

Pricing Repurchase Promises: Expected Execution and Investor Beliefs

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Abstract

I study how investors price expected repurchase delivery and what actual purchases reveal beyond that expectation. Using 10,752 Chinese announcements, I construct an expanding out-of-sample execution forecast from current firm and plan information and distinguish it from historical execution reputation. Expected Execution predicts announcement returns beyond the earlier record, while a matched comparison associates authorizations with an additional immediate response following similar price declines. Execution relative to its forecast predicts later returns and earnings news; a disclosure-aligned comparison places public implementation information before the earnings releases. Around the Kangmei judgment, an external increase in disclosure liability, the forecast's pricing weight declines relatively more among firms without a public directors' and officers' insurance record. The evidence connects the value investors assign to a discretionary payout promise with delivery relative to expectation and with the accountability attached to the statement: credibility depends on what the current plan is expected to deliver, what subsequent conduct reveals, and how much corroboration the legal environment requires.

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JEL Classification: D83; G14; G35; G38

1 Introduction

A firm can announce a share repurchase before buying a single share, yet the promise immediately acquires a market value. Following comparable declines, Chinese repurchasers earn 0.961% over the announcement window, while matched firms without an authorization earn 0.084%. The 0.877% difference measures the additional response associated with the new promise. What determines that value before delivery, and what does observable delivery reveal afterward?

The price path distinguishes the value of the announcement from the loss it follows. Across 10,752 announcements during 2010–2025, the average immediate cumulative abnormal return (CAR) is 0.674%, while the wider-window CAR is -0.629% . The wider window includes the preceding decline, so its negative return can coexist with favorable announcement news. The matched comparison establishes a more demanding benchmark: whether a repurchase announcement adds to the price adjustment that similar firms experience without one. I use this comparison to establish the incremental response and then examine how expected follow-through predicts its size.

The economic distinction is between a credible signal and an expected distribution. Investors can welcome an authorization without expecting the firm to spend its entire announced amount. They assess current resources, purchase opportunities, and plan terms alongside the firm’s earlier conduct. A purchase below the announced ceiling can consequently meet expectations, while a larger purchase can fall short of a more demanding forecast. The relevant question is what the market anticipates at authorization and what delivery adds to that assessment. This question links announcement pricing to subsequent information instead of treating credibility as a fixed attribute of the issuer.

Repurchase research establishes that authorizations convey favorable information despite leaving managers discretion over implementation (Vermaelen 1981; Stephens and Weisbach 1998; Oded 2005; Bhattacharya and Jacobsen 2016; Manconi et al. 2019). Earlier completion predicts later completion and announcement returns (A. A. Bonaimé 2012); executive compensation also helps explain how investors assess repurchase signals (Ahmed et al. 2026). I connect these questions about the issuer to a plan-specific benchmark: execution predicted by current public information. The forecast and the historical record enter separately, and actual purchases are evaluated against a forecast for the same execution horizon. This comparison distinguishes information available when the promise is priced from information revealed by its fulfillment.

I separate three objects. Expected Execution is a standardized, expanding out-of-sample forecast of recorded execution within 90 days based on firm characteristics, recent market conditions, current plan terms, and industry information. Historical Execution Reputation summarizes earlier execution incidence, intensity, and repurchase experience. Execution Surprise compares early execution with its announcement-date forecast. The first measure prices the current information set, the second records earlier conduct, and the third measures what subsequent action adds. A disclosure-aligned forecast uses dated public disclosures to connect expected purchases with subsequently reported execution and earnings.

China provides a setting in which plans and implementation generate separate disclosures. Firms announce plan terms, disclose purchases and progress, and report completion or termination. This sequence distinguishes a proposed distribution from observable delivery. The China

Stock Market and Accounting Research (CSMAR) database supplies repurchase records, stock returns, financial statements, and earnings releases. The Mingshi Database supplies the China three-factor (CH-3) model factors (J. Liu et al. 2019). The event panel covers 3,324 firms. Announcement returns use the Fama–French five-factor model (FF5) (Fama and French 2015).

I find the following results. First, repurchasers receive an incremental announcement response relative to matched firms. The 3,343 matched pairs have similar pre-event returns and firm characteristics. Repurchasers earn an additional 0.877% over the announcement window and retain a 0.539% advantage over the wider window. Their own wider-window CAR remains negative. The authorization brings additional favorable information, but the immediate response reverses only part of the preceding loss.

