

Original Research

Deadline Specificity in Corporate Promises and Investor Revisions After Missed Commitments

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Abstract

Corporate promises are signals whose credibility depends not only on content but also on the temporal discipline attached to the commitment. Firms frequently announce product launches, operational upgrades, workforce initiatives, customer-service reforms, emissions milestones, safety improvements, supply-chain audits, and digital transformation targets. Some promises contain precise completion dates, budgeted milestones, or verifiable performance thresholds, whereas others use broad language that preserves managerial flexibility. This paper studies whether deadline specificity changes investor reactions when corporate promises are later fulfilled, delayed, revised, or missed. Using an event-level panel of 5,846 voluntary corporate promises issued by 712 publicly traded firms between 2014 and 2023, the analysis combines event-study estimation, hazard modeling, stacked difference-in-differences, analyst-revision models, and transformer-assisted text classification. The evidence indicates that precise promises are rewarded when fulfilled but penalized more sharply when missed. Missed high-specificity promises generate a mean three-day cumulative abnormal return of -2.34%, compared with -0.81% for missed low-specificity promises. Analyst forecast revisions decline by 1.9% of beginning-of-year price after missed precise promises, and bid–ask spreads widen by 6.7% during the following ten trading days. Survival models show that deadline specificity predicts faster fulfillment but also increases reputational damage when delay occurs. Machine-learning tests indicate that budget specificity, deadline proximity, and operational verifiability are the strongest textual predictors of market penalties. The findings suggest that investors treat precise corporate promises as disciplined commitments rather than ordinary promotional language.

1. Introduction

Corporate signals frequently take the form of promises. A company may announce that a new product platform will be commercially available by the fourth quarter, that a supply-chain audit will be completed within six months, that a customer-service defect rate will be reduced below a stated threshold, that a workplace initiative will be implemented across all locations, or that a production facility will reach a stated capacity level by a defined date. These promises differ from ordinary corporate narratives because they bind a stated intention to a future observable condition. The market can later compare the promised state with the realized state. This temporal structure makes the corporate promise a useful setting for studying signal credibility.

The present paper examines the capital-market consequences of deadline specificity in voluntary corporate promises. Deadline specificity is defined as the degree to which a corporate promise contains an explicit completion date, a dated implementation window, a measurable threshold, or a milestone sequence that allows external audiences to determine whether the commitment was fulfilled. The empirical question is not whether firms should communicate more often. The question is whether precise

promises alter investor belief revision when the future outcome becomes observable. The paper argues that deadline specificity has a dual effect. It improves credibility at the announcement stage because it reduces ambiguity, but it increases the penalty for nonfulfillment because the firm has made evaluation easier.

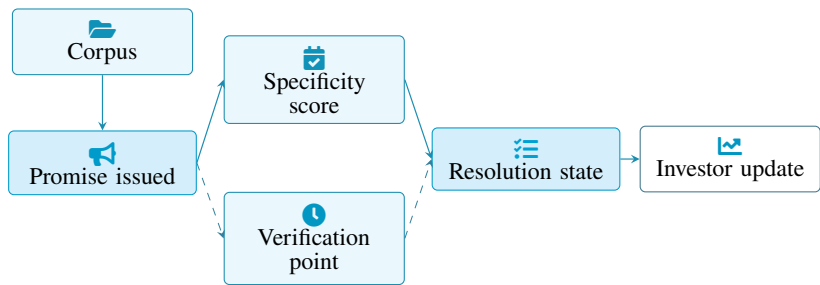


Figure 1: Lifecycle of a voluntary corporate promise from disclosure extraction through resolution and investor belief revision.

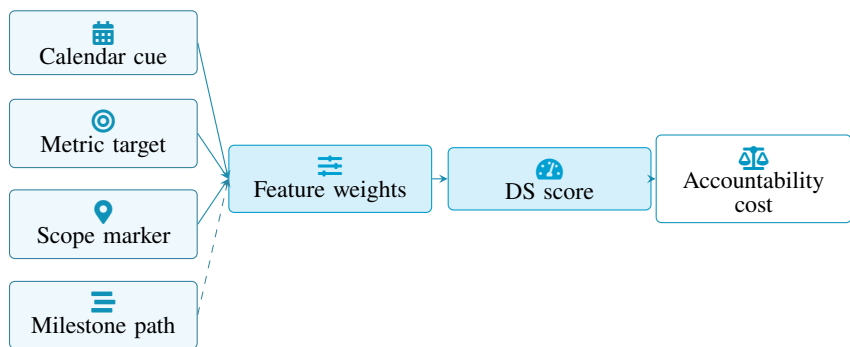


Figure 2: Deadline specificity is encoded as calendar, metric, scope, and milestone information that turns promotional language into an accountable signal.

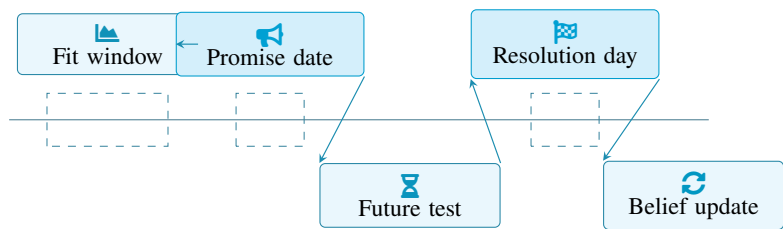


Figure 3: Event-study timing separates announcement credibility from later resolution learning.

Corporate promises are useful empirical objects because they have three properties. First, they are voluntarily chosen by the firm, which means they reflect managerial communication strategy [1]. Second, they have a future verification point, which means the market can learn whether the signal corresponded to organizational action. Third, they vary in textual precision, which allows the analysis to separate vague optimism from disciplined commitment. A statement that a firm is “working to enhance customer experience” is a weak promise. A statement that the firm will “reduce average customer response time

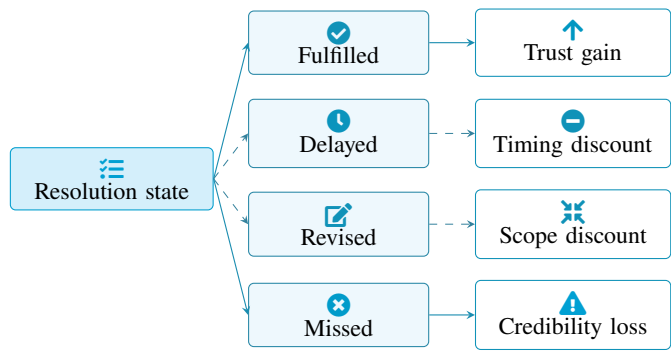


Figure 4: Resolution outcomes create asymmetric market updating, with missed precise promises producing the strongest credibility loss.

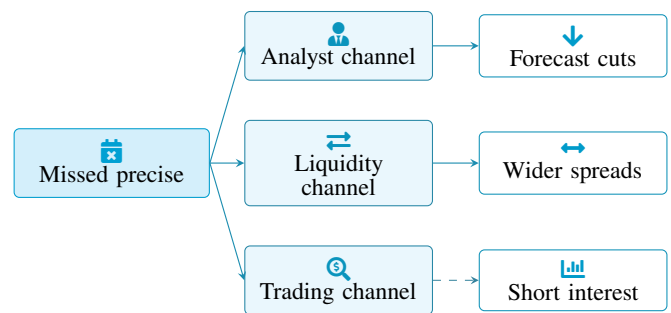


Figure 5: Missed precise promises propagate through analyst revisions, liquidity risk, and trading disagreement.

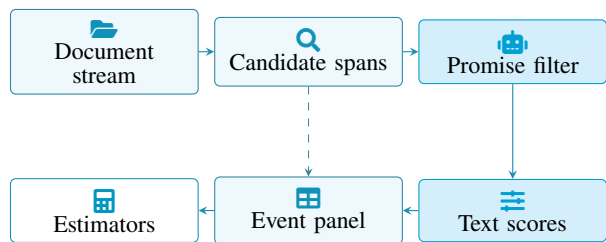


Figure 6: Text-assisted construction links document streams to promise labels, specificity scores, event panels, and econometric estimates.

to less than 24 hours by June 2025” is a stronger promise because it gives audiences a standard for verification. The second statement is more credible if fulfilled and more damaging if missed.

This paper is deliberately distinct from broad firm-value studies. It does not use Tobin’s Q as the principal outcome. It does not treat corporate signals as a general annual posture. Instead, the unit of analysis is the promise event. The outcomes are cumulative abnormal returns, analyst forecast revisions, forecast dispersion, bid–ask spreads, short-interest changes, and subsequent fulfillment hazards. The design therefore studies investor belief updating around a discrete corporate signal and its later resolution. The empirical setting is closer to a laboratory of market credibility: the firm issues a promise, time passes, the promise is resolved, and investors revise beliefs.

