plots the quarterly frequencies of opportunistic repurchases and managerial undervaluation claims from 2002Q1 through 2024Q4. The solid line reports the fraction of firm-quarters classified as opportunistic repurchases, while the dashed line reports the fraction of earnings-call transcripts containing an undervaluation claim.

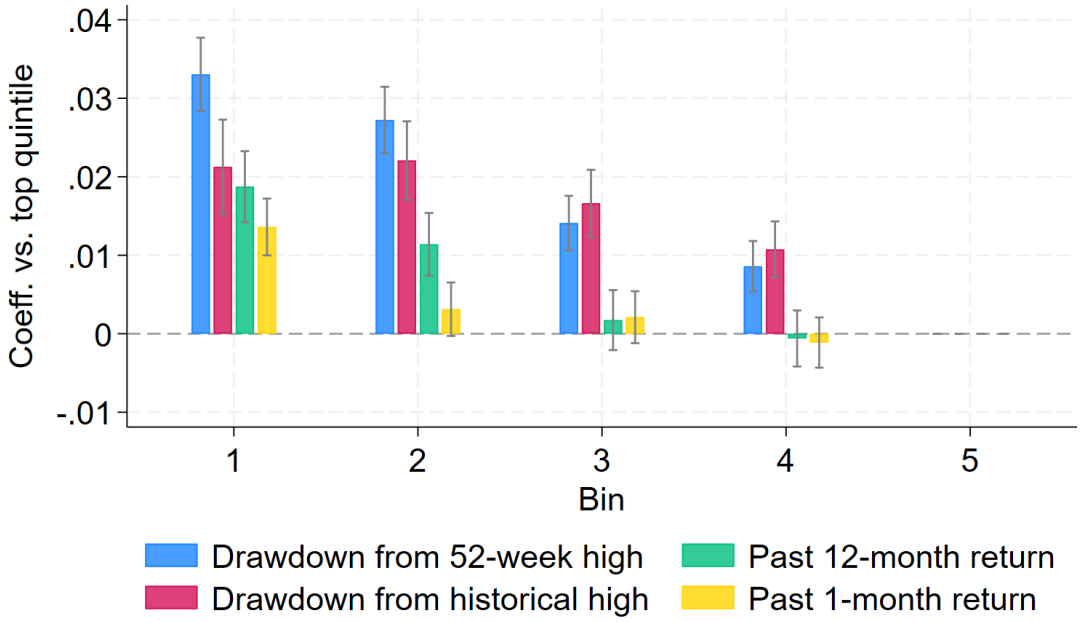
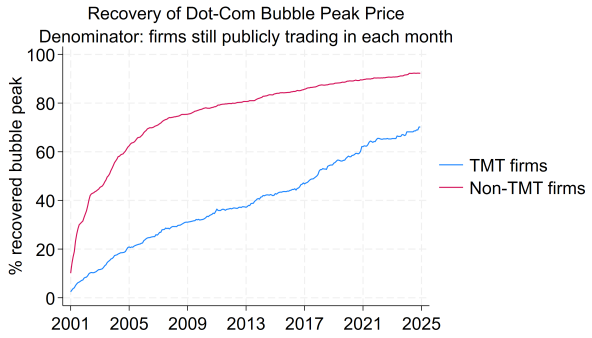


Figure 3: **Undervaluation Claims Across Stock-Price and Return Quintiles**

This figure reports coefficients from separate regressions of an undervaluation-claim indicator on quintile indicators for the distance from the 52-week high, distance from the historical high, past 12-month return, and past 1-month return. Quintile 5 is omitted; quintile 1 contains firms farthest below prior highs or with the lowest past returns. All specifications include the controls listed in Table 2 and earnings-call calendar-date fixed effects, use equal-quarter weights, and report standard errors clustered by firm and date. Coefficients are in probability units, and error bars show 95% confidence intervals.

Panel A. Conditional on remaining publicly traded



Panel B. Fixed December 2000 denominator

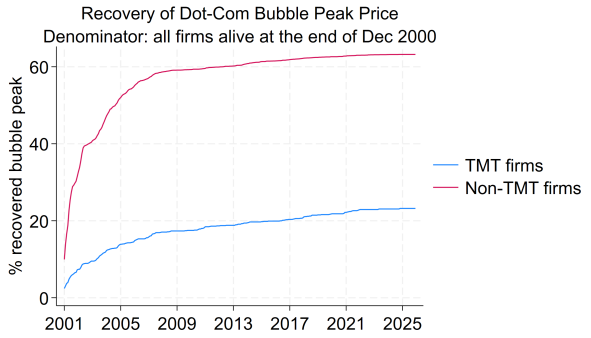


Figure 4: **Recovery of Dot-Com Bubble Peak Prices**

This figure plots the cumulative share of TMT and non-TMT firms whose stock prices recovered their firm-specific dot-com bubble peaks. Panel A uses firms remaining publicly traded in each month, while Panel B uses all firms publicly traded at the end of December 2000 as a fixed denominator, retaining subsequently delisted firms. TMT firms recover their peak prices more slowly and less frequently than non-TMT firms. TMT firms are defined in the text.

Table 1: **Illustrative Examples of Managerial Undervaluation Claims**

This table reports four illustrative examples of managerial undervaluation claims extracted from earnings-call transcripts. For brevity, the supporting verbatim passages for the extracted reasons, anchors, and actions are not reported separately.

Company	Date	Belief Evidence Quote	Other Attributes
T-Mobile US Inc	2018-02-08	"If you look at our forward multiples as a percentage of cash flow, even as to what we've guided, let alone what you're going to see in '20, '21, '22, we're a very, very affordable stock as compared to other comps that are out there. And that's why we're doing the buyback at this point."	**Prompted:** True **Strength:** Strong **Reasons:** Fundamentals **Anchors:** Multiple; Peer Comparison **Actions:** Buyback; Insider Buying
AbbVie Inc.	2017-10-27	"So despite our recent strong stock performance, our PE multiple still has significant room for expansion to be valued consistent with our top-tier biotech peers, offering the potential for strong shareholder returns."	**Prompted:** False **Strength:** Weak **Reasons:** Peer valuation gap **Anchors:** Multiple, Peer comparison **Actions:** None
Apple Inc.	2014-04-23	"We decided to continue to allocate the vast majority of the incremental capital return to share repurchases because we believe our current stock price does not reflect the full value of the Company ... We are very confident in Apple's future and we believe our current stock price does not reflect the full value of the Company."	**Prompted:** False **Strength:** Strong **Reasons:** None **Anchors:** None **Actions:** Buyback; Dividend Change; Debt Issuance
Qualcomm Inc.	2013-07-24	"The stock reacted and came down. We felt it was an extremely attractive time to start buying back shares. So it kind of goes beyond opportunistic and really a view of valuation ... We just feel at the levels of the stock today and the strength of the balance sheet and quite frankly, the strength of the businesses, that it's a good time to be buying."	**Prompted:** True **Strength:** Weak **Reasons:** Recent Price Performance; Fundamentals **Anchors:** None **Actions:** Buyback

Table 2: **Characteristics of Calls With and Without Undervaluation Claims**

This table compares transcript- and firm-level characteristics between earnings calls with and without an undervaluation claim. Past 252-day return, volatility, and drawdown are reported in percentage points. Earnings-to-price, book-to-market, gross profitability, net equity issuance, and asset growth are cross-sectional percentile ranks. Earnings surprise is the IBES standardized unexpected earnings measure (`suescore`). LM tone is the difference between positive and negative Loughran–McDonald word counts scaled by their sum, and LM uncertainty is the share of transcript words classified as uncertainty words. Reported differences are claim minus non-claim means. Means and differences use equal-quarter weights, with standard errors for the differences clustered by date. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	Undervalued	Not undervalued	Difference
		Firm Characteristics	
Log Market Equity	3.12	3.07	**0.04*****
Past 252-day Return	0.45	13.32	**-12.87*****
Past 252-day Return Volatility	44.45	47.91	**-3.47*****
Past 252-day Drawdown	-27.17	-22.91	**-4.26*****
Earnings-to-price Rank	0.62	0.53	**0.09*****
Book-to-market Rank	0.54	0.45	**0.09*****
Gross Profitability Rank	0.53	0.57	**-0.04*****
Net Equity Issuance Rank	0.35	0.46	**-0.11*****
Asset Growth Rank	0.51	0.51	-0.00
		Call Characteristics	
Earnings Surprise	1.05	1.24	**-0.19*****
Call Net Tone (LM)	0.15	0.16	**-0.01****
Call Uncertainty (LM)	0.01	0.01	0.00