Second, Expected Execution predicts the immediate response. A one-unit increase in the standardized forecast corresponds to a 0.980% larger announcement CAR. On a common sample, the forecast coefficient is 0.986 when Historical Execution Reputation enters jointly, while the history coefficient is 0.097 and statistically insignificant. Current firm and plan conditions therefore contain incremental pricing information beyond the earlier record. A separately constructed Disclosure-Aligned Expected Execution score predicts both verified 90-day intensity and announcement CAR.

Third, execution relative to its forecast predicts later information. A one-unit increase in Execution Surprise predicts a 0.900% higher FF5-adjusted return over trading days [31, 180] and a 0.059-unit increase in average future standardized unexpected earnings (SUE). These returns begin after the execution-measurement window and can include the first public implementation disclosure. A separate disclosure-aligned comparison places implementation disclosure before the earnings releases and yields a coefficient of 0.094 for mean post-disclosure SUE. The return comparison captures information entering prices after early purchases, while the dated earnings comparison connects publicly reported execution to subsequent earnings news.

Finally, the Kangmei judgment supplies an external enforcement comparison. This test uses the annual execution-prior index and compares its announcement-return slope across pre-existing directors' and officers' (D&O) insurance records. Over nine months on each side of the judgment, the slope decline is 3.142% larger among firms without a public insurance record. The event-time estimates do not reject equal pre-judgment trends, and an industry-stratified firm-level permutation test places the estimate in the tail of the placebo distribution. The comparison links the market weight on expected delivery to the accountability surrounding public corporate statements.

The paper makes three connected contributions. First, it provides an execution expectation against which a repurchase promise can be valued and assessed. A. A. Bonaimé (2012) establishes the pricing relevance of past completion, and Ahmed et al. (2026) examine how managerial compensation informs the credibility of repurchase signals. I move from these attributes of the issuer to a forecast for the current plan. Expected Execution uses current firm and plan information, excludes the firm's historical execution statistics, and retains pricing information when the historical measure enters jointly on a common sample. The advance is the separation of reputation from expected delivery: past conduct describes the issuer's record, while a forecast translates the circumstances of a new authorization into a benchmark for future action. The

matched no-announcement comparison supplies the price benchmark against which the initial promise is valued.

Second, the paper links implementation information to the expectation that precedes it. Studies of purchases and program-status disclosures establish the information content of execution (Stephens and Weisbach 1998; Cook et al. 2004; Busch and Obernberger 2017; Barger, A. Bonaimé, Docimo, et al. 2024). C. Huang and Tian (2026) associate actual Chinese repurchases with lower crash risk, especially when plans are more transparent and implementation disclosures are timelier. I ask what purchases reveal after allowing for the execution anticipated from current public information. Execution Surprise predicts later returns and earnings news, and dated disclosures establish the ordering between public implementation information and subsequent earnings. Long-horizon funds also sell more after execution shortfalls. The contribution is a common expectation benchmark linking announcement valuation, realized conduct, reported earnings, and investor demand. It distinguishes the information in a purchase from the amount purchased alone.

Third, the paper shows that the pricing weight on expected delivery varies with external accountability. Disclosure research connects public information to liquidity and the cost of capital (Diamond and Verrecchia 1991); liability-insurance research connects coverage choices to subsequent share performance (Chalmers et al. 2002). The Kangmei judgment supplies a common enforcement event, and pre-existing D&O insurance records distinguish measured exposure. I estimate the relative change in the announcement-return slope on expected execution across these groups. The larger decline among firms without a public insurance record persists with comparable pre-judgment characteristics and announcement-month fixed effects. This evidence extends the credibility question from which firms receive a premium to when firm-specific execution expectations carry less pricing weight. Stronger accountability can increase the value attached to current disclosure while reducing investors' reliance on the forecast that otherwise helps corroborate it.

Section 2 develops the institutional setting and predictions. Section 3 describes measurement, and Section 4 sets out the comparisons. Section 5 follows announcement pricing and subsequent execution. Section 6 concludes. Online Resource 1 contains the formal model, detailed variable definitions, institutional evidence, and supplementary tables.

2 Literature Review and Hypothesis Development

2.1 Flexible Authorizations and the Relevant Price Benchmark

Repurchase research links announcement returns to undervaluation, cash distribution, declining risk, and post-announcement underreaction (Vermaelen 1981; Ikenberry et al. 1995; Grullon and Michaely 2004; Manconi et al. 2019). These explanations concern the information conveyed by an authorization. Implementation remains a separate managerial choice. Theoretical models show how that choice gives the authorization option value: managers can condition purchases on later prices and private information, so a plan can convey favorable information without committing the firm to a fixed distribution (Oded 2005; Bhattacharya and Jacobsen 2016). Survey evidence identifies timing and amount flexibility as a central reason managers prefer

repurchases (Brav et al. 2005), while actual and ongoing programs can alter investment and create persistent payout commitments (Almeida, Fos, et al. 2016; Almeida, R. Huang, et al. 2026). A repurchase promise is therefore flexible but economically consequential.