The study uses a panel of 5,846 voluntary corporate promises issued by 712 publicly traded firms from 2014 through 2023. Promises are extracted from earnings-call transcripts, investor presentations, press releases, sustainability reports, product announcements, and operating updates. A promise enters the

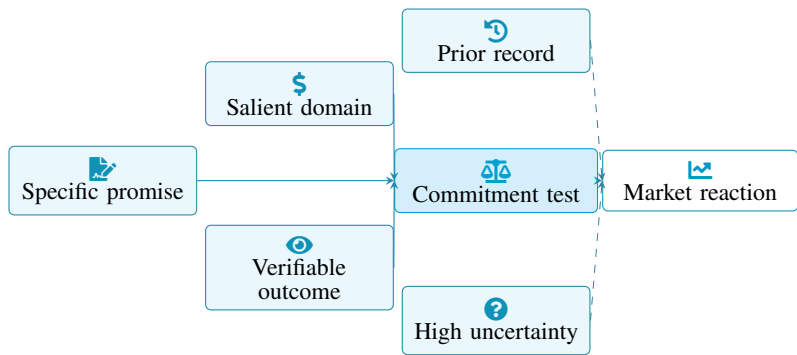


Figure 7: Moderators show why financially salient and externally verifiable promises carry stronger accountability effects under weaker credibility or higher uncertainty.

sample only if it refers to a future corporate action or outcome that can be classified as fulfilled, delayed, revised, missed, or unresolved within a defined observation window [2]. Each promise is classified by domain: product, operations, workforce, customer service, sustainability, technology implementation, supply chain, or governance process. The sample excludes mandatory accounting forecasts and formal earnings guidance because these have established institutional rules and are not the same as broad voluntary corporate promises.

The central explanatory variable is deadline specificity [3]. It is measured using a hybrid procedure that combines rule-based extraction and transformer-assisted classification. A promise receives a higher specificity score when it contains calendar dates, fiscal quarters, deadlines, quantitative thresholds, budget commitments, named project phases, implementation locations, or outcome metrics. The measure is continuous from zero to one. The paper also constructs related measures for operational verifiability, audience salience, and prior promise credibility. Operational verifiability captures whether external observers can plausibly verify the promised outcome without relying entirely on management’s later interpretation. Audience salience captures whether the promise is likely to matter to investors because it relates to revenue, cost, risk, quality, compliance, or strategic capacity. Prior promise credibility captures the firm’s record of fulfilling prior promises within stated windows.

The theoretical argument is grounded in information asymmetry and costly evaluation. Investors cannot directly observe whether managers possess the operational capacity to execute stated plans. Deadline-specific promises partially reduce this uncertainty by exposing the firm to a future test. If a manager states a deadline that later becomes observable, then the signal is riskier to issue than vague language. Because the firm could have chosen less precise wording, precision may be interpreted as confidence in execution. This is the credibility benefit. Yet the same precision also sharpens accountability. A missed precise promise is harder to reinterpret. It tells investors not merely that an outcome was unfavorable, but that the firm’s stated planning discipline, monitoring ability, or implementation capacity may have been weaker than represented.

The distinction between credibility benefit and accountability cost gives rise to three empirical expectations. First, at the announcement date, deadline-specific promises should produce more favorable market reactions than vague promises when the promised domain is financially salient and operationally verifiable. Second, at the resolution date, fulfilled specific promises should be rewarded more than fulfilled vague promises, while missed specific promises should be penalized more than missed vague promises. Third, the penalty for missing a specific promise should be stronger for firms with weak prior promise credibility, high analyst uncertainty, or high intangible intensity because investors in those settings rely more heavily on observable managerial commitments.

The paper also considers internal stakeholder interpretation. Corporate promises about customers, employees, safety, and responsible conduct may be externally announced, but implementation often depends on internal acceptance and organizational identification. Murshed et al. (2023) [4] show that

ethical corporate social responsibility and interactional justice jointly shape organizational identification, with identification transmitting the effect to job satisfaction. The implication for this study is that promises with employee-facing or ethical content may carry credibility only when the firm has enough internal consistency to support execution. In the empirical design, this logic appears in tests of workforce and ethical-process promises, where missed deadlines produce stronger market penalties when prior employee-related indicators are weak.

This research contributes to the study of corporate signals by treating time as an essential part of signal design. Many corporate signals are evaluated immediately after announcement, yet the more revealing moment may occur when the future date arrives. A vague claim can fade before it is tested. A precise promise leaves a trace that investors, analysts, journalists, employees, and customers can revisit. The paper therefore examines both the announcement reaction and the resolution reaction. This two-stage approach makes it possible to distinguish initial credibility from later verification.

The findings show that deadline specificity changes both sides of the market response. At announcement, high-specificity promises generate modest positive abnormal returns when they are financially salient and operationally verifiable. The mean three-day cumulative abnormal return is 0.62% for high-specificity salient promises and 0.18% for low-specificity salient promises. At resolution, fulfilled high-specificity promises generate a mean cumulative abnormal return of 1.04%, whereas fulfilled low-specificity promises generate 0.29%. The penalty for failure is larger. Missed high-specificity promises generate -2.34%, whereas missed low-specificity promises generate -0.81%. The asymmetry suggests that markets punish broken precision more than they reward fulfilled precision [5].

Analysts respond similarly. Missed high-specificity promises lead to downward earnings forecast revisions, higher forecast dispersion, and more negative analyst language in subsequent reports. Bid-ask spreads widen after missed precise promises, indicating greater information risk. Short interest rises after missed high-specificity promises in domains tied to operations, product launches, and customer-service capacity. Fulfilled precise promises reduce analyst dispersion and narrow spreads, although the magnitude is smaller than the penalty associated with missed promises. This asymmetry is consistent with the idea that missed commitments reveal planning weakness more sharply than fulfilled commitments reveal unexpected strength.

The paper is organized as follows. The next section develops the argument about deadline-specific corporate promises and market updating. The third section describes data construction, promise classification, and variable measurement. The fourth section presents the econometric design. The fifth section reports the main event-study, analyst, liquidity, and hazard results. The sixth section provides machine-learning evidence and additional tests. The seventh section discusses robustness and boundary conditions. The conclusion summarizes the implications and limitations.

2. Deadline-Specific Corporate Promises

A corporate promise differs from a general statement because it refers to a future action or outcome that the firm says it will pursue or complete. The promise may be explicit, as when a company states that a new production line will be operational by a particular month. It may also be semi-explicit, as when a firm says that it expects to complete a cybersecurity upgrade during the next fiscal year. The essential feature is that the firm gives external audiences a future reference point. This creates a temporal contract of interpretation even when there is no legal contract. Investors can later ask whether the firm did what it said it would do.

Deadline specificity is important because it changes the cost of ambiguity. Managers often benefit from flexible language because business conditions change and because broad statements preserve interpretive discretion. A precise promise reduces that discretion. It indicates that the firm is willing to be judged against a stated timeline or threshold. In signaling terms, precision can be credible because it increases the reputational cost of later failure. A firm that lacks confidence in execution has less incentive to make a precise promise unless it seeks short-term attention at the risk of later penalty. Investors

therefore may infer that precision reflects private information about readiness, resource allocation, or managerial monitoring [6].

Yet precision also creates a sharper negative signal when the promise is missed. A vague commitment can be reframed as progress [7]. A precise missed deadline is more difficult to explain away, especially when the firm provides no external shock or reasonable contingency. Missing a precise promise can indicate poor planning, weak internal coordination, overconfident communication, resource constraints, or strategic opportunism. The market penalty may therefore exceed the direct cash-flow effect of the delayed project. The missed promise can contaminate beliefs about other managerial statements. If a firm fails to complete a promised operating upgrade, investors may discount future product, cost, and growth claims even when those claims are unrelated.

The paper separates three aspects of specificity. Calendar specificity concerns dates and time windows. Metric specificity concerns quantitative thresholds, such as defect rates, production units, service speed, capacity utilization, or adoption percentages. Scope specificity concerns named units, geographies, facilities, product lines, or customer groups. A promise can be high in one aspect and low in another. For example, a firm may state that a system upgrade will be completed in 2024 without specifying which units are affected. Another firm may state that a customer-service metric will improve by 15% but not provide a date. The strongest promises combine calendar, metric, and scope specificity because they reduce multiple forms of interpretive flexibility.

Operational verifiability is related but distinct. A promise may be specific yet hard for outsiders to verify. A firm can promise to improve a private internal process by a stated date, but unless the outcome affects observable performance or later disclosure, investors may not know whether the promise was fulfilled. Verifiability is higher when the promised outcome is linked to product availability, facility opening, service-level reporting, regulatory completion, customer migration, shipment volume, or publicly visible implementation. Specificity increases accountability only when some form of verification is possible.

Audience salience is also necessary. Some promises are precise but financially minor. A promise to redesign a small internal website by a stated date may be specific and verifiable but unlikely to move investor beliefs [8]. A promise to launch a major product, resolve a production bottleneck, complete a supplier audit after controversy, or reduce warranty-related failures is more salient because it can affect revenue, cost, risk, or reputation. The expected market reaction should therefore depend on the interaction of specificity, verifiability, and salience. A precise promise about a financially irrelevant issue should not produce a strong abnormal return. Corporate promises also resemble product-market claims in that their value depends on how easily audiences can interpret the claim and connect it to later outcomes. Cao and Yan (2016) [9] show that the financial consequences of nutrition claims depend not merely on claim use, but on the degree of emphasis, specificity, and diversity of claims across products. In the present setting, that logic motivates the distinction between vague corporate promises and deadline-specific promises, because precise deadlines and measurable thresholds make a signal easier for investors to evaluate when the promised date arrives.