Table 3: **Market Reactions to Managerial Undervaluation Claims**

This table reports regressions of Fama–French three-factor cumulative abnormal returns over the 1-day, 5-day, and 21-day windows following the earnings call on an indicator for a managerial undervaluation claim. Panel A reports baseline estimates with and without the controls listed in Table 2. Panel B examines whether the response varies with associated managerial actions and whether the claim was volunteered rather than prompted by an analyst. All specifications include earnings-call calendar-date fixed effects, use equal-quarter weights, and report standard errors clustered by firm and date. Coefficients and standard errors are reported in percentage points, with standard errors shown in parentheses. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

Panel A: Baseline market reactions

	1-day CAR		5-day CAR		21-day CAR	
	No controls	Controls	No controls	Controls	No controls	Controls
Undervaluation Claim	**0.74*****	**0.67*****	**1.31*****	**1.14*****	**1.85*****	**1.53*****
	(0.09)	**(0.10)**	**(0.12)**	**(0.12)**	**(0.16)**	**(0.17)**
Controls	NO	YES	NO	YES	NO	YES
Date fixed effects	YES	YES	YES	YES	YES	YES
Observations	198,336	158,436	198,327	158,431	198,292	158,412

Panel B: Market reactions by action and prompting status

	1-day CAR		5-day CAR		21-day CAR	
	No Action	Volunteered	No Action	Volunteered	No Action	Volunteered
Undervaluation Claim	**0.74*****	**0.25****	**1.15*****	**0.66*****	**1.56*****	**1.21*****
	(0.10)	**(0.13)**	**(0.13)**	**(0.16)**	**(0.17)**	**(0.22)**
Claim × No Action	-0.38		-0.05		-0.16	
	(0.25)		(0.36)		(0.52)	
Claim × Volunteered		**0.85*****		**0.97*****		**0.64****
		(0.18)		**(0.23)**		**(0.30)**
Controls	YES	YES	YES	YES	YES	YES
Date fixed effects	YES	YES	YES	YES	YES	YES
Observations	158,244	158,244	158,239	158,239	158,220	158,220

Table 4: **Undervaluation Claims and Opportunistic Repurchases**

This table examines whether managerial undervaluation claims are associated with contemporaneous and subsequent opportunistic repurchases. An opportunistic repurchase is a firm-quarter in which the firm repurchases shares and insiders are net buyers. The dependent variables indicate opportunistic repurchases in quarters t, $t+1$, and $t+2$. Within each pair of columns, the first specification includes no additional controls, while the second includes opportunistic repurchases in $t-1$ and $t-2$ and the controls listed in Table 2. All specifications include firm and earnings-call calendar-date fixed effects, use equal-quarter weights, and report standard errors clustered by firm and date. Coefficients are reported in probability units, with standard errors shown in parentheses. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	Opportunistic repurchase		Opportunistic repurchase $_{t+1}$		Opportunistic repurchase $_{t+2}$	
	No controls	Controls	No controls	Controls	No controls	Controls
Undervaluation claim	**0.037*****	**0.029*****	**0.016*****	**0.011*****	**0.011*****	0.002
	(0.004)	**(0.004)**	**(0.003)**	**(0.004)**	**(0.003)**	(0.004)
Opportunistic repurchase $_{t-1}$		**0.097*****		**0.053*****		**0.038*****
		(0.006)		**(0.005)**		**(0.005)**
Opportunistic repurchase $_{t-2}$		**0.047*****		**0.035*****		**0.026*****
		(0.005)		**(0.005)**		**(0.005)**
Controls	NO	YES	NO	YES	NO	YES
Firm fixed effects	YES	YES	YES	YES	YES	YES
Date fixed effects	YES	YES	YES	YES	YES	YES
Observations	187,557	131,234	174,468	123,618	169,815	120,593
R-squared	0.142	0.173	0.143	0.160	0.145	0.159

Table 5: **Managerial Incentives and Undervaluation Claims**

This table reports regressions of an undervaluation-claim indicator on managerial equity incentives measured for the CEO, the CEO and CFO jointly, and the five highest-paid executives. Long-term incentives comprise ownership, equity pay mix, and unvested equity; short-term incentives comprise option exposure, options expiring within 12 months, and underwater options expiring within 12 months. All continuous variables are standardized. All specifications include the controls listed in Table 2, firm and earnings-call calendar-date fixed effects, use equal-quarter weights, and report standard errors clustered by firm and date. Coefficients are reported in percentage points, with standard errors shown in parentheses. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	CEO	CEO+CFO	Top 5
Long-term incentives			
Ownership	0.12	0.18	-0.02
	(0.23)	(0.23)	(0.19)
Equity pay mix	0.01	0.00	-0.00
	(0.01)	(0.02)	(0.01)
Unvested equity	**0.54*****	**0.49*****	**0.55*****
	(0.18)	**(0.18)**	**(0.20)**
Short-term incentives			
Option exposure	-0.20	-0.25	**-0.42****
	(0.17)	(0.18)	**(0.18)**
Expiring options ($<$ 12m)	-0.03	-0.06	0.02
	(0.07)	(0.07)	(0.07)
Underwater expiring ($<$ 12m)	-0.04	-0.01	-0.09
	(0.09)	(0.09)	(0.08)
Firm FE	Yes	Yes	Yes
Date FE	Yes	Yes	Yes
Observations	88,289	88,289	88,289

Table 6: **Stock-Price Anchors and Managerial Undervaluation Claims**

Panel A reports linear probability regressions of an undervaluation-claim indicator on two valuation ratios and four price-based signals: book-to-market, earnings-to-price, distance from the 52-week high, distance from the historical high, past 12-month return, and past 1-month return. Columns (1)–(4) include each price-based signal separately alongside the two valuation ratios, while column (5) includes all six measures jointly. More negative distance measures indicate that the stock price is farther below the corresponding peak. Panel B reports a forward-selection exercise based on incremental within-(R^2). At each step, the remaining variable that produces the largest increase in within-(R^2), conditional on the variables selected in earlier steps, is added to the model. The entries report incremental within-(R^2) in percentage points, with the selected variable at each step shown in bold and previously selected variables indicated by an em dash. All continuous variables are standardized. All specifications include the remaining controls listed in Table 2, earnings-call calendar-date fixed effects, and use equal-quarter weights. In Panel A, coefficients and standard errors are reported in percentage points, with standard errors shown in parentheses and clustered by firm and date. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

Panel A: Multivariate Regressions

	(1)	(2)	(3)	(4)	(5)
Distance from 52-week high	**-1.44*****				**-1.56*****
	(0.11)				**(0.14)**
Distance from historical high		**-0.85*****			**-0.40*****
		(0.13)			**(0.15)**
Past 12-month return			**-0.47*****		**0.45*****
			(0.08)		**(0.09)**
Past 1-month return				**-0.57*****	**-0.14***
				(0.07)	**(0.08)**
Book-to-market	**0.81*****	**0.89*****	**0.97*****	**1.07*****	**0.80*****
	(0.12)	**(0.11)**	**(0.12)**	**(0.11)**	**(0.12)**
Earnings-to-price	**1.45*****	**1.53*****	**1.43*****	**1.42*****	**1.49*****
	(0.12)	**(0.12)**	**(0.12)**	**(0.12)**	**(0.12)**
Controls	YES	YES	YES	YES	YES
Date fixed effects	YES	YES	YES	YES	YES
Observations	159,760	159,760	159,760	159,760	159,760

Panel B: Forward Selection by Incremental R-squared

	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6
Book-to-market	0.33	0.17	**0.09**	—	—	—
Earnings-to-price	**0.40**	—	—	—	—	—
Distance from 52-week high	0.29	**0.26**	—	—	—	—
Distance from historical high	0.10	0.14	0.03	0.01	**0.01**	—
Past 12-month return	0.09	0.08	0.01	**0.02**	—	—
Past 1-month return	0.05	0.05	0.00	0.00	0.00	**0.00**
Baseline within $R^2 \times 100$	0.83					
Selected $\Delta R^2 \times 100$	**0.40**	**0.26**	**0.09**	**0.02**	**0.01**	**0.00**
Model within $R^2 \times 100$	1.23	1.49	1.58	1.59	1.61	1.61

Table 7: **Stock-Price Anchors Subsume Past Returns in Predicting Undervaluation Claims**