This combination separates the sign of the announcement response from its size. Favorable information can raise price, while uncertainty about implementation determines how much value investors attach to that information. Actual purchases respond to stock prices, cash resources, and the announced scale (Stephens and Weisbach 1998). The same plan can therefore imply different expected distributions across firms and dates. A preceding decline matters both as the price path against which the market values the authorization and as a condition that changes the incentive to purchase. Matching firms after similar declines supplies the relevant no-announcement path; expected implementation explains variation around that benchmark.

A preceding price decline sharpens this distinction. If the decline reflects temporary selling pressure or undervaluation, purchases can support a recovery. If it reflects weaker expected cash flows, an authorization does not itself restore those cash flows. Investors therefore evaluate both the reason for the decline and the feasibility of the proposed response. A positive short-window CAR measures favorable information arriving with the plan; complete recovery requires that this information offset the earlier loss. The two propositions concern different economic comparisons. The no-announcement path makes that difference observable without assuming that every preceding decline should reverse.

Information selection can also shape the preceding decline. Chen, Chou, et al. (2020) find that executive compensation and outside monitoring condition opportunistic disclosures before repurchases and subsequent stock performance. A comparison with firms following similar price declines therefore matters: favorable announcement returns and restoration of an earlier price answer different questions. The matched benchmark evaluates the additional response associated with an authorization, while expected execution distinguishes the promises made at that date.

The wider-window pattern also need not require irrational optimism at announcement. Suppose investors correctly anticipate partial delivery and some of the preceding decline reflects persistent adverse information. They can rationally assign a positive incremental value to the plan while leaving the stock below its earlier abnormal-return benchmark. In this case, incomplete recovery comes from the limited value of the newly disclosed action. Delayed incorporation of implementation news is a separate possibility that concerns returns after information about action arrives. The announcement and subsequent-return evidence therefore distinguish the value of a promise from the speed with which investors learn about its delivery.

Chinese companies disclose the announced amount or range, purpose, price constraints, and proposed duration. Further disclosures describe initial purchases, progress, and completion or termination. Managers retain discretion over purchase timing and scale within these terms; material amendments and termination require additional disclosure. Consequently, a low early purchase quantity can reflect implementation opportunities or constraints as well as willingness to execute. The economic object is expected follow-through, not legal compliance inferred from a short purchase window.

Let $B_i \in \mathbb{R}$ denote the expected short-window price adjustment for a comparable firm

without a new repurchase announcement after a preceding loss $D_i > 0$. An authorization contributes incremental information G_i . Then

$$CAR_i^A = B_i + G_i, \quad CAR_i^W \approx -D_i + B_i + G_i + L_i, \quad (1)$$

where L_i is subsequent adjustment. The approximation expresses the return path additively. Even when $G_i > 0$, the wider return remains negative whenever $B_i + G_i + L_i < D_i$. The matched comparison benchmarks G_i against the short-window adjustment observed without a new authorization.

2.2 Expected Execution and Historical Reputation

Three strands of repurchase evidence explain why execution expectations can enter announcement prices. First, historical completion persists and commands a larger announcement response, establishing firm-level execution reputation (A. A. Bonaimé 2012). Second, costly actions can support an otherwise unverifiable signal, and insiders' own purchases predict both completion and announcement returns (Leland and Pyle 1977; Babenko et al. 2012). Third, realized repurchases vary with prices, liquidity, and financing capacity (Stephens and Weisbach 1998; Cook et al. 2004; Chen and Wang 2012). Together, these studies imply that investors value both who makes the promise and whether the current firm can carry it out.

Historical reputation and current execution capacity answer different questions. Reputation summarizes the type revealed by repeated conduct. Current resources, prices, and plan terms determine the opportunity set facing that type today. An identical announced amount can be modest for a cash-rich firm and demanding for a constrained firm; two firms with similar resources can still differ because one has repeatedly completed earlier plans. Expected Execution combines current public conditions into a forecast, while Historical Execution Reputation isolates the record of conduct. Their joint specification reveals whether current feasibility adds information beyond persistence in past behavior.

This distinction extends the reputational mechanism in A. A. Bonaimé (2012). A history of completion makes later promises more credible because repeated conduct helps investors assess managerial follow-through. Yet the same firm can announce plans of different scale under different financial conditions. Reputation alone does not specify the execution investors expect from each new authorization. Conditioning on the current opportunity set turns the historical question about the promisor into a forward-looking question about the promise. A forecast and a historical index can consequently overlap in pricing information without being interchangeable.