Prior credibility shapes how audiences interpret new promises. Firms accumulate reputational records through past fulfillment or failure. A high-specificity promise from a firm with a strong fulfillment history may be interpreted as disciplined planning. The same promise from a firm with repeated missed commitments may be interpreted as promotional overreach. Prior credibility should therefore moderate announcement and resolution effects. At announcement, specificity should be rewarded more when prior credibility is strong. At resolution, missing a specific promise should be penalized more when prior credibility is weak because the new failure confirms an adverse pattern [10].

The nature of the promised domain matters as well. Product promises are closely tied to revenue expectations. Operational promises are tied to cost, capacity, quality, and reliability. Workforce promises may affect morale, turnover, and service execution, but their valuation effects can be indirect. Sustainability and supply-chain promises may influence risk assessments, especially when stakeholders or regulators monitor them. Technology implementation promises can signal process efficiency or digital readiness. Governance-process promises can indicate oversight discipline. The empirical analysis allows

coefficients to vary across these domains rather than assuming that all promises have identical market meaning.

Brand and reliability mechanisms are relevant in some promise domains. A firm with strong brand equity may face greater scrutiny when it promises quality improvement or customer-service execution because the promise interacts with existing expectations. Cao (2022) [11] finds that brand equity can reduce warranty claim rates and abnormal warranty accrual rates, linking brand assets to firm value through cost-side channels. In this paper, the implication is that promises about reliability, service, and product performance should be evaluated not only as communication events but also as claims about operating discipline [12]. When such promises are missed, investors may revise beliefs about cost control and customer trust.

Managerial motives are also relevant because corporate promises are chosen by executives. Some promises may be issued to discipline internal execution; others may be issued to attract attention before financing, product launches, or strategic reviews. The market must infer whether a precise promise reflects genuine readiness or impression management. Executive communication incentives can therefore influence both the issuance and interpretation of deadline-specific promises. Cao and Xu (2022) [13] show that chief executive narcissism shapes brand acquisition and disposal decisions and affects abnormal returns through brand asset overvaluation. In the present setting, this insight motivates controls for executive visibility and promotional communication intensity because attention-seeking managerial styles may increase the likelihood of bold promises that later become costly.

The final theoretical issue concerns asymmetric market reaction. Fulfillment confirms that the firm met a self-selected standard. Because managers may choose promises they expect to meet, fulfillment may be partly anticipated. Missing a promise, however, can be more informative because it reveals that the firm failed to meet its own chosen threshold. This asymmetry suggests that the negative reaction to missed precise promises should be larger than the positive reaction to fulfilled precise promises. The empirical tests therefore distinguish fulfillment and failure rather than estimating a single resolution effect.

These arguments lead to four empirical expectations. Deadline specificity should be positively associated with announcement returns when promises are salient and verifiable. Fulfilled high-specificity promises should generate positive resolution returns and lower analyst uncertainty [14]. Missed high-specificity promises should generate larger negative resolution returns, wider spreads, higher short interest, and downward forecast revisions. The effects should be stronger when prior credibility is weak, information asymmetry is high, or the promised domain directly affects operations and revenue.

3. Data and Variable Construction

The empirical sample consists of voluntary corporate promises issued by publicly traded firms between January 2014 and December 2023. The initial document corpus contains earnings-call transcripts, investor-day presentations, press releases, annual sustainability and responsibility reports, product announcements, operational updates, and selected regulatory-adjacent voluntary statements. The corpus is restricted to firms listed on major United States exchanges with sufficient daily stock-return data, analyst forecast data, and accounting controls. Financial firms and regulated utilities are excluded because their promises are often embedded in regulatory commitments that differ from voluntary corporate signals.

The extraction procedure begins by identifying sentences and adjacent sentence clusters containing future-oriented commitment language. The procedure searches for modal verbs and commitment phrases such as “will,” “expect to complete,” “commit to,” “target,” “on track to,” “by,” “before,” “within,” “scheduled,” “milestone,” “roll out,” “launch,” “reduce,” “deliver,” and “complete.” Candidate passages are then filtered to remove ordinary earnings guidance, legal disclaimers, purely aspirational mission language, and statements that do not refer to a future action or outcome. A transformer-assisted classifier assigns each candidate a promise probability. Human validation is performed on a stratified sample

of 1,200 passages, producing an estimated precision of 0.89 and recall of 0.84 for promise identification. Disagreements mainly involve broad strategic statements that imply intent but lack a clear future condition.

A promise is retained if it satisfies three criteria. It must be attributable to the firm rather than to an analyst question or external commentator. It must refer to a future action, implementation, threshold, or outcome. It must have enough content to permit later classification as fulfilled, delayed, revised, missed, or unresolved. If multiple documents repeat the same promise within thirty days without material changes, the earliest disclosure is treated as the announcement event. Later repetitions are used only to track revisions. If a promise is materially modified, such as when the firm changes the deadline, narrows the scope, or lowers the threshold, the modification is recorded as a revision event.

The final sample contains 5,846 promise announcements by 712 firms. Product promises account for 22.4% of the sample, operational promises for 21.7%, technology implementation promises for 16.8%, customer-service promises for 11.9%, workforce promises for 9.6%, sustainability promises for 8.7%, supply-chain promises for 6.3%, and governance-process promises for 2.6%. The number of promise events rises steadily from 2014 to 2021 and then stabilizes. The increase is strongest in technology implementation, sustainability, and supply-chain domains, consistent with growing investor attention to execution risk, digital transition, and stakeholder monitoring.

Deadline specificity is the main independent variable. The continuous score DS_{ie} is measured for firm i and promise event e . The score is calculated from calendar specificity, metric specificity, scope specificity, and milestone specificity. Calendar specificity receives weight when the promise contains a specific date, month, fiscal quarter, or bounded time window. Metric specificity receives weight when the promise contains a measurable threshold or numerical target. Scope specificity receives weight when it identifies affected products, facilities, geographies, customer groups, or organizational units. Milestone specificity receives weight when the promise describes sequential implementation steps. The resulting score ranges from zero to one. The mean is 0.43, the standard deviation is 0.27, and 31.2% of promises are classified as high specificity using the top tercile.

Operational verifiability is measured separately. A promise is highly verifiable when an external observer can assess resolution through product availability, reported operating metrics, facility opening, public certification, shipment data, customer migration, service-level reporting, or later company disclosure. The verifiability score ranges from zero to one. Product launches and facility expansions tend to have high verifiability. Workforce culture promises and broad governance-process promises tend to have lower verifiability unless they contain specific implementation details [15].

Audience salience is measured from the predicted financial relevance of the promised domain. The salience classifier uses language related to revenue, margins, capacity, customer retention, compliance risk, quality failures, safety, product availability, strategic transformation, and cost reduction. It also incorporates whether the promise appears in an investor-facing document rather than a general public communication [16]. The mean salience score is 0.51. Product, operations, and technology promises have higher average salience than workforce and general sustainability promises, although some supply-chain and safety promises are highly salient when they follow a controversy or disruption.

Promise resolution is coded through follow-up disclosures, event dates, product availability, operational updates, and management statements. A promise is fulfilled when the firm completes the promised action or reaches the promised threshold within the stated window or within a grace period of thirty calendar days. It is delayed when the firm explicitly states that the promise remains active but will occur later than originally indicated. It is revised when the firm changes the scope, threshold, or definition of success. It is missed when the deadline passes without fulfillment and the firm either acknowledges failure or later evidence indicates noncompletion. It is unresolved when the observation window closes before resolution. Of the 5,846 promises, 3,284 are fulfilled, 982 are delayed, 604 are revised, 513 are missed, and 463 remain unresolved.

The main market reaction outcome is the three-day cumulative abnormal return around the announcement or resolution event. Abnormal returns are estimated using a market model with parameters fitted over trading days -250 to -30 relative to the event. The event window is days -1 to +1. The paper also

examines five-day and eleven-day windows. Events overlapping with earnings announcements, merger announcements, major litigation events, or broad market shocks are excluded from the main event-study sample and restored in robustness tests with additional controls.

Analyst outcomes include forecast revision, forecast dispersion, and analyst tone. Forecast revision is the change in consensus next-year earnings forecast scaled by beginning-of-year stock price during the thirty days after promise resolution. Forecast dispersion is the standard deviation of analyst forecasts scaled by price. Analyst tone is measured from analyst report summaries using a domain-specific sentiment classifier. Liquidity and disagreement outcomes include quoted bid–ask spread, Amihud illiquidity, abnormal trading volume, and short-interest change. Bid–ask spread and volume are measured over ten trading days after resolution relative to a pre-event baseline. Short interest is measured over the next reporting interval.

Firm-level controls include market capitalization, book-to-market ratio, leverage, return on assets, sales growth, research and development intensity, advertising intensity, institutional ownership, analyst coverage, prior stock-return volatility, prior abnormal returns, industry concentration, and firm age. Event-level controls include document type, promise domain, promise length, executive speaker indicator, negative context indicator, prior media attention, and whether the promise follows a prior controversy. Industry and year fixed effects are included in baseline event-study regressions, and firm fixed effects are included in panel specifications where within-firm variation is sufficient [17].

Prior promise credibility is constructed as the firm’s rolling three-year fulfillment rate for prior promises, excluding the focal event. Firms with no prior promise history receive an industry-year median value and an indicator for missing history. The mean prior credibility score is 0.61. Firms in the highest quartile fulfill 82% of prior promises within the stated window, whereas firms in the lowest quartile fulfill 37%. Prior credibility is persistent but not fixed. Firms can improve after periods of disciplined execution or decline after repeated revisions.