This table compares the incremental explanatory power of distance from the 52-week high, distance from the historical high, past 12-month return, and past 1-month return. Observations are first sorted into terciles based on the row variable and then, within each tercile, into terciles based on the column variable. Each cell reports the average bottom-minus-top difference in undervaluation-claim probability for the column variable across terciles of the row variable. Diagonal cells are omitted. The specifications use equal-quarter weights and report standard errors clustered by firm and date. Coefficients and standard errors are reported in percentage points, with standard errors shown in parentheses. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	Test signal sorted within conditioning signal			
Conditioning signal	52-week drawdown	Historical drawdown	Past 12-month return	Past 1-month return
52-week drawdown		0.22	0.14	0.19
		(0.21)	(0.16)	(0.14)
Historical drawdown	**1.98*****		**1.06*****	**0.67*****
	(0.17)		**(0.17)**	**(0.14)**
Past 12-month return	**1.48*****	**0.64*****		**0.69*****
	(0.15)	**(0.22)**		**(0.14)**
Past 1-month return	**2.20*****	**1.37*****	**1.28*****	
	(0.17)	**(0.22)**	**(0.17)**	

Table 8: **Dot-Com Bubble Exposure and Managerial Undervaluation Claims**

This table reports linear probability regressions of an undervaluation-claim indicator on exposure to dot-com bubble valuations. *Dot-com-exposed TMT* equals one for TMT firms listed before the March 10, 2000 dot-com peak. Columns (1)–(3) use all calls, calls after 2005, and calls after 2015, respectively. Column (4) replaces this indicator with separate indicators for TMT firms first appearing in CRSP within six months before and after the peak; all other observations form the omitted group. All specifications include the controls listed in Table 2, except earnings surprise, as well as earnings-call calendar-date, three-digit SIC industry, and CRSP-entry-year fixed effects. Regressions use equal-quarter weights and standard errors clustered by firm and date. Coefficients and standard errors are reported in percentage points, with standard errors shown in parentheses. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	All earnings calls	Calls after 2005	Calls after 2015	Listing within ±6m of Mar. 10, 2000
Dot-com-exposed TMT	**1.56*****	**1.60*****	**1.18***	
	(0.49)	**(0.52)**	**(0.69)**	
TMT listed within 6m pre-peak				**2.63***
				(1.60)
TMT listed within 6m post-peak				-0.03
				(0.93)
Controls	YES	YES	YES	YES
Date fixed effects	YES	YES	YES	YES
Industry fixed effects	YES	YES	YES	YES
CRSP-entry year fixed effects	YES	YES	YES	YES
Observations	190,598	174,811	93,200	190,598

Table 9: **Dot-Com Bubble Exposure and Managerial Trading Actions**

This table reports linear probability regressions of repurchases, insider buying, and opportunistic repurchases on exposure to dot-com bubble valuations. *Dot-com-exposed TMT* equals one for TMT firms listed before the March 10, 2000 dot-com peak. An opportunistic repurchase is a firm-quarter in which the firm repurchases shares and insiders are net buyers. Columns (1)–(3) use the full sample, column (4) restricts the opportunistic-repurchase analysis to observations after 2005, and column (5) replaces the exposure indicator with separate indicators for TMT firms first appearing in CRSP within six months before and after the peak; all other observations form the omitted group. All specifications include the firm-level controls listed in Table 2, quarter, three-digit SIC industry, and CRSP-entry-year fixed effects. Regressions use equal-quarter weights and standard errors clustered by firm and quarter. Coefficients and standard errors are reported in percentage points, with standard errors shown in parentheses. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

			Opportunistic repurchases		
	Repurchases	Insider buying	Full sample	After 2005	Listing within ±6 months of Mar. 10, 2000
Dot-com-exposed TMT	3.03	**2.63*****	**1.50****	**1.32****	
	(2.24)	**(0.96)**	**(0.60)**	**(0.64)**	
TMT listed within 6m pre-peak					**3.52***
					(1.90)
TMT listed within 6m post-peak					0.40
					(1.07)
Controls	YES	YES	YES	YES	YES
Quarter fixed effects	YES	YES	YES	YES	YES
Industry fixed effects	YES	YES	YES	YES	YES
CRSP-entry year fixed effects	YES	YES	YES	YES	YES
Observations	177,957	189,803	177,957	163,839	177,957

Table 10: **Fading Salience of Price Peaks**

This table examines whether the relation between past price peaks and managerial undervaluation claims weakens as the peak becomes more distant. Columns (1) and (2) use drawdown from the 52-week high, and columns (3) and (4) use drawdown from the historical high. Columns (2) and (4) interact the drawdown measure with *Log days since peak*, defined as the natural logarithm of the number of days between the peak and the earnings call. All specifications include the controls listed in Table 2 and earnings-call calendar-date fixed effects, use equal-quarter weights, and report standard errors clustered by firm and date. Continuous variables are standardized except *Log days since peak*. Coefficients and standard errors are reported in percentage points, with standard errors shown in parentheses. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	52-week drawdown		Historical drawdown	
	Baseline	Interaction	Baseline	Interaction
Drawdown	**-1.44*****	**-1.73*****	**-0.85*****	**-1.57*****
	(0.11)	**(0.16)**	**(0.13)**	**(0.17)**
Log days since peak		**-0.34****		**-1.02*****
		(0.16)		**(0.18)**
Drawdown × log days since peak		**0.48****		**0.66*****
		(0.15)		**(0.13)**
Controls	YES	YES	YES	YES
Date fixed effects	YES	YES	YES	YES
Observations	159,760	159,760	159,760	159,760

Table 11: **Managerial Memory and Valuation Beliefs**

This table tests whether bubble-era managerial continuity strengthens the relation between dot-com exposure and subsequent beliefs and actions. The dependent variable indicates an undervaluation claim in Panel A and an opportunistic repurchase in Panel B. *Exposed* identifies TMT firms listed before the March 10, 2000 dot-com peak; *CEO/CFO same as bubble* identifies firms whose current CEO or CFO also served there during the bubble. In each panel, column (1) reports the baseline exposure specification, column (2) adds managerial continuity and its interaction with exposure, and column (3) adds firm fixed effects, which absorb *Exposed*. Columns (4) and (5) restrict the interaction specification to post-2005 and post-2015 observations. Panel A includes the controls in Table 2, excluding earnings surprise, and earnings-call date fixed effects; Panel B includes the corresponding firm-level controls, and quarter fixed effects. All columns except (3) include three-digit SIC industry and CRSP-entry-year fixed effects. Regressions use equal-quarter weights, with standard errors clustered by firm and earnings-call date in Panel A and by firm and quarter in Panel B. Coefficients and standard errors are in percentage points; standard errors appear in parentheses. *, **, and *** denote significance at the 10%, 5%, and 1% levels.

Panel A: Managerial undervaluation claims

	Baseline	Interaction	Firm FE	Post-2005	Post-2015
Exposed	**1.56*****	**0.91***		0.88	0.65
	(0.49)	**(0.53)**		(0.55)	(0.71)
CEO/CFO same as bubble		-0.02	-0.13	-0.11	-0.57
		(0.24)	(0.29)	(0.25)	(0.43)
Exposed × CEO/CFO same as bubble		**1.16****	**1.52*****	**1.49*****	**1.91***
		(0.50)	**(0.58)**	**(0.57)**	**(1.06)**
Controls	YES	YES	YES	YES	YES
Industry fixed effects	YES	YES	NO	YES	YES
CRSP-entry year fixed effects	YES	YES	NO	YES	YES
Firm fixed effects	NO	NO	YES	NO	NO
Date fixed effects	YES	YES	YES	YES	YES
Observations	190,598	190,598	190,391	174,811	93,200

Panel B: Opportunistic repurchases

	Baseline	Interaction	Firm FE	Post-2005	Post-2015
Exposed	**1.50****	0.72		0.72	0.33
	(0.60)	(0.66)		(0.69)	(0.92)
CEO/CFO same as bubble		**-0.99*****	**-0.80****	**-1.05*****	**-1.70*****
		(0.24)	**(0.32)**	**(0.25)**	**(0.43)**
Exposed × CEO/CFO same as bubble		**1.33****	0.53	**1.18***	**3.01****
		(0.59)	(0.68)	**(0.65)**	**(1.23)**
Controls	YES	YES	YES	YES	YES
Industry fixed effects	YES	YES	NO	YES	YES
CRSP-entry year fixed effects	YES	YES	NO	YES	YES
Firm fixed effects	NO	NO	YES	NO	NO
Date fixed effects	YES	YES	YES	YES	YES
Observations	177,957	177,957	177,742	163,839	88,007

A Regression Derivations

This appendix derives the interpretations of the claim and return regressions in Section 1.