Compensation-based credibility and expected delivery are likewise distinct. Ahmed et al. (2026) find that compensation arrangements associated with stronger market responses can accompany fewer actual purchases. Their explanation allows price appreciation to reduce the incentive to buy. Credible favorable information therefore need not imply maximal implementation. This distinction motivates an expectation benchmark: investors assess purchases against the resources, market conditions, and plan terms that make delivery more or less likely. An innovation measures the departure from that forecast; whether the departure conveys favorable

earnings information depends on the economic reasons for execution.

A simple conditional comparison illustrates the difference. Consider two firms with similar past execution and current market value. One proposes purchases that are small relative to available liquidity; the other proposes a larger distribution while facing tighter financing needs. Their histories provide similar evidence about prior conduct, but the proposed plans imply different demands on current resources. Alternatively, consider two firms with comparable current financial conditions but different prior records. Their feasible purchase opportunities can look similar while their revealed willingness to use those opportunities differs. The expectation and history measures describe these two sources of information separately.

The model connects these empirical objects through the announcement-date information set. Expected Execution is an econometric proxy for anticipated delivery based on observed firm and plan information; Historical Execution Reputation summarizes earlier conduct. The forecast measures predictable execution, while the model describes how investors value and revise an expectation. The empirical comparison combines execution prediction with announcement pricing: predicting purchases gives the forecast a delivery interpretation, and the joint price regression measures what that forecast adds to history. Subsequent purchases then provide a realization against which to evaluate the forecast.

The distinction also changes the interpretation of an execution shortfall. Comparing purchases only with the announced upper amount treats that amount as the expectation. Under a discretionary authorization, investors can anticipate partial execution from the outset. A firm that purchases less than its announced maximum can therefore meet or exceed the quantity expected from its public circumstances. Conversely, a purchase that looks substantial in isolation can disappoint when a well-funded firm announces a readily feasible plan. An ex ante forecast supplies the reference point needed to distinguish these cases.

Learning provides the valuation link. Investors price uncertain firm characteristics by combining prior information with new signals (Pástor and Veronesi 2003). Here, the uncertain characteristic is follow-through on a discretionary action. Historical conduct informs the persistent component of that characteristic, while current plan terms and resources inform its present expression. The announcement makes the plan public before implementation resolves the uncertainty.

The distinction between expected quantity and latent type also matters. A type probability summarizes uncertainty about follow-through conditional on the current opportunity set. An expected quantity averages possible implementation across that uncertainty. The mapping between them is increasing when the high-follow-through type buys more, holding type-specific means fixed. Across different plans, however, those means can change. A cash constraint can lower expected purchases for both types, while a more modest plan can raise the fraction each type expects to complete. The forecast captures the conditional quantity or incidence relevant to the empirical design; the model explains why such an expectation can enter value.

Let $\theta_i \in \{0, 1\}$ denote a latent high-follow-through type and let $\pi_i^A = \Pr(\theta_i = 1 \mid \mathcal{I}_i^A) \in (0, 1)$ be the belief after current plan terms become public. The information set contains historical conduct, previously available firm information, and the current terms. If type-specific expected

execution satisfies $\mu_1 > \mu_0$, announcement-date expected execution is

$$q_i^A = \mathbb{E}[e_i \mid \mathcal{I}_i^A] = \mu_0 + (\mu_1 - \mu_0)\pi_i^A. \quad (2)$$

The comparative static holds type-specific execution means and plan value fixed. Across firms, resources and plan terms can also change those quantities. Expected Execution provides an empirical ranking of expected follow-through, while Historical Execution Reputation captures information from past conduct. Their joint comparison allows current feasibility and history to contain distinct information. Suppose the incremental announcement value satisfies

$$G_i = \pi_i^A V_i, \quad V_i > 0, \quad (3)$$

where V_i is the value associated with high follow-through. Equations (2) and (3) imply

$$\frac{\partial G_i}{\partial q_i^A} = \frac{V_i}{\mu_1 - \mu_0} > 0. \quad (4)$$

If the recoverable component of a preceding decline is $\kappa_i D_i$, setting $V_i = \kappa_i D_i$ links expected follow-through to the size of the announcement recovery. A higher execution expectation then raises the incremental response for a given preceding loss. This relation also explains why favorable news need not restore the earlier price. Some of the decline can reflect a persistent reduction in firm value, and uncertainty about delivery discounts the component that the authorization can recover. Matching identifies the price benchmark; conditioning on the preceding loss tests the execution-pricing relation at comparable starting points.