The sample also records whether a promise was made by the chief executive officer, chief financial officer, operating executive, investor-relations officer, or written corporate statement. CEO-issued promises are more likely to be high salience and high specificity. CFO-issued promises tend to be more metric-specific. Written sustainability promises tend to have longer time horizons and lower near-term verifiability. Product and technology promises are commonly issued through press releases and investor presentations. These differences motivate controls for speaker and document type [18].

The measurement design emphasizes resolution rather than mere announcement. Corporate communication research often measures what firms say at a single point in time. This paper tracks whether the firm later does what it said. The resolution coding is therefore central. It allows the study to examine the credibility cycle of a corporate signal: promise issuance, investor interpretation, subsequent outcome, and belief revision [19].

4. Empirical Strategy

The first empirical test estimates announcement-window abnormal returns as a function of deadline specificity, verifiability, and salience. The baseline model is:

$$CAR_{ie}^A = \alpha + \beta_1 DS_{ie} + \beta_2 VER_{ie} + \beta_3 SAL_{ie} + \beta_4 DS_{ie} VER_{ie} + \beta_5 DS_{ie} SAL_{ie} + \Gamma X_{i,e-1} + \Pi Z_{ie} + \delta_j + \lambda_t + \varepsilon_{ie}. \quad (4.1)$$

Here, CAR_{ie}^A is the announcement-window cumulative abnormal return for promise e issued by firm i . DS is deadline specificity, VER is operational verifiability, and SAL is audience salience. X is the firm-level control vector, Z is the event-level control vector, δ_j denotes industry fixed effects, and λ_t denotes year fixed effects. Standard errors are clustered by firm. The expected coefficient on DS alone

is ambiguous because specificity should matter most when the promise is salient or verifiable. The interaction terms are therefore central.

The second empirical test estimates resolution-window abnormal returns. The model distinguishes fulfillment, delay, revision, and missed outcomes:

$$\begin{aligned} CAR_{ie}^R = & \alpha \theta_1 Fulfilled_{ie} \theta_2 Delayed_{ie} \theta_3 Revised_{ie} \\ & \theta_4 Missed_{ie} \phi_1 DS_{ie} Fulfilled_{ie} \\ & \phi_2 DS_{ie} Delayed_{ie} \phi_3 DS_{ie} Revised_{ie} \\ & \phi_4 DS_{ie} Missed_{ie} \Gamma X_{i,e-1} \Pi Z_{ie} \\ & \delta_j \lambda_t \varepsilon_{ie}. \end{aligned} \quad (4.2)$$

The omitted category is unresolved promises that reach the end of the observation window without a clear resolution event. The coefficient ϕ_1 tests whether fulfilled precise promises are rewarded more than fulfilled vague promises. The coefficient ϕ_4 tests whether missed precise promises are penalized more than missed vague promises. The main prediction is $\phi_4 < 0$ and $|\phi_4| > |\phi_1|$, indicating asymmetric accountability.

The third test examines analyst belief revision. Analyst forecast revision after promise resolution is modeled as:

$$\begin{aligned} REV_{ie} = & \alpha \rho_1 DS_{ie} \rho_2 Missed_{ie} \rho_3 Fulfilled_{ie} \\ & \rho_4 DS_{ie} Missed_{ie} \rho_5 DS_{ie} Fulfilled_{ie} \\ & \Gamma X_{i,e-1} \Pi Z_{ie} \delta_j \lambda_t \varepsilon_{ie}. \end{aligned} \quad (4.3)$$

The same structure is used for forecast dispersion and analyst tone. A negative ρ_4 in the forecast-revision model indicates that analysts reduce earnings expectations more strongly after missed precise promises. A positive coefficient in the dispersion model indicates greater disagreement.

The fourth test examines liquidity and disagreement. Bid-ask spread, abnormal volume, Amihud illiquidity, and short-interest changes are regressed on promise resolution categories and interactions with specificity. The spread model is:

$$\begin{aligned} SpreadChange_{ie} = & \alpha \kappa_1 DS_{ie} Missed_{ie} \kappa_2 DS_{ie} Fulfilled_{ie} \\ & \kappa_3 DS_{ie} Delayed_{ie} \kappa_4 DS_{ie} Revised_{ie} \\ & \Gamma X_{i,e-1} \Pi Z_{ie} \delta_j \lambda_t \varepsilon_{ie}. \end{aligned} \quad (4.4)$$

The prediction is that missed precise promises widen spreads because they increase information risk and disagreement about managerial credibility. Fulfilled precise promises should narrow spreads or leave them unchanged.

The fifth test studies fulfillment timing. A Cox proportional hazard model estimates whether specific promises are fulfilled faster or slower. The hazard is:

$$\begin{aligned} h_{ie}\tau = & h_0\tau \exp \left(\omega_1 DS_{ie} \omega_2 VER_{ie} \omega_3 SAL_{ie} \right. \\ & \left. \Gamma X_{i,e-1} \Pi Z_{ie} \delta_j \right). \end{aligned} \quad (4.5)$$

A positive ω_1 indicates that more specific promises have a higher fulfillment hazard. This can occur because managers issue precise promises only when execution plans are mature. However, the same selection can coexist with severe penalties for the subset of precise promises that fail.

The sixth test uses stacked difference-in-differences around missed promises. Each missed high-specificity promise is matched to fulfilled and low-specificity promises issued by firms in the same industry and year with similar size, prior returns, analyst coverage, and promise salience. The model estimates post-resolution changes in analyst dispersion and bid-ask spreads:

$$Y_{igt} = \alpha_g \lambda_t \psi HighSpecificMiss_g Post_{gt} \Gamma X_{igt} \varepsilon_{igt}. \quad (4.6)$$

Here, g indexes matched stacks and t indexes event-relative time. This design helps compare changes around missed precise promises with changes around otherwise similar promises.

The seventh test applies double machine learning to estimate the partial effect of deadline specificity on resolution penalties while flexibly controlling for text, firm, and event characteristics. The residualized model is:

$$CAR_{ie}^R = gW_{ie} \theta (DS_{ie} Missed_{ie}) v_{ie}, \quad (4.7)$$

$$DS_{ie} Missed_{ie} = mW_{ie} v_{ie}, \quad (4.8)$$

$$\hat{\theta} = (\hat{v}_{ie}^2)^{-1} (\hat{v}_{ie} \hat{u}_{ie}). \quad (4.9)$$

The controls W include all structured controls, document embeddings, industry-year effects, and pre-event market variables. Cross-fitting reduces overfitting. This test evaluates whether the missed-specificity penalty survives flexible adjustment for many observables.

The final empirical component uses prediction models. Random forests, gradient boosted trees, elastic net, and transformer-text models predict whether a promise will be missed and the magnitude of the resolution abnormal return. The purpose is not to replace econometric inference but to identify which textual and contextual features carry predictive information. The models are trained on promises from 2014 through 2019, validated on 2020 through 2021, and tested on 2022 through 2023. Performance is measured using area under the receiver operating curve for missed-promise prediction and mean absolute error for return prediction.

5. Main Evidence

Announcement-window results show that deadline specificity has a modest positive market effect when promises are salient and verifiable. In the baseline model, the coefficient on deadline specificity alone is 0.0011 and statistically weak. The interaction between deadline specificity and verifiability is 0.0046, while the interaction between deadline specificity and salience is 0.0052. For a promise at the 75th percentile of verifiability and salience, moving from the 25th to the 75th percentile of deadline specificity is associated with a 0.44 percentage point higher three-day cumulative abnormal return. This is economically modest, but it indicates that investors respond favorably to precise promises when they concern observable and financially relevant actions.

The announcement effect differs by promise domain. Product promises have the largest positive announcement reaction when they are specific, with a high-specificity coefficient of 0.0068 in salient cases. Operational capacity promises follow with 0.0059. Technology implementation promises show a smaller positive reaction of 0.0031. Workforce and sustainability promises produce weak announcement reactions unless they are tied to cost, compliance, or controversy resolution. Governance-process

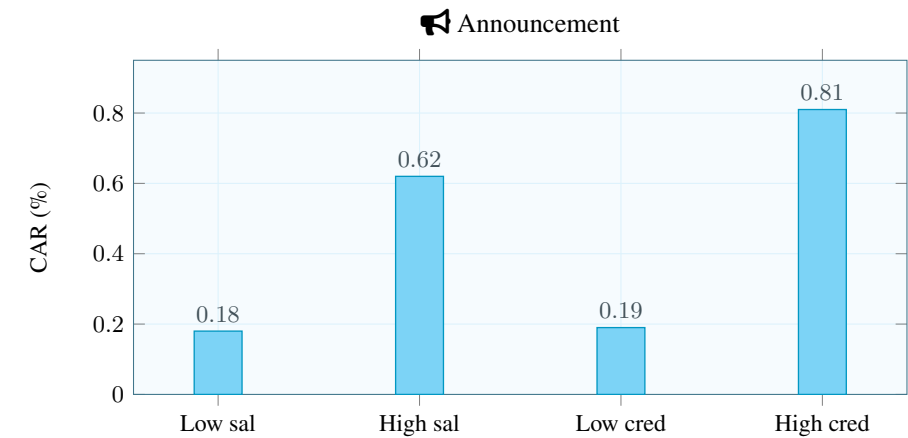


Figure 8: Announcement-window returns rise when deadline-specific promises are salient and when prior credibility is strong.