A.1 Claim regression

Given equations (1) and (2), define the latent disclosure index as

$$s_{i,t}^{m} = \gamma' X_{i,t} + \xi_{i,t}^{m} - \phi' D_{i,t}. \tag{6}$$

The disclosure rule implies

$$\Pr\left(C_{i,t} = 1 \mid X_{i,t}, D_{i,t}, \xi_{i,t}^{m}\right) = F_{\delta}\left(s_{i,t}^{m}\right), \tag{7}$$

where F_{δ} is the conditional cumulative distribution function of the unobserved disclosure cost. Suppose that F_{δ} is continuously differentiable and that $f_{\delta}(0) > 0$. Centering the latent index at zero and taking a first-order approximation gives

$$F_{\delta}\left(s_{i,t}^{m}\right) \approx F_{\delta}(0) + \lambda s_{i,t}^{m}, \qquad \lambda = f_{\delta}(0) > 0. \tag{8}$$

Writing the binary claim indicator as its conditional probability plus a mean-zero realization error then gives

$$C_{i,t} \approx F_{\delta}(0) + \lambda\gamma' X_{i,t} - \lambda\phi' D_{i,t} + \lambda\xi_{i,t}^{m} + \varepsilon_{i,t}^{C}, \tag{9}$$

where $\varepsilon_{i,t}^{C}$ also absorbs the higher-order approximation error.

After controlling for $D_{i,t}$ and the fixed effects, suppose that managers' private information is mean-independent of $X_{i,t}$. The population coefficient on $X_{i,t}$ in the linear claim regression then satisfies

$$\beta_X = \lambda\gamma. \tag{10}$$

Because $\lambda > 0$, the signs of β_X coincide with those of γ. When the elements of $X_{i,t}$ are standardized, their coefficient magnitudes measure their relative importance up to the common

positive scale factor λ.

A.2 Return regression

Let $W_{i,t}$ collect $X_{i,t}$, $D_{i,t}$, $Z_{i,t}$, and the fixed effects. Let tildes denote residuals after projecting on $W_{i,t}$, and define

$$\xi_{i,t}^{\perp} = \xi_{i,t}^{m} - \text{Proj}\left(\xi_{i,t}^{m} \mid W_{i,t}\right). \tag{11}$$

Residualizing the local approximation to the claim equation gives

$$\widetilde{C}_{i,t} = \lambda \xi_{i,t}^{\perp} + \eta_{i,t}^{C}, \tag{12}$$

where $\eta_{i,t}^{C}$ contains residual disclosure, realization, and approximation noise.

By the Frisch–Waugh–Lovell theorem, the coefficient on the claim indicator in the return regression is

$$b_1 = \frac{\text{Cov}\left(\widetilde{C}_{i,t}, \widetilde{CAR}_{i,t+h}\right)}{\text{Var}\left(\widetilde{C}_{i,t}\right)}. \tag{13}$$

If the residual disclosure noise is orthogonal to residual abnormal returns, then

$$b_1 = \frac{\lambda \,\text{Cov}\left(\xi_{i,t}^{\perp}, \widetilde{CAR}_{i,t+h}\right)}{\text{Var}\left(\widetilde{C}_{i,t}\right)}. \tag{14}$$

Since $\lambda > 0$, a positive b_1 indicates that the private-information component of perceived undervaluation predicts positive abnormal returns. Interpreting b_1 this way requires that, after conditioning on the included observables, the claim indicator not simply proxy for other favorable public information disclosed during the call that also predicts subsequent abnormal returns.

B Matching LSEG Transcripts to CRSP

This appendix describes how we match earnings-call transcripts from LSEG StreetEvents to CRSP securities. We first identify candidate firms using transcript tickers and call dates, resolve ambiguous matches using company-name similarity, and then use exact name matching for transcripts without a usable ticker. Table A13 summarizes the resulting sample attrition.

B.1 Transcript metadata and CRSP candidates

We download all earnings-related transcripts from LSEG, including earnings conference calls, presentations, and press releases.[14] From each transcript, we extract the ticker and exchange identifiers from the filename and the company name and event date from the header. Restricting event dates to December 31, 2024, or earlier yields 300,316 unique files.[15]

We construct the matching crosswalk from the CRSP monthly stock file. For each CRSP firm identifier (*permco*), we retain all historical company names and ticker symbols, its first and last CRSP months, and the corresponding monthly security identifier (*permno*), share code, and exchange code. Retaining historical ticker–name combinations accommodates ticker changes, name changes, mergers, and reorganizations. We also associate acquired firms with their acquirers' tickers because LSEG may store post-acquisition transcripts under the acquirer's ticker while retaining the acquired firm's name.

B.2 Ticker and company-name matching

We first match each transcript to all candidate CRSP firms that have used the ticker reported in its filename. Among the 300,316 files, 5,433 lack a usable ticker and 32,386 do not match the CRSP ticker crosswalk, leaving 262,497 files for ticker-based matching.

[14] Earnings conference calls account for approximately 99% of the sample.

[15] Our sample uses the LSEG transcript coverage available when the original files were downloaded. Effective June 30, 2025, LSEG expanded live transcript coverage from 1,500 to 2,500 companies globally. LSEG subsequently informed us that historical transcripts for the newly covered companies were also backfilled, increasing the number of files returned by an otherwise comparable U.S.-exchange search from approximately 318,000 to 450,000 and expanding the available exchange list from 52 to 82. We retain the original download to maintain a consistent coverage vintage. Many of the subsequently added securities are associated with smaller regional or OTC venues and therefore fall outside our final sample of common stocks listed on the NYSE, AMEX, or Nasdaq.

We discard candidate firms whose CRSP listing periods do not include the transcript month. For each remaining transcript–*permco* pair, we compare the transcript company name with all historical CRSP names and retain the highest similarity score. We then select the uniquely best-scoring candidate associated with the ticker, rejecting zero-score matches and ties. The ambiguity screen removes 1,265 files. This procedure assigns 239,507 transcript files to a CRSP firm and at least one *permno* observed in the call month.

B.3 Fallback matching and final restrictions

For transcripts without a usable ticker or ticker match, we require an exact company-name match, restrict the event month to the candidate firm's CRSP listing period, and retain only unique matches. This procedure recovers an additional 14,459 files.

Combining both procedures yields 253,966 matched transcript files and 258,016 transcript–*permno* observations. The observation count is larger because a firm may have multiple CRSP securities in a given month. We then restrict the sample to ordinary common shares with CRSP share codes 10 or 11 listed on the NYSE, AMEX, or Nasdaq, corresponding to exchange codes 1, 2, or 3. The final matched sample contains 199,884 transcript files and 202,963 transcript–*permno* observations, as reported in Table A13. Because coverage is sparse early in the sample, the main analysis begins in the second quarter of 2002.

C LLM Extraction Prompt

You are a STRICT information-extraction engine for earnings call transcripts.

HARD RULES 1) Use ONLY the provided transcript text. Do NOT use outside knowledge. 2) Do NOT infer motives, beliefs, or facts not stated. 3) Create an event ONLY when the transcript is EXPLICIT. If there is any ambiguity, extract NO event. 4) All quotes must be verbatim (including punctuation/ typos) and short (max 3 sentences each). 5) If a field is not explicitly supported by the transcript, set it to null (or [ ] for lists).

OUTPUT RULES 1) Output MUST be a valid JSON value and NOTHING ELSE (no markdown, no commentary). 2) If NO valuation-belief events exist, output exactly ONE of these JSON strings (and nothing else): "none" OR "active" OR "not active" OR "unclear" (based on `mentions buyback anywhere` defined below). 3) Otherwise (if ANY valuation-belief event exists), output exactly ONE JSON object with EXACTLY these top-level keys: "call level", "events", "actions". 4) In that JSON object, `call level.mentions buyback anywhere` MUST be set to exactly ONE of: "none", "active", "not active", "unclear", using the same definition below. 5) If events exist but there are no related actions, set `actions = [ ]`.

TASK From the transcript below, extract: (1) managers' explicit beliefs about the company's OWN stock valuation (undervalued/ overvalued/ fairly valued), (2) any explicitly mentioned RELATED ACTIONS (e.g., buyback, dividend, issuance) that appear in the SAME valuation-belief passage OR are explicitly stated as connected to that valuation comment, and (3) a call-level flag (`mentions buyback anywhere`) indicating whether ANY COMPANY representative mentions repurchasing the company's OWN equity (shares/ common stock) ANYWHERE in the transcript, independent of whether any valuation-belief event exists.