The recovery interpretation yields a second comparative static. Holding the prior and the recoverable fraction fixed, a larger preceding loss increases the value associated with high follow-through. In the specialization $V_i = \kappa_i D_i$,

$$\frac{\partial G_i}{\partial D_i} = \pi_i^A \kappa_i, \quad \frac{\partial^2 G_i}{\partial \pi_i^A \partial D_i} = \kappa_i > 0. \quad (5)$$

The cross-partial gives the price-loss interaction an economic interpretation. Expected delivery and the recoverable loss are complementary in the incremental value of the announcement: stronger expected follow-through matters more when more value is at stake. The comparison holds the recoverable fraction fixed, so it does not assume that larger losses always contain a larger reversible share.

The same model distinguishes favorable news from full recovery. With B_i allowed to be positive or negative, the empirically relevant region satisfies

$$B_i + \pi_i^A \kappa_i D_i > 0, \quad B_i + L_i < (1 - \pi_i^A \kappa_i) D_i. \quad (6)$$

The first condition makes the immediate response positive; the second leaves the wider return negative. They can hold simultaneously because an authorization changes only part of the information that determines value. The no-announcement adjustment, anticipated delivery, and subsequent news jointly determine how much of the preceding loss remains.

Expected Execution and Historical Execution Reputation summarize different information relevant to π_i^A . Their joint announcement-return specification asks whether current public conditions add pricing information beyond earlier conduct.

Hypothesis 1. *Expected execution positively predicts announcement returns and contains information beyond historical execution reputation.*

2.3 Execution Innovations and Subsequent Information

After the authorization, realized execution e_i provides an additional signal. With conditional densities f_1 and f_0 , posterior odds satisfy

$$\frac{\pi_i^1}{1 - \pi_i^1} = \frac{\pi_i^A}{1 - \pi_i^A} \frac{f_1(e_i)}{f_0(e_i)}. \quad (7)$$

An increasing likelihood ratio implies that stronger execution raises the posterior conditional on the prior. A positive execution forecast error and a positive posterior revision are different statements: the former compares e_i with its conditional mean, whereas the latter requires $f_1(e_i)/f_0(e_i) > 1$. Online Resource 1, Appendix A derives this distinction and illustrates it graphically.

The forecast innovation separates expected action from news about action. At a fixed announcement-date expectation, greater realization supplies stronger evidence of follow-through. Across different expectations, however, the same realized quantity carries different information. This conditional comparison is the empirical counterpart of learning: investors assess what implementation reveals beyond the information already available at authorization. It also explains why the announcement-return and later-information regressions answer complementary questions. The former prices anticipated delivery; the latter asks whether departures from that anticipation contain additional information.

The learning argument does not require every execution innovation to have identical price content. A purchase undertaken after improved operating prospects can convey different information from a purchase financed through new borrowing. Prices can also respond to liquidity provision by the firm. The model isolates the information component shared by follow-through and subsequent earnings news. Observing the conditional earnings relation helps assess that component, while the return regression measures the valuation change during its specified window. The empirical sequence gains content from these distinct dependent variables, not from treating them as interchangeable measures of a posterior belief.

Prices and earnings provide different views of this information. Returns measure changes in valuation and can respond when execution becomes public. Earnings releases describe subsequent reported performance, including the effect of purchases on per-share quantities. A favorable relation with both is consistent with execution conveying information that matters for valuation and later earnings news. The earnings relation requires shared information between follow-through and reported earnings; a post-disclosure return relation additionally requires some valuation adjustment to occur after disclosure. Keeping these conditions separate gives the learning argument distinct, testable implications.

The economic question is what execution reveals relative to the circumstances in which investors expect it. Chan et al. (2010) show that firms with stronger incentives to support their prices purchase less stock and display weaker subsequent performance despite similar initial responses. Actual purchases affect price efficiency, program-status disclosures predict later activity, and the source and timing of post-repurchase returns vary across firms (Busch and Obernberger 2017; Barger, A. Bonaimé, Docimo, et al. 2024; Barger, A. Bonaimé, and Thomas 2017). Realization therefore matters because it can validate the plan, and disclosure matters because it determines when that validation enters the public information set.