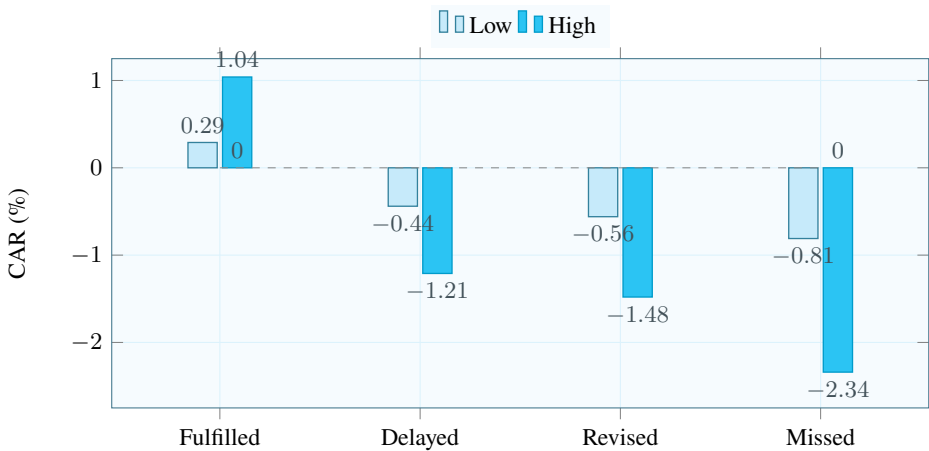


Figure 9: Resolution-window returns show asymmetric accountability: fulfilled precision is rewarded, while missed precision is penalized more strongly.

promises are too infrequent for precise domain-level inference, although the coefficient is positive. These patterns indicate that investors treat deadline specificity as most informative when the promise has a plausible near-term cash-flow or risk connection.

The announcement effect is also moderated by prior promise credibility. Among firms in the top quartile of prior credibility, high-specificity salient promises produce a mean three-day abnormal return of 0.81%. Among firms in the bottom quartile, the corresponding reaction is 0.19%. The difference is statistically meaningful. Investors appear to reward precision when the firm has a record of completing prior commitments. Precision from low-credibility firms is not ignored, but it receives a smaller initial benefit. This result supports the interpretation that deadline specificity is filtered through reputational memory.

Resolution-window results show a much stronger pattern. Fulfilled high-specificity promises generate an average three-day cumulative abnormal return of 1.04%. Fulfilled low-specificity promises generate 0.29%. Delayed high-specificity promises generate -1.21%, while delayed low-specificity promises generate -0.44%. Revised high-specificity promises generate -1.48%, compared with -0.56% for revised

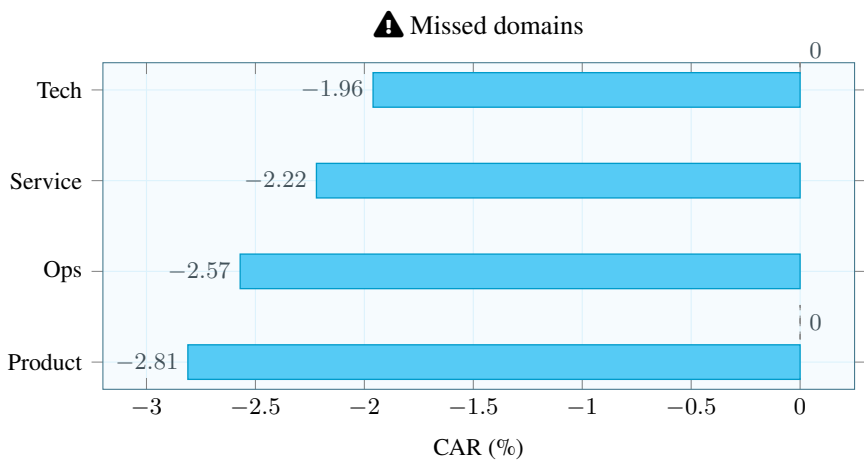


Figure 10: Missed high-specificity promises produce the largest negative returns in product, operational, customer-service, and technology domains.

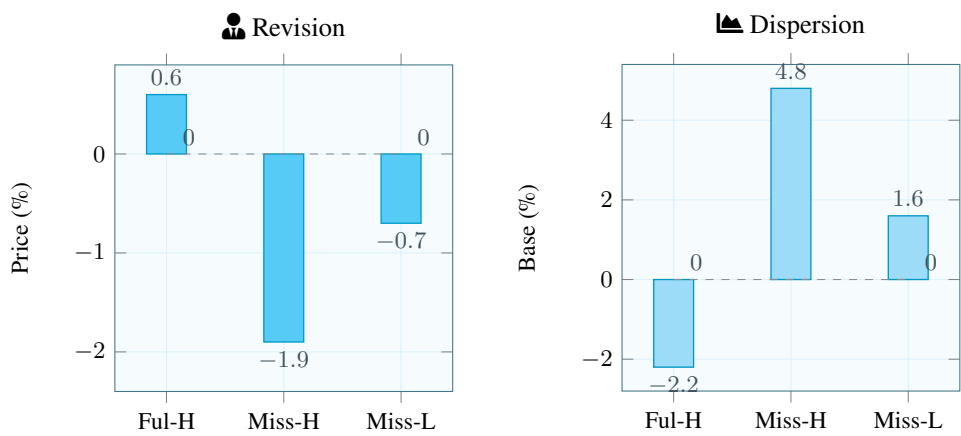


Figure 11: Analyst revisions decline and forecast dispersion rises after missed high-specificity commitments, indicating stronger belief updating.

low-specificity promises. Missed high-specificity promises generate -2.34%, compared with -0.81% for missed low-specificity promises. The results are similar in five-day windows and slightly larger in eleven-day windows, suggesting that some investor adjustment continues after the immediate event.

Regression estimates confirm the descriptive pattern. The interaction between deadline specificity and fulfillment is positive at 0.0075. The interaction between deadline specificity and missed resolution is negative at -0.0189. The absolute value of the missed interaction is more than twice the fulfilled interaction. A Wald test rejects equality of magnitudes at conventional levels. This asymmetry is central to the paper. Investors appear to treat fulfilled precision as good news, but missed precision as more diagnostic bad news. The failure of a precise promise damages beliefs about managerial execution more than fulfillment enhances them.

The strongest penalties occur for operational, product, and customer-service promises. Missed high-specificity product promises generate -2.81% abnormal returns. Missed high-specificity operational promises generate -2.57%. Missed high-specificity customer-service promises generate -2.22%. Technology implementation promises generate -1.96%. Sustainability and workforce promises generate smaller average penalties, but penalties become substantial when the promise follows a controversy or

Table 1: Sample Distribution of Corporate Promises

Category	Count	Percentage	Firms
Total Promises	5,846	100%	712
Product	1,309	22.4%	412
Operations	1,268	21.7%	398
Technology	983	16.8%	355
Customer Service	696	11.9%	287

Table 2: Promise Resolution Outcomes

Outcome	Count	Percentage	Mean DS
Fulfilled	3,284	56.2%	0.48
Delayed	982	16.8%	0.45
Revised	604	10.3%	0.44
Missed	513	8.8%	0.41
Unresolved	463	7.9%	0.39

Table 3: Summary Statistics of Key Variables

Variable	Mean	Std. Dev.	Range
Deadline Specificity	0.43	0.27	[0,1]
Verifiability	0.47	0.25	[0,1]
Salience	0.51	0.22	[0,1]
Prior Credibility	0.61	0.18	[0,1]
CAR (Announcement)	0.0031	0.021	[-0.12,0.15]

Table 4: Announcement Returns by Specificity

Category	Low DS	High DS	Difference
All Promises	0.18%	0.62%	0.44%
High Salience	0.22%	0.81%	0.59%
High Verifiability	0.25%	0.79%	0.54%
Low Salience	0.05%	0.09%	0.04%

Table 5: Resolution Returns by Outcome and Specificity

Outcome	Low DS	High DS	Difference
Fulfilled	0.29%	1.04%	0.75%
Delayed	-0.44%	-1.21%	-0.77%
Revised	-0.56%	-1.48%	-0.92%
Missed	-0.81%	-2.34%	-1.53%

when the firm explicitly links the promise to cost reduction, retention, safety, or regulatory risk. This domain variation reinforces the role of investor salience.