DEFINITION: mentions buyback anywhere (call-level buyback posture; independent of valuation-belief events) Consider ONLY statements by COMPANY representatives (not analysts) about repurchasing/ buying back/ retiring the company's OWN shares/common stock/ equity, including discussion of a repurchase authorization/ program, ASR, open-market repurchases, etc.

EXCLUSIONS (do not count toward `mentions buyback anywhere`): 1) only an analyst mentions buybacks and no company representative does. 2) the discussion is about repurchasing debt (bond buybacks, tender offers for notes), preferred securities, warrants, or other non-common-equity instruments. 3) the discussion is about repurchasing another company's shares. 4) "stock" refers to inventory or other non-equity usage.

Set `mentions buyback anywhere` to exactly ONE of these strings using the PRIORITY rule: 1) "ac-

tive": ANY company-rep statement anywhere in the transcript explicitly indicates repurchases are occurring/occurred or are intended/planned. 2) "not active": ANY company-rep statement explicitly indicates they are not repurchasing / paused / suspended / will not repurchase, OR that the repurchase program/ASR is completed or authorization exhausted/expired, AND there is NO "active" statement anywhere. 3) "unclear": a company representative mentions buybacks but no explicit "active" or "not active" statement is present. 4) "none": no COMPANY representative mentions equity repurchases anywhere in the transcript after applying the exclusions above.

DEFINITION: Valuation-belief event Create an event ONLY if BOTH are true: 1) The speaker is a COMPANY representative (executive/management/IR), not an analyst. 2) The manager quote contains BOTH: (i) an explicit reference to the company's OWN stock/ shares/ share price/ valuation, AND (ii) an explicit valuation judgment: undervalued/ overvalued/ fairly valued (or a direct equivalent like "our stock is too cheap"/ "our shares are overpriced"/ "attractive value at current prices").

IMPORTANT EXCLUSIONS (do NOT count as events): 1) Operations/ assets/ acquisition targets being undervalued. 2) Generic statements like "we create shareholder value" without explicit stock valuation. 3) Buybacks/ dividends alone are NOT enough unless the manager explicitly connects them to stock undervaluation/ overvaluation/ fair value.

MULTIPLE EVENTS: 1) Extract multiple events if distinct valuation-belief passages occur in different places. 2) If the same manager repeats the same valuation belief in adjacent turns, treat it as ONE event.

ROLE TIGHTENING: 1) Use `role_in_call = "CEO"`, `"CFO"`, or `"IR"` only when that role is explicitly stated in the speaker label. 2) Otherwise, if the speaker is a company representative, set `role_in_call = "OtherExecutive"`. 3) If the speaker is a company representative but no name is provided, set `role_in_call = "UnknownCompanyRep"`.

REASON EXTRACTION: After an event is found, search for reasons within the same manager passage (valuation quote + immediate continuation by the same manager, stopping when the speaker changes). Each event may have MULTIPLE reasons (0 to many); if none, set `reasons=[ ]`. Extract a reason ONLY if the manager explicitly explains why they hold the valuation belief, using explanatory linkage (e.g., because/ due to/ given/ driven by/ reflects/ based on/ in light of/ in view of) or any other explicit wording that states the reason behind the belief, regardless of specificity of the statement.

ANCHOR EXTRACTION: After an event is found, search for anchors within the same manager passage (valuation quote + immediate continuation by the same manager, stopping when the speaker changes). Each event may have multiple valuation anchors (0 to many); if none, set `valuation_anchors = [ ]`. An anchor must reference either (i) a valuation method/ metric (e.g., P/E, multiples, DCF, book value, price/ target/ discount/ premium) or (ii) an explicit comparison set (e.g., industry/ peers/ competitors/ sector).

Generic value judgments ("attractive value", "good value", "cheap at these levels") are NOT anchors unless explicitly tied to a method/metric or a comparison. Comparisons to industry/ peers/ competitors/ sector should be classified as `anchor_type = "peer_comps"`; market-wide comparisons should be classified as `anchor_type="other"`. `numbers_mentioned` must copy any numeric phrase exactly as written (e.g., "10x", "$50", "15% discount").

CONFIDENCE SCORE (`belief_strength_1to2`) 2 = direct, unambiguous valuation claim about the company's stock (e.g., undervalued/ overvalued/ fairly valued, too cheap/ overpriced, trading at a discount/ premium). 1 = mild valuation language that implies value but is not definitive (e.g., attractive/ good value, we like these levels, appetite to buy at current prices).

LINGUISTIC MARKERS: Set markers only from the valuation-belief sentence(s) (the sentence(s) that state the stock is undervalued/ overvalued/ fairly valued) and any immediately adjacent words/ sentences that directly qualify or intensify that belief. `has_hedging_language=true` only if the valuation belief itself is qualified/uncertain. `has_emphasis_language=true` only if the valuation belief itself is strongly emphasized/absolute.

speaker turn tag: 1) Use the bracket ID shown in the transcript for the manager's valuation quote turn (example: "[96]"). 2) If no bracket IDs exist, set `speaker_turn_tag=null`.

SCHEMA (follow exactly) If output is a JSON object, it MUST match exactly:

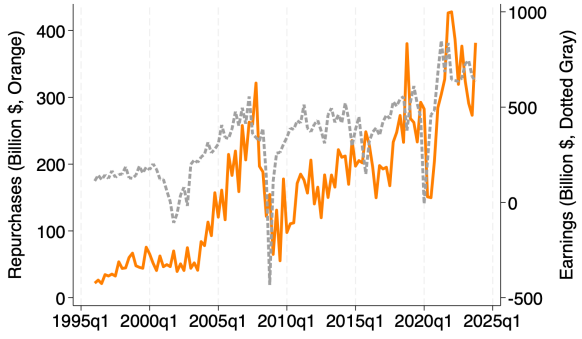
```
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    "has_undervalued_event": boolean,
    "has_overvalued_event": boolean,
    "has_fairly_valued_event": boolean,
    "mentions_buyback_anywhere": "none", "active", "not_active", "unclear"
  },
  "events": [
    {
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      },
      "speaker": {
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```

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  "role_in_call": "CEO", "CFO", "IR", "OtherExecutive", "UnknownCompanyRep"
},
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  "analyst_firm": string|null,
  "analyst_question_quote": string|null
},
"valuation_belief": {
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  "belief_strength_1to2": integer,
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      "action_quote": string
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D Additional Figures and Tables

Panel A. Total repurchases and earnings



Panel B. Total versus opportunistic repurchases

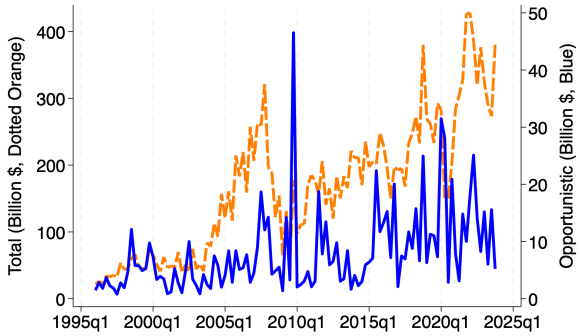


Figure A1: **Repurchase Cyclicality: Total versus Opportunistic Repurchases** This figure presents quarterly aggregate repurchase activity among publicly traded U.S. firms from 1996Q1 through 2023Q4. Panel A plots total repurchase amounts, shown by the solid orange line, together with total earnings, shown by the dotted gray line. Panel B plots total repurchase amounts, shown by the dotted orange line, together with total opportunistic repurchases, shown by the solid blue line. Opportunistic repurchases are defined as described in the text.

Table A1: **Characteristics of Managerial Undervaluation Claims**

This table reports selected characteristics of the extracted managerial undervaluation claims. The first column reports the share of all undervaluation claims exhibiting each characteristic. The second and third columns report the corresponding shares separately for analyst-prompted and non-prompted claims.

	All	Prompted	Not Prompted
Prompted by analyst question	48.6		
Strong belief	55.8	52.2	59.2
Has explicit reason	43.6	37.9	49.0
Has valuation anchor	39.2	33.9	44.1
Has linked action	83.8	84.5	83.0

Table A2: **Market Reactions to Managerial Undervaluation Claims (Unsuppressed)**

This table reports regressions of Fama–French three-factor cumulative abnormal returns over the 1-day, 5-day, and 21-day windows following the earnings call on an indicator for a managerial undervaluation claim. All continuous controls are standardized. All specifications include earnings-call calendar-date fixed effects, use equal-quarter weights, and report standard errors clustered by firm and date. Coefficients and standard errors are reported in percentage points, with standard errors shown in parentheses. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	1-day CAR		5-day CAR		21-day CAR	
	No controls	Controls	No controls	Controls	No controls	Controls
Undervaluation Claim	**0.74*****	**0.67*****	**1.31*****	**1.14*****	**1.85*****	**1.53*****
	(0.09)	**(0.10)**	**(0.12)**	**(0.12)**	**(0.16)**	**(0.17)**
Log Market Equity		**-0.22*****		**-0.29*****		**-0.42*****
		(0.04)		**(0.05)**		**(0.07)**
Book-to-market Rank		**0.11*****		**0.17*****		**0.32*****
		(0.04)		**(0.05)**		**(0.07)**
Earnings-to-price Rank		0.06		**0.10****		0.10
		(0.04)		**(0.05)**		(0.07)
Past 252-day Return		**-0.11****		**-0.17*****		**-0.17****
		(0.04)		**(0.06)**		**(0.08)**
Past 252-day Drawdown		**-0.37*****		**-0.53*****		**-0.73*****
		(0.06)		**(0.09)**		**(0.13)**
Earnings Surprise		**2.52*****		**2.82*****		**2.98*****
		(0.04)		**(0.04)**		**(0.06)**
Call Net Tone (LM)		**1.10*****		**1.24*****		**1.26*****
		(0.03)		**(0.04)**		**(0.05)**
Call Uncertainty (LM)		**0.23*****		**0.29*****		**0.33*****
		(0.03)		**(0.03)**		**(0.05)**
Gross Profitability Rank		**-0.36*****		**-0.41*****		**-0.26*****
		(0.03)		**(0.05)**		**(0.07)**
Asset Growth Rank		-0.03		-0.01		-0.04
		(0.03)		(0.04)		(0.05)
Net Equity Issuance Rank		**-0.05***		**-0.08****		**-0.23*****
		(0.03)		**(0.04)**		**(0.05)**
Past 252-day Volatility		**-0.28*****		**-0.31*****		-0.24
		(0.07)		**(0.10)**		(0.15)
Date fixed effects	YES	YES	YES	YES	YES	YES
Observations	198,336	158,436	198,327	158,431	198,292	158,412

Table A3: **Long-Run Market Reactions to Managerial Undervaluation Claims**

This table reports regressions of Fama–French three-factor cumulative abnormal returns over the 3-month, 12-month, and 24-month horizons following the earnings call on an indicator for a managerial undervaluation claim. Each horizon includes returns from the call through the end of the calendar month and the following 3, 12, or 24 complete calendar months. All continuous controls are standardized. All specifications include earnings-call calendar-date fixed effects, use equal-quarter weights, and report standard errors clustered by firm and date. Coefficients and standard errors are reported in percentage points, with standard errors shown in parentheses. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	3-month CAR		12-month CAR		24-month CAR	
	No Controls	Controls	No Controls	Controls	No Controls	Controls
Undervaluation Claim	**2.04*****	**1.44*****	**3.19*****	**1.73****	**3.91*****	**2.38***
	(0.35)	**(0.31)**	**(0.87)**	**(0.71)**	**(1.39)**	**(1.32)**
Log Market Equity		**-0.78*****		**-2.17*****		**-4.63*****
		(0.14)		**(0.41)**		**(0.81)**
Book-to-market Rank		**0.57*****		**2.27*****		**2.99*****
		(0.14)		**(0.47)**		**(0.85)**
Earnings-to-price Rank		0.09		-0.43		-1.01
		(0.13)		(0.41)		(0.69)
Past 252-day Return		-0.14		-0.34		0.16
		(0.18)		(0.45)		(0.60)
Past 252-day Drawdown		**-0.61*****		**-1.63*****		**-2.58*****
		(0.23)		**(0.57)**		**(0.84)**
Earnings Surprise		**2.99*****		**3.36*****		**4.08*****
		(0.09)		**(0.19)**		**(0.34)**
Call Net Tone (LM)		**1.52*****		**1.38*****		**1.21****
		(0.10)		**(0.26)**		**(0.48)**
Call Uncertainty (LM)		**0.62*****		**0.96*****		**1.77*****
		(0.09)		**(0.27)**		**(0.49)**
Gross Profitability Rank		0.19		**2.03*****		**3.92*****
		(0.13)		**(0.42)**		**(0.76)**
Asset Growth Rank		-0.16		**-0.72****		**-1.27****
		(0.10)		**(0.29)**		**(0.52)**
Net Equity Issuance Rank		**-0.29*****		**-1.02*****		**-1.26****
		(0.10)		**(0.31)**		**(0.58)**
Past 252-day Volatility		0.18		0.77		**-4.50*****
		(0.28)		(0.86)		**(1.36)**
Date fixed effects	YES	YES	YES	YES	YES	YES
Observations	198,317	158,426	198,317	158,426	188,506	150,770

Table A4: **Managerial Undervaluation Claims and Future Operating Performance**

This table examines whether managerial undervaluation claims predict operating performance over the following six fiscal quarters. The dependent variables are standardized cross-sectional percentile ranks of net income to assets, operating cash flow to assets, sales to book enterprise value, and operating cash flow to sales. Forecast horizons begin with the next fiscal-quarter release after the earnings call, so $t+1$ refers to the first subsequently reported value. Each specification controls for the contemporaneous and lagged values of the dependent variable and the transcript- and firm-level controls listed in Table 2. All continuous controls are standardized. All specifications include earnings-call calendar-date fixed effects, use equal-quarter weights, and report standard errors clustered by firm and date. Standard errors are shown in parentheses. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	Future fiscal quarter					
	$t+1$	$t+2$	$t+3$	$t+4$	$t+5$	$t+6$
	Panel A: Net income / assets					
Undervaluation claim	**0.029*** **	**0.048*** **	**0.062*** **	**0.060*** **	**0.043*** **	**0.034*** **
	(0.004)	**(0.006)**	**(0.007)**	**(0.009)**	**(0.009)**	**(0.010)**
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Date fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	158,572	157,143	155,490	152,626	148,808	145,171
	Panel B: Operating cash flow / assets					
Undervaluation claim	**0.021*** **	**0.037*** **	**0.042*** **	**0.045*** **	**0.036*** **	**0.031*** **
	(0.004)	**(0.006)**	**(0.008)**	**(0.009)**	**(0.010)**	**(0.010)**
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Date fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	158,572	157,143	155,490	152,626	148,808	145,171
	Panel C: Sales / book enterprise value					
Undervaluation claim	**0.005***	**0.009****	0.004	-0.001	-0.007	**-0.011***
	(0.002)	**(0.003)**	(0.004)	(0.005)	(0.006)	**(0.006)**
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Date fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	150,228	148,548	146,776	143,834	140,125	136,548
	Panel D: Operating cash flow / sales					