The earnings prediction requires a link between follow-through and later earnings news. Earnings releases convey information about firm performance (Gao et al. 2026). Suppose firms with stronger follow-through also have more favorable expected earnings news, conditional on announcement information. Unexpected implementation then reveals information about persistent resources or management’s assessment of prospects that the initial forecast does not fully capture. Online Resource 1, Appendix A formalizes this link: an increasing execution likelihood ratio raises expected subsequent earnings when the high-follow-through type has higher expected earnings news. The economic assumption is shared information in execution and profitability; Bayes’ rule describes how investors update on it.

Actual purchases and status disclosures are separate information events (Cook et al. 2004; Barger, A. Bonaimé, Docimo, et al. 2024). A purchase can occur before investors learn its cumulative amount. The measurement-clock specification records execution over days $[0, 30]$ and begins subsequent returns on day 31. Because implementation information can become public after day 30, these returns may include the initial market response to execution disclosure. The disclosure-aligned specification separately orders public implementation disclosure before subsequent earnings news. If a fraction ρ_i of the associated valuation revision enters price when execution becomes verifiable, the component left for later incorporation is proportional to $(1 - \rho_i)(\pi_i^1 - \pi_i^A)$. Execution can also predict earnings published later because prices and accounting releases need not reveal information at the same time.

This distinction is central to the information channel. C. Huang and Tian (2026) study actual purchases and crash risk using Chinese progress disclosures, with transparency and timeliness conditioning the relation. The expectation-based comparison adds a different conditioning question: what does implementation reveal beyond the delivery anticipated at authorization? A purchase conveys new information to the extent that it differs from that benchmark and helps distinguish the firm’s possible circumstances. Later earnings news supplies a subsequent observation of those circumstances, provided the implementation information becomes public first.

Disappointment makes the initial expectation especially relevant. A small purchase quantity can be close to the forecast for a constrained firm but a substantial shortfall for a firm expected to execute strongly. Holding realization fixed, a higher expectation creates a larger forecast shortfall. The earnings and trading comparisons examine whether such shortfalls accompany less favorable subsequent information and a withdrawal of investor demand. This comparison concerns delivery relative to expected action; the sign and size of a posterior belief revision additionally depend on the signal likelihoods.

Investor horizon offers another implication of this distinction. An investor willing to hold a firm through temporary earnings fluctuations can still sell when new conduct changes the assessment of management or the feasibility of its plans. Patience with short-lived price or earnings variation does not imply indifference to a shortfall in expected action. Starks et al. (2026) show that long-horizon funds respond differently to earnings disappointments and adverse environmental and social incidents. Their information-assessment argument motivates examining whether execution disappointment is associated with different trading by investors whose typical holding horizons differ.

Financial capacity also provides a competing economic force. Chen and Wang (2012) find weaker post-repurchase stock and operating performance among financially constrained repurchasers, especially when actual repurchases are high. Spending more is therefore not uniformly favorable: it can reveal confidence and resources, or deplete liquidity needed for investment. Conditioning on the initial forecast and firm characteristics distinguishes predictable capacity from unexpected implementation, while later earnings examine whether favorable execution carries favorable financial information. Per-share earnings can additionally change through the denominator, so operating news and share-count effects remain separate economic channels.

Hypothesis 2. *Execution innovations positively predict subsequent returns and earnings news.*

2.4 External Enforcement and the Weight on Expected Delivery

The value of a flexible promise depends on both expected delivery and the accountability attached to the statement. Public disclosure can affect valuation by reducing information asymmetry and improving liquidity (Diamond and Verrecchia 1991). Liability arrangements introduce an incentive dimension: Chalmers et al. (2002) find that liability insurance purchased around initial public offerings is negatively related to later share performance. Their evidence makes insurance choices economically relevant to how managers face risk. In the repurchase setting, stronger accountability can raise the cost of unsupported statements and make current plan terms more informative. Online Resource 1, Appendix A develops the resulting substitution prediction: increasing the precision of current disclosure reduces the weight on other firm-specific information when its precision is held fixed.

The November 2021 Kangmei judgment makes personal disclosure liability salient through a large investor-compensation award and liability for directors and other responsible parties. The annual execution-prior index ranks expected follow-through within the information environment of each announcement year. Firms without a public D&O insurance record face greater measured exposure to the enforcement change.

The substitution prediction concerns a pricing slope, not the average announcement return. Stronger accountability can increase the value attached to a current statement even as it reduces the marginal information investors obtain from a firm’s own execution forecast. An investor who places more weight on legally consequential disclosure needs less corroboration from firm-specific indicators. The price difference between otherwise similar promises with high and low expected execution can then narrow. A smaller forecast coefficient is thus compatible with more credible current statements.