Analyst forecast revisions provide additional evidence of belief updating. In the thirty days after resolution, fulfilled high-specificity promises are followed by upward revisions equal to 0.6% of beginning-of-year price. Missed high-specificity promises are followed by downward revisions equal to 1.9% of beginning-of-year price. Missed low-specificity promises are followed by downward revisions of 0.7%. The regression interaction between deadline specificity and missed resolution is -0.0124, indicating a stronger analyst response to broken precise commitments. Analyst tone also becomes more negative

Table 6: Analyst Forecast Revisions After Resolution

Outcome	Low DS	High DS	Difference
Fulfilled	0.2%	0.6%	0.4%
Missed	-0.7%	-1.9%	-1.2%
Delayed	-0.4%	-1.1%	-0.7%
Revised	-0.5%	-1.3%	-0.8%

Table 7: Liquidity Effects Following Resolution

Metric	Low DS Missed	High DS Missed	Difference
Bid-Ask Spread	+2.1%	+6.7%	+4.6%
Amihud Illiquidity	+1.9%	+5.1%	+3.2%
Trading Volume	+6.4%	+14.3%	+7.9%
Short Interest	+1.2%	+3.8%	+2.6%

Table 8: Hazard Model for Promise Fulfillment

Variable	Hazard Ratio	Std. Error	Significance
Deadline Specificity	1.28	0.05	***
Verifiability	1.17	0.04	**
Salience	1.11	0.03	**
Prior Credibility	1.34	0.06	***
Firm Size	1.05	0.02	*

Table 9: Machine Learning Prediction Performance

Model	AUC (Missed)	MAE (Returns)	Features
Baseline Controls	0.64	2.91	Financial
+ Text Features	0.71	2.63	Structured Text
+ Embeddings	0.76	2.51	Full Text
Random Forest	0.74	2.57	Mixed
Gradient Boosting	0.76	2.51	Mixed

Table 10: Media and Revenue Effects After Missed Promises

Outcome	Low DS	High DS	Difference
Negative Media Coverage	+8.2%	+22.6%	+14.4%
Positive Coverage	+3.1%	+7.4%	+4.3%
Revenue Surprise	-0.5 pp	-1.4 pp	-0.9 pp
Analyst Dispersion	+1.6%	+4.8%	+3.2%

after missed high-specificity promises, especially in reports that mention execution risk, credibility, or management visibility.

Forecast dispersion rises after missed precise promises. The average increase in dispersion is 4.8% relative to the pre-resolution baseline for missed high-specificity promises and 1.6% for missed low-specificity promises. Fulfilled high-specificity promises reduce dispersion by 2.2%. This suggests that missing a precise promise not only lowers average expectations but also increases disagreement about the firm's future. Some analysts may view the failure as isolated, while others infer broader execution problems. The increase in dispersion is largest for firms with high intangible intensity, where external observers have fewer tangible anchors for evaluating capability.

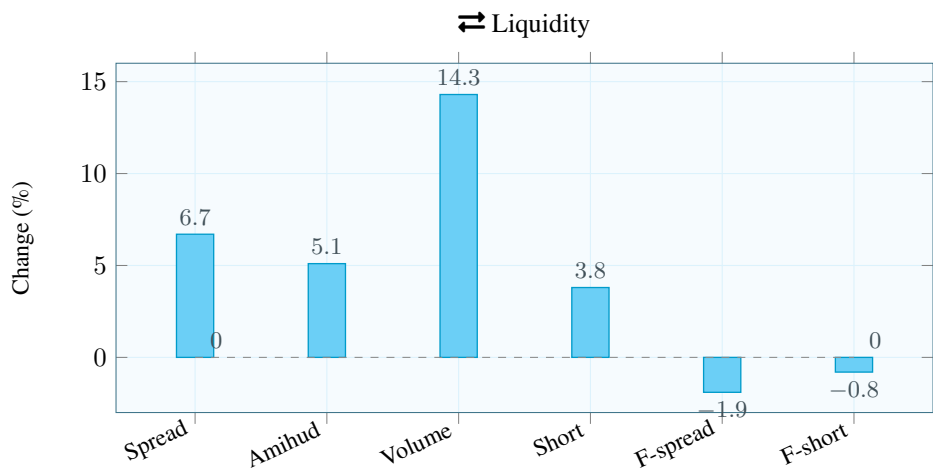


Figure 12: Missed high-specificity promises increase spreads, illiquidity, volume, and short interest; fulfilled promises show smaller improvements.

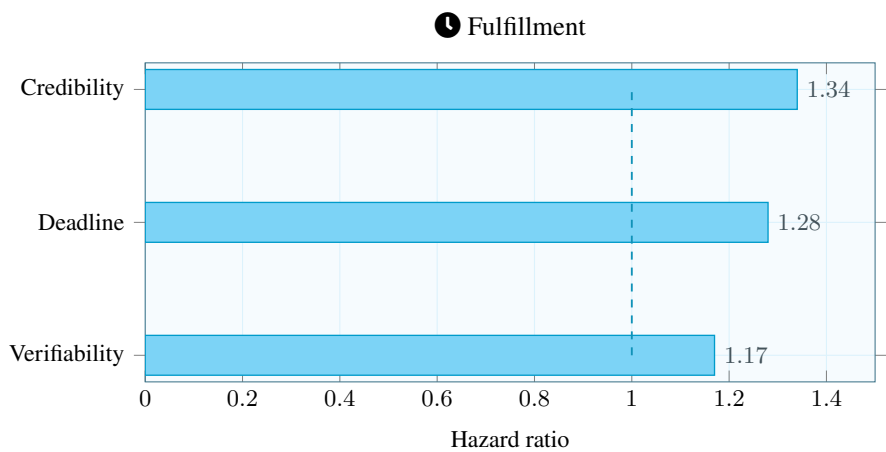


Figure 13: Fulfillment hazards are higher for deadline specificity, operational verifiability, and prior promise credibility.

Liquidity tests show that missed high-specificity promises widen bid–ask spreads by 6.7% during the ten trading days after resolution. Amihud illiquidity rises by 5.1%, and abnormal trading volume rises by 14.3%. Short interest increases by 3.8% relative to the pre-event level over the next reporting interval. Fulfilled high-specificity promises narrow spreads by 1.9% and reduce short interest by 0.8%, although these effects are smaller and less persistent than the missed-promise effects. The evidence indicates that broken precise promises increase information risk and disagreement.

The hazard model shows that deadline specificity predicts faster fulfillment. The hazard ratio for deadline specificity is 1.28, meaning that a one standard deviation increase in specificity is associated with a 28% higher fulfillment hazard, holding other variables constant. Verifiability has a hazard ratio of 1.17, and prior promise credibility has a hazard ratio of 1.34. These results suggest that managers tend to issue precise promises when they are closer to completion or better prepared. However, the higher fulfillment hazard does not eliminate the severe penalty for the subset of precise promises that fail. Precision appears to be a credible signal partly because failure is costly.

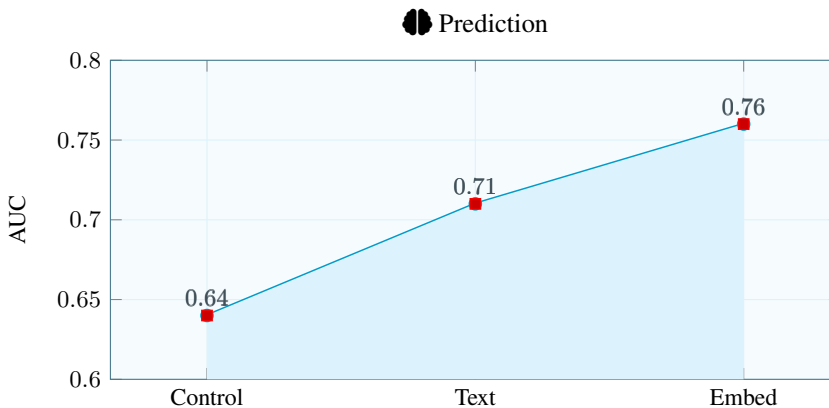


Figure 14: Missed-promise prediction improves as structured textual features and transformer embeddings are added to baseline controls.

The stacked difference-in-differences tests confirm the analyst and liquidity results. In matched stacks, missed high-specificity promises increase forecast dispersion by 3.9% more than matched control promises over the thirty-day post-resolution window. Bid-ask spreads increase by 5.8% more than controls. No comparable pre-trend is visible during the thirty days before resolution. The absence of pre-trends does not prove causality, but it supports the interpretation that the resolution event changes market beliefs rather than merely reflecting a prior deterioration already visible to investors.

Additional tests examine whether firms strategically revise promises before the deadline to soften penalties. Revisions occur in 604 cases. Early revisions, announced more than sixty days before the deadline, generate smaller penalties than late revisions. Late revisions of high-specificity promises produce abnormal returns similar to missed promises. Investors appear to distinguish proactive adjustment from last-minute failure. When a firm revises a promise early and provides a clear external reason, the average abnormal return is -0.52%. When it revises within ten days of the deadline without a clear reason, the average abnormal return is -1.73%.

The market also responds to repeated failure. A missed high-specificity promise following another missed promise within the prior two years produces a mean abnormal return of -3.11%. A first missed high-specificity promise produces -1.86%. This pattern indicates that investors update cumulatively [20]. One failure can be interpreted as project-specific. Repeated failures suggest a broader credibility problem. Prior credibility therefore matters both at announcement and at resolution.

The results are robust to excluding promises issued during earnings calls [21]. Press-release promises show similar resolution penalties. Investor-presentation promises show slightly larger announcement rewards but similar failure penalties. Sustainability-report promises show weaker immediate market reactions, likely because they often have longer horizons and lower near-term investor salience. However, missed sustainability promises following public controversy generate significant negative abnormal returns, especially when the promise concerns supply-chain audits, safety, or compliance.

The results also remain when controlling for the tone of the original promise. High-specificity promises are often more confident in tone, and confidence could itself affect market reaction. Including positive tone, certainty language, and promotional intensity does not remove the deadline-specificity effect. In fact, missed precise promises with highly confident tone receive the largest penalties. The market appears to punish the combination of precision and confident nonfulfillment particularly strongly.