Undervaluation claim	**0.019*** **	**0.027*** **	**0.035*** **	**0.040*** **	**0.029*** **	**0.021****
	(0.004)	**(0.007)**	**(0.008)**	**(0.009)**	**(0.010)**	**(0.011)**
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Date fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	156,905	155,430	153,764	150,919	147,144	143,555

Table A5: **Characteristics of Opportunistic and Non-Opportunistic Repurchases**

This table compares firm and earnings-call characteristics across opportunistic and non-opportunistic repurchase quarters. Opportunistic repurchases are firm-quarters in which the firm repurchases shares and insiders are net buyers; non-opportunistic repurchases are repurchasing quarters without insider net buying. Reported differences are opportunistic minus non-opportunistic means. Means and differences use equal-quarter weights, with standard errors clustered by date. Past returns are reported in percentage points. Earnings-to-price, book-to-market, gross profitability, net equity issuance, and asset growth are cross-sectional percentile ranks. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	Opportunistic repurchase	Non-opportunistic repurchase	Difference
		Firm Characteristics	
Log Market Equity	3.04	3.40	**-0.36*****
Past 252-day Return	-2.01	14.92	**-16.92*****
Past 252-day Return Volatility	45.20	40.09	**5.11*****
past 252-day Drawdown	-28.51	-18.34	**-10.17*****
Earnings-to-price Rank	0.60	0.61	**-0.01*****
Book-to-market Rank	0.54	0.42	**0.11*****
Gross Profitability Rank	0.56	0.61	**-0.06*****
Net Equity Issuance Rank	0.37	0.31	**0.05*****
Asset Growth Rank	0.49	0.51	**-0.02*****
		Call Characteristics	
Earnings Surprise	0.34	1.63	**-1.29*****
Call Net Tone (LM)	0.14	0.20	**-0.05*****
Call Uncertainty (LM)	0.01	0.01	**0.00*****

Table A6: **Stock-Price Anchors and Managerial Trading Actions**

This table repeats the analysis in Panel A of Table 6, replacing the undervaluation-claim indicator with an opportunistic-repurchase indicator as the dependent variable. The table reports linear probability regressions of opportunistic repurchases on two valuation ratios and four price-based signals measured at the beginning of each quarter: book-to-market, earnings-to-price, distance from the 52-week high, distance from the historical high, past 12-month return, and past 1-month return. Columns (1)–(4) include each price-based signal separately alongside the two valuation ratios, while column (5) includes all six measures jointly. More negative distance measures indicate that the stock price is farther below the corresponding peak. All continuous variables are standardized. All specifications include the remaining firm-level controls listed in Table 2, quarter fixed effects, and use equal-quarter weights. Coefficients and standard errors are reported in percentage points, with standard errors shown in parentheses and clustered by firm and quarter. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	(1)	(2)	(3)	(4)	(5)
Distance from 52-week high	**-1.23*****				**-0.94*****
	(0.16)				**(0.20)**
Distance from historical high		**-1.04*****			**-0.71*****
		(0.15)			**(0.16)**
Past 12-month return			**-0.49*****		**0.23*****
			(0.11)		**(0.10)**
Past 1-month return				**-0.64*****	**-0.32*****
				(0.11)	**(0.11)**
Book-to-market	**0.82*****	**0.82*****	**0.95*****	**1.02*****	**0.73*****
	(0.16)	**(0.14)**	**(0.16)**	**(0.15)**	**(0.15)**
Earnings-to-price	**0.69*****	**0.82*****	**0.69*****	**0.67*****	**0.77*****
	(0.15)	**(0.15)**	**(0.15)**	**(0.15)**	**(0.15)**
Controls	YES	YES	YES	YES	YES
Firm fixed effects	YES	YES	YES	YES	YES
Quarter fixed effects	YES	YES	YES	YES	YES
Observations	177,959	177,959	177,959	177,959	177,959

Table A7: **Conditional Double Sorts of Distance From the 52-Week High and Past Returns**

This table reports conditional double sorts of undervaluation-claim probabilities based on past 12-month returns and distance from the 52-week high. Panel A sorts observations first by past returns and then, within each return tercile, by distance from the 52-week high; Panel B reverses the sorting order. Interior cells report percentage-point differences relative to firms with high past returns and prices near their 52-week highs. The final column reports the difference between the extreme terciles of the second-stage sorting variable. All specifications use the controls and fixed effects in Table 6, equal-quarter weights, and standard errors clustered by firm and date. Standard errors are shown in parentheses. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

Panel A: Conditional sort of distance from 52-week high within past returns

	Distance from 52-week high			Far below – Near 52-week high
Past 12-month return	Near 52-week high	Middle	Far below 52-week high	Difference
High past return	0.00	**0.94*****	**1.73*****	**1.73*****
		(0.21)	**(0.21)**	**(0.21)**
Middle	0.18	**0.97*****	**2.00*****	**1.81*****
	(0.22)	**(0.24)**	**(0.24)**	**(0.25)**
Low past return	**2.13*****	**3.21*****	**3.01*****	**0.88*****
	(0.27)	**(0.28)**	**(0.28)**	**(0.28)**

Panel B: Conditional sort of past returns within distance from 52-week high

	Past 12-month return			Low – High past return
Distance from 52-week high	High past return	Middle	Low past return	Difference
Near 52-week high	0.00	-0.25	-0.19	-0.19
		(0.22)	(0.24)	(0.24)
Middle	**1.22*****	**0.76*****	**1.22*****	0.00
	(0.21)	**(0.24)**	**(0.25)**	(0.26)
Far below 52-week high	**2.23*****	**2.89*****	**2.84*****	**0.61****
	(0.26)	**(0.28)**	**(0.28)**	**(0.26)**

Table A8: **Dot-Com Bubble Exposure and Managerial Trading Actions: Alternative Repurchase Measures**

This table repeats the analysis in Table 9 using alternative measures of share repurchases. Panel A defines a material repurchase as a firm-quarter in which share repurchases exceed 0.1% of lagged total assets ($\text{prstkc}_t/\text{atq}_{t-1} > 0.001$), rather than the baseline definition of prstkc > 0. Panel B identifies repurchases using reductions in Compustat shares outstanding (cshopq), providing a quantity-based alternative to the cash-flow-based prstkc measure; because cshopq is available only from 2004Q1 onward, the sample begins in 2004Q1. Opportunistic repurchases are defined as quarters in which the firm satisfies the respective repurchase definition and insiders are net buyers. All other variable definitions, controls, fixed effects, weighting, and standard-error adjustments are as in Table 9. Coefficients and standard errors are reported in percentage points, with standard errors shown in parentheses. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

Panel A: Material Share Repurchases

			Opportunistic repurchases		
	Repurchases	Insider buying	Full sample	After 2005	Listing within ±6 months of Mar. 10, 2000
Dot-com-exposed TMT	2.53	**2.63*****	**1.11*****	**1.02****	
	(1.92)	**(0.96)**	**(0.38)**	**(0.41)**	
TMT listed within 6m pre-peak					**3.34****
					(1.37)
TMT listed within 6m post-peak					0.22
					(0.65)
Controls	YES	YES	YES	YES	YES
Quarter fixed effects	YES	YES	YES	YES	YES
Industry fixed effects	YES	YES	YES	YES	YES
CRSP-entry year fixed effects	YES	YES	YES	YES	YES
Observations	177,919	189,803	177,919	163,803	177,919

Panel B: Share Repurchases Based on Changes in Shares Outstanding

			Opportunistic repurchases		
	Repurchases	Insider buying	Full sample	After 2005	Listing within ±6 months of Mar. 10, 2000
Dot-com-exposed TMT	4.26	**2.86*****	**2.33*****	**2.31*****	
	(2.89)	**(0.99)**	**(0.78)**	**(0.79)**	
TMT listed within 6m pre-peak					**7.29****
					(2.96)
TMT listed within 6m post-peak					0.82
					(2.02)
Controls	YES	YES	YES	YES	YES
Quarter fixed effects	YES	YES	YES	YES	YES
Industry fixed effects	YES	YES	YES	YES	YES
CRSP-entry year fixed effects	YES	YES	YES	YES	YES
Observations	118,271	180,604	118,271	115,856	118,271

Table A9: **Dot-Com Bubble Exposure and Managerial Undervaluation Claims: Instrumental-Variable Estimates**

This table reports instrumental-variable estimates of the effect of historical price drawdowns on undervaluation claims. Historical drawdown is instrumented using exposure to dot-com bubble valuations. In columns (1)–(3), the excluded instrument, *Dot-com-exposed TMT*, equals one for TMT firms listed before the March 10, 2000 dot-com peak. The columns use the full sample and observations after 2005 and 2015, respectively. Column (4) instead instruments historical drawdown with separate indicators for TMT firms first appearing in CRSP within six months before and after the peak. The second-stage coefficients report the effect of a one-standard-deviation increase in historical drawdown on the outcome and are expressed in percentage points. More negative historical drawdowns indicate that the current stock price is farther below its historical peak. The first-stage coefficients report the effect of the excluded instruments on standardized historical drawdown. All specifications include the same controls, fixed effects, weighting, and standard-error adjustments as the corresponding reduced-form specifications in Table 8. The Kleibergen–Paap rk Wald F-statistic measures first-stage instrument strength. For the overidentified specification in column (4), the table also reports the p-value from the Hansen J-test of the overidentifying restrictions. Standard errors are shown in parentheses. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	All earnings calls	Calls after 2005	Calls after 2015	Listing within ±6m of Mar. 10, 2000