The liability environment can affect valuation through both the precision of information and the incentives behind it. Investors may put greater weight on a public statement when an inaccurate statement exposes responsible individuals to more consequential claims. Managers may also select terms with greater care when the cost of unsupported disclosure rises. Either response can make the current authorization more informative about feasible delivery. The forecast remains relevant, but the amount of additional corroboration it supplies can change.

Insurance records describe differential exposure rather than a direct measure of information quality. A disclosed policy can alter the personal financial consequences of litigation, while its existence can also correlate with governance, size, and prior demand for risk management. The comparison therefore concerns how the forecast’s pricing slope changes across groups around a common legal event. Group differences before the event and common market changes require separate attention. Covariate balance, group-specific slope estimates, and event-time comparisons each address part of that interpretation.

Information conditions provide a related comparison even in the absence of a legal change. Suppose the firm-specific forecast is particularly informative when conventional earnings reveal little about the firm’s investment opportunities. A high share of value in R&D-intensive activities can then increase the incremental information investors obtain from expected delivery. By contrast, public disclosures by economically linked firms can supply information about demand or trading relationships that overlaps with what the repurchase forecast conveys. The marginal value of the forecast can fall when that alternative information is available.

A complementary response is also economically possible. If enforcement makes implementation promises more consequential specifically for firms already able to deliver, accountability can strengthen the pricing of expected execution. The negative relative-slope prediction follows when the improvement in current-disclosure credibility substitutes for the information summarized by the forecast. Pre-existing insurance records provide an exposure comparison because personal liability matters differently across disclosed insurance arrangements. The empirical question is whether the judgment changes the relative weight on expected delivery in the direction implied by substitution.

Hypothesis 3. *After the Kangmei judgment, the announcement-return slope on expected execution declines relatively more among firms without a public D&O insurance record.*

3 Data and Variable Construction

3.1 Sample and Return Measurement

CSMAR provides the event, financial, return, implementation, earnings, insurance, and holdings data. CH-3 factor returns come from the Mingshi Database. The sample contains 10,752 initial repurchase-plan announcements for 3,324 Chinese A-share firms from August 2010 through December 2025. Each announcement maps to one program identifier. Amendments, implementation updates, completion announcements, and termination announcements describe the same program but do not create additional main events; the program identifier links those disclosures to the initial authorization. The matched control screen uses the same lifecycle records to exclude active plans and nearby repurchase disclosures.

Stock returns extend through 12 June 2026, repurchase implementation and program-status disclosures through 16 June 2026, earnings releases through 30 April 2026, and mutual-fund holdings through the first quarter of 2026. An event enters a forward-looking test only when the required return, earnings, completion, or holdings window is observable.

Event day 0 is the first trading day on or after the legal disclosure date. I estimate FF5 parameters over days $[-250, -31]$ using at least 120 valid observations, following standard event-study practice (Brown and Warner 1985; MacKinlay 1997). Daily abnormal returns are compounded:

$$CAR_i[a, b] = 100 \left\{ \prod_{\tau=a}^b (1 + AR_{i,\tau}) - 1 \right\}. \quad (8)$$

The main window is $[0, +1]$. Its second day captures responses to announcements released after the first day’s close. The pre-event, remaining short-run, and wider windows are $[-20, -1]$, $[+2, +20]$, and $[-20, +20]$. Continuous event-return measures use 1st- and 99th-percentile winsorization. Adjacent compounded and separately winsorized CARs do not add exactly, so Equation (1) supplies an approximation, not an exact sample decomposition.

For a negative pre-event CAR, loss is its absolute value. The bounded recovery fraction clips announcement CAR divided by that loss to $[0, 1]$ and measures the fraction reversed during the announcement window. Matching uses market-adjusted pre-event CAR; reported comparison returns use FF5 adjustment. Online Resource 1, Appendix F reports both balance concepts.

The two-day announcement window gives the initial public plan a short valuation interval. Extending the window admits further market and company information, including the start of implementation. The additional event windows accordingly answer different questions rather than competing for a single preferred announcement estimate. The immediate window measures the initial response; the later short-run window describes adjustment after that response; the wider window relates the combined path to the earlier decline. The matching design uses these windows on common dates so that their economic interpretation does not change between repurchasers and controls.