6. Machine Learning and Additional Tests

The machine-learning analysis begins by predicting whether a promise will be missed. The baseline logistic model using firm financial controls, industry, year, and promise domain has an out-of-sample

area under the receiver operating curve of 0.64. Adding structured textual features raises the score to 0.71. Adding transformer embeddings raises it to 0.76. The most important predictors of missed promises are long time horizon, low prior promise credibility, high promotional intensity, absence of milestone structure, weak operating cash flow, and high prior stock-return volatility. Deadline specificity alone predicts lower miss probability, consistent with the hazard model, but high specificity combined with long horizon and promotional tone predicts higher failure risk.

The return-prediction models show that textual features improve prediction of resolution penalties [22]. A financial-controls-only gradient boosting model predicts resolution-window abnormal returns with a mean absolute error of 2.91 percentage points in the test period. Adding promise domain, deadline specificity, verifiability, salience, and prior credibility reduces mean absolute error to 2.63 [23]. Adding document embeddings reduces it to 2.51. The largest incremental gains occur for missed and revised promises. Prediction remains difficult because event returns contain substantial noise, but the improvement indicates that promise text contains market-relevant information.

Feature attribution from the gradient boosting model identifies budget specificity, deadline proximity, operational verifiability, prior missed-promise history, and executive speaker identity as the strongest predictors of severe negative resolution reactions. Budget specificity is especially important in operational and technology promises. When a firm states both a deadline and a budget, failure suggests not only a missed schedule but also possible cost overrun or resource misallocation. Deadline proximity matters because promises issued close to the target date should reflect more precise private information. Missing a near-term promise is therefore more damaging than missing a promise made several years earlier.

Transformer attention diagnostics indicate that investors react more strongly to promise language containing concrete implementation verbs, such as “complete,” “install,” “ship,” “certify,” “migrate,” “open,” and “convert.” Promises using softer verbs, such as “explore,” “advance,” “support,” or “continue,” produce weaker reactions even when they include dates. This distinction is important because not all dates carry the same commitment meaning. A dated aspiration is weaker than a dated implementation claim. The classifier therefore separates temporal reference from commitment force.

Double machine-learning estimates confirm the missed-specificity penalty. After residualizing the missed-specificity interaction and abnormal returns using flexible controls and document embeddings, the estimated coefficient is -0.0167, close to the baseline estimate of -0.0189. The estimate for fulfilled specificity is 0.0069. These results indicate that the asymmetry is not driven solely by observable firm characteristics or broad textual patterns. The penalty remains after controlling for the fact that certain firms and certain types of promises are more likely to be specific.

A separate causal forest analysis estimates heterogeneous treatment effects for high-specificity missed promises. The largest negative effects occur among firms with high analyst dispersion, high intangible intensity, low prior promise credibility, and high institutional ownership. The institutional ownership result is notable because sophisticated investors may monitor promise resolution more closely. In low analyst-dispersion firms with strong prior credibility, the penalty for a missed precise promise is smaller, particularly when management provides an external explanation. This suggests that reputation can buffer, but not eliminate, the penalty of nonfulfillment.

The analysis also examines whether deadline specificity changes media coverage. Missed high-specificity promises generate a 22.6% increase in negative media articles over the following month relative to matched promises. The increase is concentrated in business press and industry trade publications rather than general media. Fulfilled high-specificity promises generate a smaller 7.4% increase in positive coverage. Negative media coverage partially mediates the relation between missed precise promises and short-interest increases, although the direct market reaction remains significant after controlling for media.

Another additional test studies customer-facing consequences using revenue surprises. For product and customer-service promises, missed high-specificity commitments are associated with a 1.4 percentage point lower revenue surprise in the following quarter relative to analyst expectations. The association is stronger when the promise concerns product availability or service recovery [24]. Fulfilled precise

promises are associated with a 0.5 percentage point positive revenue surprise. These findings suggest that some promise failures correspond to real operating consequences, not merely communication penalties.

The paper also tests whether firms reduce future specificity after failure. Following a missed high-specificity promise, firms reduce the average specificity of new promises by 0.09 over the next year. The reduction is strongest after severe stock-market penalties. Firms do not stop issuing promises; instead, they shift toward broader time windows, fewer numerical thresholds, and less explicit scope. This behavior is consistent with managerial learning about accountability costs. However, firms with strong subsequent fulfillment records gradually restore specificity within two to three years.

There is evidence of spillover across promise domains [25]. A missed high-specificity product promise reduces the announcement reaction to later operational promises by the same firm. A missed workforce promise has weaker spillover into product promises, unless the workforce promise concerned staffing capacity or service quality [26]. These spillovers indicate that investors maintain a firm-level credibility account but weight domain relatedness. A failure in one execution-intensive domain can contaminate beliefs about another execution-intensive domain.

The study further considers whether precise promises are more common before external financing. Firms issuing equity or debt within six months after a promise announcement are more likely to use high-specificity language. However, the main results remain after excluding promises followed by financing. Among financing-related promises, the penalty for missed high-specificity commitments is larger, reaching -3.02%. Investors may be especially sensitive when precise promises appear before capital raising because failure raises concerns about pre-financing persuasion.

The machine-learning evidence therefore complements the econometric results. It shows that the market-relevant content of corporate promises is not limited to a single numeric specificity score. The strongest signals combine dates, budgets, implementation verbs, verifiable milestones, and salient domains. The most damaging failures occur when a firm uses precise and confident language but lacks a strong prior fulfillment record. The prediction models do not replace theory, but they help identify the textual features through which promise credibility is encoded.

7. Robustness and Boundary Conditions

Several robustness tests examine whether the results depend on event-window choices. Using a five-day window around resolution produces a missed high-specificity penalty of -2.61%, compared with -2.34% in the three-day window. Using an eleven-day window produces -2.88%. Announcement effects are weaker over longer windows, suggesting that initial promise interpretation occurs quickly, while resolution penalties may diffuse through analyst reports and media coverage over several days. The central asymmetry between fulfillment rewards and failure penalties remains in all windows [27].

The results also hold under alternative abnormal-return models. Market-adjusted returns, industry-adjusted returns, and factor-adjusted returns produce similar estimates. Excluding events with absolute market returns above 2.5% on the event day does not change the pattern. Excluding firms with stock prices below five dollars or market capitalization below 500 million dollars produces slightly smaller but still meaningful coefficients. These checks reduce concern that microstructure noise or broad market shocks drive the findings.

Promise classification error is another concern. To address it, the paper re-estimates the main models using only promises with high classifier confidence and clear human validation. This stricter sample contains 3,912 promises. The missed high-specificity penalty is -2.41%, nearly identical to the full-sample estimate. The fulfillment reward is 0.98%. A second test treats delayed and revised promises as missed promises. The combined failure category produces a specificity interaction of -0.0158. A third test excludes unresolved promises rather than using them as an omitted category, and the results remain similar.

The grace period for fulfillment could affect classification. The baseline uses thirty calendar days after the stated deadline. Using no grace period increases the number of missed promises and slightly reduces the average missed-promise penalty, likely because minor administrative delays are included.

Using a sixty-day grace period reduces the number of missed promises but increases the penalty for the remaining failures. The main inference is unchanged: missing a precise promise is more damaging than missing a vague promise.

The study also checks whether the resolution event is confounded by earnings news. The main sample excludes resolutions within three trading days of earnings announcements. Restoring those events and controlling for earnings surprise produces similar coefficients. The missed-specificity penalty is somewhat larger during earnings windows, which is plausible because investors receive updated financial information and promise-resolution information simultaneously. The clean non-earnings sample is therefore retained for the main tests [28].

A possible alternative explanation is that high-specificity promises are simply larger projects. Larger projects would naturally produce larger market reactions when they fail. The models control for salience, document prominence, executive speaker, word count, and domain. The paper also constructs a project magnitude proxy based on budget mentions, expected revenue language, capacity terms, and analyst discussion intensity [29]. Including this proxy reduces the missed-specificity coefficient by about 12%, but the effect remains large. This indicates that specificity is not merely a proxy for project size.

Another concern is that firms may choose specificity when they are already confident, making fulfillment rewards predictable and failure penalties rare but severe. The hazard model confirms that specific promises are more likely to be fulfilled. The paper therefore uses inverse probability weighting to balance high- and low-specificity promises on predicted specificity. Weighted event-study estimates remain consistent. The missed-specificity penalty in the weighted model is -1.93%, and the fulfillment reward is 0.71%. Selection explains part, but not most, of the accountability effect.

The analysis also evaluates whether the findings are driven by product-launch announcements. Product promises are important, but excluding them leaves 4,536 promises and a missed high-specificity penalty of -2.05%. Excluding sustainability promises or workforce promises has little effect. Excluding operational promises reduces the average penalty somewhat but leaves the qualitative result intact. This suggests that the effect is not confined to any one domain.

Boundary-condition tests show where deadline specificity is less consequential. For low-salience promises, specificity has little effect on announcement or resolution returns. Investors do not strongly penalize precise failure when the promised action is financially trivial. For low-verifiability promises, specificity also has weaker effects because outsiders cannot easily judge whether the firm truly failed. For firms with extremely strong prior credibility, missed precise promises still produce negative returns, but the penalty is smaller and more likely to reverse partially when management provides credible explanations. For firms in highly volatile industries, deadline extensions tied to external supply shocks receive smaller penalties than unexplained delays.