Second stage: Undervaluation claims				
Historical drawdown	**-4.73*****	**-4.90*****	-7.01	-7.34
	(1.62)	**(1.75)**	(4.74)	(4.87)
First stage: Historical drawdown				
Dot-com-exposed TMT	**-0.33*****	**-0.33*****	**-0.17*****	
	(0.05)	**(0.05)**	**(0.06)**	
TMT listing in 6 months before peak				**-0.31*****
				(0.08)
TMT listing in 6 months after peak				0.12
				(0.09)
IV diagnostics				
Kleibergen–Paap rk Wald F	52.50	44.93	7.96	8.42
Hansen J-test p-value				0.483
Observations	190,598	174,811	93,200	190,598

Table A10: **Historical Price Anchors and Opportunistic Repurchases: Instrumental-Variable Estimates**

This table reports instrumental-variable estimates of the effect of historical price drawdowns on opportunistic repurchases. Historical drawdown is instrumented using exposure to dot-com bubble valuations. In columns (1)–(3), the excluded instrument, *Dot-com-exposed TMT*, equals one for TMT firms listed before the March 10, 2000 dot-com peak. The columns use the full sample and observations after 2005 and 2015, respectively. Column (4) instead instruments historical drawdown with separate indicators for TMT firms first appearing in CRSP within six months before and after the peak. The second-stage coefficients report the effect of a one-standard-deviation increase in historical drawdown on the probability of an opportunistic repurchase and are expressed in percentage points. More negative historical drawdowns indicate that the current stock price is farther below its historical peak. The first-stage coefficients report the effect of the excluded instruments on standardized historical drawdown. All specifications include the same controls, fixed effects, weighting, and standard-error adjustments as the corresponding reduced-form specifications in Table 9. The Kleibergen–Paap rk Wald F-statistic measures first-stage instrument strength. For the overidentified specification in column (4), the table also reports the p-value from the Hansen J-test of the overidentifying restrictions. Standard errors are shown in parentheses. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	Full sample	After 2005	After 2015	Listing within ±6m of Mar. 10, 2000
Second stage: Opportunistic repurchases				
Historical drawdown	**-4.74****	**-4.22****	-8.19	-8.15
	(2.00)	**(2.10)**	(6.88)	(5.15)
First stage: Historical drawdown				
Dot-com-exposed TMT	**-0.32*****	**-0.32*****	**-0.17*****	
	(0.05)	**(0.05)**	**(0.06)**	
TMT listing in 6 months before peak				**-0.30*****
				(0.08)
TMT listing in 6 months after peak				0.12
				(0.09)
IV diagnostics				
Kleibergen–Paap rk Wald F	39.48	33.84	5.54	9.03
Hansen J-test p-value				0.231
Observations	177,957	163,839	88,007	177,957

Table A11: **Price Drawdowns, Dot-Com Exposure, and Repurchase Financing**

This table examines changes in firms' cash and debt holdings following stock-price drawdowns and during share repurchases. Panel A uses the quarterly change in cash relative to total assets, $\text{cheq}_t/\text{atq}_t - \text{cheq}_{t-1}/\text{atq}_{t-1}$, while Panel B uses the corresponding change in total debt, $(\text{dlttq}_t + \text{dlcq}_t)/\text{atq}_t - (\text{dlttq}_{t-1} + \text{dlcq}_{t-1})/\text{atq}_{t-1}$. Columns labeled "Sign of change" replace these outcomes with their signs, taking values -1, 0, and 1. All continuous variables are standardized. All specifications include the firm-level controls listed in Table 2, three-digit SIC industry, CRSP-entry-year, and quarter fixed effects, and use equal-quarter weights. Standard errors are clustered by firm and quarter and shown in parentheses. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

Panel A: Changes in Cash Holdings

	Drawdown	Dot-com exposure		Repurchase financing	
	Change	Change	Sign of change	Change	Sign of change
52-week drawdown	**0.023*****	**0.023*****	**0.028*****	**0.024*****	**0.026*****
	(0.006)	**(0.006)**	**(0.005)**	**(0.007)**	**(0.005)**
Dot-com-exposed TMT		0.014	0.017	**0.048****	**0.060****
		(0.015)	(0.017)	**(0.020)**	**(0.023)**
Repurchase				**-0.040*****	**-0.058*****
				(0.006)	**(0.006)**
Exposed × Repurchase				**-0.060*****	**-0.089*****
				(0.016)	**(0.021)**
Controls	YES	YES	YES	YES	YES
Industry fixed effects	YES	YES	YES	YES	YES
CRSP-entry year fixed effects	YES	YES	YES	YES	YES
Quarter fixed effects	YES	YES	YES	YES	YES
Observations	188,704	188,704	188,704	177,903	177,903

Panel B: Changes in Total Debt

	Drawdown	Dot-com exposure		Repurchase financing	
	Change	Change	Sign of change	Change	Sign of change
52-week drawdown	**-0.071*****	**-0.071*****	**-0.082*****	**-0.069*****	**-0.081*****
	(0.007)	**(0.007)**	**(0.006)**	**(0.007)**	**(0.006)**
Dot-com-exposed TMT		0.017	**0.046****	0.002	0.035
		(0.014)	**(0.022)**	(0.018)	(0.026)
Repurchase				**0.049*****	**0.089*****
				(0.008)	**(0.008)**
Exposed × Repurchase				0.019	0.010
				(0.015)	(0.017)
Controls	YES	YES	YES	YES	YES
Industry fixed effects	YES	YES	YES	YES	YES
CRSP-entry year fixed effects	YES	YES	YES	YES	YES
Quarter fixed effects	YES	YES	YES	YES	YES
Observations	177,062	177,062	177,062	166,739	166,739

Table A12: **Market Response to Undervaluation Claims by Dot-Com-Exposed TMT Firms**

This table examines whether the market response to managerial undervaluation claims differs for dot-com-exposed TMT firms. The dependent variables are Fama–French three-factor cumulative abnormal returns over the 1-day, 5-day, 21-day, 1-month, and 3-month horizons following the earnings call. *TMT* identifies technology, media, and telecommunications firms, and *Listed Before Dot-com Peak* identifies firms that first appeared in CRSP before March 10, 2000. The triple interaction captures the incremental response to claims by dot-com-exposed TMT firms; all constituent terms and lower-order interactions are included. All specifications include the controls listed in Table 2, firm fixed effects, and earnings-call calendar-date fixed effects, use equal-quarter weights, and report standard errors clustered by firm and date. Coefficients and standard errors are reported in percentage points, with standard errors shown in parentheses. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

	1-day CAR	5-day CAR	21-day CAR	ME + 1m CAR	ME + 3m CAR
Undervaluation Claim	**0.56*****	**1.06*****	**1.38*****	**1.23*****	**1.20****
	(0.18)	**(0.22)**	**(0.32)**	**(0.38)**	**(0.54)**
Claim × TMT	0.60	**1.89***	1.74	2.30	4.16
	(0.75)	**(1.06)**	(1.34)	(1.63)	(2.88)
Claim × Listed Before Dot-com Peak	0.06	0.11	0.11	0.43	0.28
	(0.22)	(0.27)	(0.38)	(0.44)	(0.64)
Claim × TMT × Listed Before Dot-com Peak	-0.26	-1.62	-0.74	-1.28	-4.03
	(0.85)	(1.17)	(1.48)	(1.78)	(3.05)
Controls	YES	YES	YES	YES	YES
Firm fixed effects	YES	YES	YES	YES	YES
Date fixed effects	YES	YES	YES	YES	YES
Observations	158,244	158,239	158,220	158,234	158,234

Table A13: **Transcript-to-CRSP Matching and Sample Attrition**

This table summarizes the matching of LSEG StreetEvents transcripts to CRSP and the resulting sample attrition. The ticker-based procedure matches transcripts to CRSP firms using historical tickers, valid listing periods, and company-name similarity; exact name matching recovers additional transcripts without a valid ticker-based match. Transcript–*permno* observations may exceed unique files because firms can have multiple securities in the event month. The final sample is restricted to ordinary common shares (CRSP share codes 10 and 11) listed on the NYSE, AMEX, or Nasdaq (exchange codes 1, 2, and 3), begins in 2002Q2, and collapses multiple observations with the same *permno* and earnings-call date.

Matching stage	Unique transcript files	Transcript–*permno* observations
Initial transcripts dated through December 2024	300,316	—
Files entering ticker-based matching	262,497	—
Matched using ticker, date, and name similarity	239,507	—
Additional files recovered using exact-name matching	14,459	—
Total files matched to CRSP	253,966	258,016
Common shares listed on NYSE, AMEX, or Nasdaq	199,884	202,963
Sample beginning in 2002Q2	199,471	202,544
One observation per *permno*–date	—	202,041