External explanations are coded from resolution disclosures. Explanations are classified as external shock, internal execution issue, strategic reprioritization, demand change, regulatory delay, supplier constraint, or unspecified. Missed high-specificity promises with internal execution explanations produce the largest penalty at -3.05%. Unspecified failures produce -2.76%. External shocks produce -1.22%. Regulatory delays produce -0.94%. This pattern indicates that investors do not mechanically punish every missed deadline. They interpret the reason for failure, but precision still increases the baseline accountability standard.

The paper also considers whether firms with more complex operations face higher penalties because their promises are harder to execute. Complexity is measured using segment count, geographic dispersion, product-line breadth, and supply-chain length. Complexity increases the probability of delay but does not fully explain resolution returns. The penalty for missed precise promises is strongest when complexity is high and prior credibility is low. When complexity is high but prior credibility is strong, investors appear more willing to attribute failure to operational difficulty rather than managerial overstatement.

An additional boundary condition concerns time horizon. Near-term precise promises, with deadlines within one year, generate stronger announcement rewards and stronger failure penalties than long-horizon precise promises. Long-horizon promises are discounted because many conditions can

change before resolution. However, long-horizon promises with intermediate milestones behave more like near-term promises. Milestone structure therefore helps maintain credibility over longer horizons by giving investors partial verification points.

The study tests whether promise specificity relates to subsequent legal or regulatory risk. Missed high-specificity promises are followed by a small increase in shareholder litigation announcements and regulatory inquiry mentions, but these events are rare. Excluding firms with subsequent litigation does not alter the market-reaction results. The penalty for missed precise promises is therefore not driven primarily by legal exposure. It appears more closely related to investor belief revision about execution quality.

The final robustness test compares corporate promises with nonpromise positive announcements [30]. A matched sample of optimistic but noncommittal corporate statements is constructed from the same documents. These statements contain positive language about strategy or opportunity but lack a future verifiable commitment. Nonpromise statements generate smaller announcement reactions and no comparable resolution effect because there is no clear future test. This comparison supports the central claim that promises are distinctive because they create a measurable accountability point.

8. Discussion

The evidence indicates that deadline specificity is a consequential design feature of corporate signals. Investors do not treat all promises as equivalent. A precise promise can provide reassurance because it suggests that management is willing to be evaluated against a future standard. Yet the same precision increases the penalty for failure. The market reaction is therefore conditional and asymmetric. Precision helps when the firm fulfills its commitment, but it hurts more when the firm fails to meet the stated deadline or threshold.

This finding changes how corporate promises should be understood. A promise is not simply positive language about the future. It is a claim that creates an evaluable path [31]. The path matters because investors learn from both the original commitment and the later outcome. When a firm chooses a specific deadline, it reveals something about its confidence, planning process, and willingness to accept reputational exposure. When that deadline is missed, investors revise beliefs not only about the delayed project but also about the credibility of managerial communication.

The study also shows that the market's response is disciplined rather than indiscriminate. Investors do not strongly reward or punish every precise statement. The strongest effects occur when promises are salient, verifiable, and tied to operations, products, customer service, or technology implementation. Low-salience promises generate weak reactions. Low-verifiability promises are harder for investors to evaluate. This indicates that market participants distinguish between symbolic precision and economically meaningful precision.

Prior credibility plays an important role. Firms with strong fulfillment histories receive larger announcement benefits and smaller failure penalties. Firms with weak histories receive limited announcement benefits and larger penalties when they miss precise commitments. This pattern suggests that corporate signaling is cumulative. Each promise enters a reputational ledger. A firm that repeatedly fulfills commitments can make precise promises without appearing reckless. A firm that repeatedly misses commitments may find that precision no longer creates credibility and instead invites skepticism.

The results have implications for managerial communication. Managers may prefer precise promises because they attract attention, coordinate internal action, and reassure investors. However, precision should not be used merely to make a communication sound disciplined. A deadline-specific promise should be issued when the firm has enough operational readiness, monitoring capacity, and contingency planning to withstand later verification. Otherwise, the short-term communication benefit can be outweighed by the resolution penalty.

The evidence also has implications for internal governance. Firms may need internal review processes for voluntary promises, similar to review processes for financial guidance or legal disclosures. The relevant review should include operating managers who understand execution risk, finance managers who

understand investor salience, legal teams who understand liability, and communication teams who understand audience interpretation. Without such review, firms may issue precise commitments that sound persuasive but lack adequate implementation support.

For investors, the findings suggest that promise tracking can be informative. A firm's record of promised deadlines, revisions, and fulfillment outcomes can reveal execution discipline [32]. Investors often track earnings guidance, but broader corporate promises may contain additional information about operations, product readiness, customer commitments, workforce initiatives, and supply-chain risk. A database of voluntary promises and resolutions could support assessments of managerial credibility beyond conventional accounting indicators.

For analysts, the study suggests that forecast revisions should consider the resolution of nonfinancial promises [33]. Missed operational or product commitments can affect future revenue and cost even when the immediate financial impact is not disclosed. Fulfilled commitments may reduce uncertainty about execution. Analysts who systematically track such promises may detect changes in firm credibility earlier than those relying only on formal guidance.

The findings also caution against interpreting vague language as harmless. Vague promises may avoid sharp penalties because they are difficult to evaluate, but they also receive smaller announcement rewards and weaker fulfillment benefits. Vague communication preserves flexibility at the cost of credibility [34]. The choice between specificity and vagueness is therefore a trade-off. Firms with strong execution systems may benefit from specificity, while firms facing high uncertainty may rationally choose broader language. The market appears to understand this trade-off [35].

The paper also contributes methodologically by combining event studies with textual classification and resolution tracking. Many studies analyze corporate language at issuance, but fewer follow the later outcome of the language. Tracking resolution is labor-intensive, yet it is essential for understanding whether a signal was credible. The method developed here can be applied to other settings where firms make voluntary commitments, such as cybersecurity upgrades, supplier audits, safety improvements, digital migration, workforce reforms, and service-level promises.

There are limitations. Promise classification requires judgment, and some outcomes remain difficult to verify. Firms may fulfill a promise internally without disclosing the outcome, or they may redefine success in ways that outsiders cannot fully assess. The sample focuses on publicly traded firms with sufficient disclosure and market data, so the findings may not generalize to private firms. The event-study design measures market reactions but cannot observe all investor reasoning. Although the robustness tests reduce several concerns, unobserved shocks may still coincide with promise resolution in some cases.

Future research can extend the analysis by examining international differences in promise penalties. Legal systems, disclosure norms, investor protection, and media environments may influence how strongly markets punish missed commitments. Another extension would compare executive-level promise styles, including whether certain executives systematically use more precise language and whether boards respond after repeated missed promises. A third extension would examine customer and employee reactions to promise fulfillment, especially for service and workforce commitments where market prices may understate stakeholder effects.

9. Conclusion

This paper studies deadline specificity in voluntary corporate promises. The evidence indicates that precise promises are not ordinary optimistic statements. They are corporate signals that create future accountability. Investors respond modestly when such promises are issued, especially when they are salient and verifiable. They respond more strongly when the promise is later resolved. Fulfillment produces positive reactions, but failure produces larger negative reactions.

The central finding is asymmetric accountability. A fulfilled precise promise improves market beliefs, but a missed precise promise damages them more sharply. This asymmetry appears in abnormal returns, analyst forecast revisions, forecast dispersion, bid-ask spreads, short interest, and media tone. The

penalty is strongest for operational, product, customer-service, and technology implementation promises, where failure can reveal execution weakness. The penalty is weaker for low-salience or low-verifiability promises because investors have less reason or ability to update beliefs.

The study also shows that credibility accumulates over time. Firms with strong prior fulfillment records receive greater benefit from precise promises and face smaller penalties when failure is plausibly explained [36]. Firms with weak records receive little initial benefit and face larger penalties after missed deadlines. Corporate promises therefore operate within a reputational history. The market does not evaluate each promise in isolation.

The findings suggest a practical implication for managers. Deadline specificity should be used carefully. It can strengthen credibility when the firm has operational readiness and a clear verification path [37]. It can also magnify reputational damage when execution fails. Managers should not treat precision as merely a rhetorical improvement. A precise promise is a claim about organizational discipline.

The paper avoids a broad firm-value framing and instead focuses on investor belief revision around discrete signal events. This design shows how corporate signals become financially meaningful through time. A promise matters not only when it is announced, but also when the promised date arrives. The later comparison between words and outcomes is where credibility is confirmed, weakened, or lost [38].

Several limitations remain. Some promise outcomes are difficult to classify, and some market reactions may reflect simultaneous information. The empirical design uses extensive controls, matched comparisons, and machine-learning checks, but it cannot eliminate all sources of endogeneity. The findings should therefore be interpreted as evidence that deadline-specific promises are associated with disciplined investor updating, not as proof that every precise promise mechanically causes a market reaction.

The broader conclusion is that corporate signaling involves accountability. Firms choose how much future verifiability to attach to their claims. Investors appear to notice that choice. A company that gives the market a date, a threshold, and a scope condition receives the benefit of clearer communication, but it also accepts the cost of being judged. In corporate promises, precision is valuable because it is risky.

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