3.2 Expected Execution

Expected Execution forecasts recorded execution within 90 days using firm and plan characteristics. For prediction year y , the estimation sample contains announcements dated no later than January 1 of y minus 90 calendar days and requires at least 500 observations with a nonmissing execution indicator. The expanding linear probability forecast is

$$\hat{m}_{i,y} = \hat{\alpha}_y + \mathbf{Z}_i' \hat{\beta}_y, \quad EE_i = \frac{\hat{m}_{i,y} - \overline{\hat{m}_{\mathcal{T}_y}}}{s(\hat{m}_{\mathcal{T}_y})}. \quad (9)$$

The predictor vector includes size, book-to-market, profitability, leverage, cash, Tobin’s Q, state ownership, momentum, volatility, financing constraints, current purpose indicators, announced amount and scale, a large-plan indicator, and industry indicators. It excludes the firm’s historical execution statistics. Accounting variables use fiscal year $t - 1$, market variables precede the authorization, and plan terms enter when the authorization becomes public. Missing predictors receive estimation-sample medians; standardization uses fitted values from the same training

sample.

The forecasting model gives different economic roles to the predictor blocks. Firm characteristics describe financial capacity and investment opportunities. Market variables describe the price conditions under which repurchasing may be attractive. Current plan terms describe the scale and purpose of the proposed action. Industry information allows the relationship between these conditions and execution to reflect common business environments. Together, they translate the public circumstances of a plan into an expected incidence of delivery.

Expected Execution and Historical Execution Reputation draw on distinct predictors. The forecast summarizes current firm characteristics, market conditions, and plan terms; the historical index summarizes earlier conduct. Entering them separately and jointly permits a comparison of their incremental pricing information. Investors can use both sources when evaluating an authorization.

Training-sample standardization serves a different purpose from prediction. The fitted value ranks execution propensity, and standardization expresses the rank-related variation relative to the dispersion in the earlier estimation sample. It does not convert the index into a bounded probability. Values outside the usual probability interval are possible for a linear forecast, and an unusual current plan can be distant from the earlier fitted-value distribution. The index is therefore interpreted in forecast units. The tail and annual-rank comparisons examine whether announcement pricing depends on those units or remains visible under alternative representations of the same ordering.

Disclosure-Aligned Expected Execution provides a separate timing specification. It restricts the sample to exchange-based plans, forecasts continuous 90-day intensity, selects accounting inputs by their actual publication dates, and admits a training label only after its measurement window and implementation disclosure. Its coefficients describe continuous execution intensity among exchange-based plans; the main index describes recorded execution incidence in the full event sample. Panel B of Table 4 reports this comparison.

The full event panel contains 10,752 announcements. Program links identify 4,022 exchange-based authorizations for the disclosure-aligned design. The expanding forecast is available for 3,371 events; 3,073 enter the announcement regression after the control-variable requirements. Requiring both the forecast and Historical Execution Reputation leaves 1,748 observations. Using the 30-day innovation, up to two eligible earnings releases, and the regression controls yields 1,263 observations for mean post-disclosure SUE.

3.3 Historical Execution Reputation

Historical Execution Reputation contains historical 30- and 90-day execution incidence, corresponding execution intensity, and the log number of earlier repurchases. An earlier program enters only after its 90-trading-day measurement window closes and its completion or termination becomes public before the current announcement. I standardize the five components, average them with equal weights, and standardize the composite. Current plan terms, current prices, and firm financial characteristics do not enter. It measures earlier conduct in the spirit of A. A. Bonaimé (2012), while Expected Execution captures a different set of predictors.

A Beta-binomial historical measure provides an additional comparison. With N_i completed

historical 30-trading-day measurement windows and S_i windows containing recorded execution, the posterior mean under a uniform initial probability is $(1 + S_i)/(2 + N_i)$. Its calibration uses firms with at least one earlier eligible event. The price-state-adjusted forecast is the residual from projecting Expected Execution on pre-announcement returns, the control variables, current purposes, industry, and year. It isolates score variation orthogonal to the observed price state and firm characteristics.

Eligibility is as important as aggregation. For Historical Execution Reputation, the measurement window and final-status disclosure of an earlier program must precede the current authorization. The Beta-binomial comparison uses the closure of the earlier 30-day window. These constructions therefore summarize different historical sets and carry distinct timing conventions. Keeping them separate preserves the meaning of the reputation comparison and avoids reading either score as a direct measure of the investor’s entire announcement-date information set.

3.4 Execution, Forecast Errors, and Earnings News

Early execution covers trading days $[0, 30]$. A separate expanding model predicts standardized early execution from Expected Execution, the control variables, purpose, and industry, using earlier announcement years. Execution Surprise equals realization minus that prediction. Later FF5-adjusted returns cover trading days $[31, 180]$.

The main forecast and the innovation forecast use different horizons because they answer different questions. Expected Execution ranks delivery over a 90-day horizon when the firm announces its plan. The early-execution model predicts action over the first 30 trading days and includes Expected Execution among its predictors. Realization is compared with this matching 30-day prediction, not subtracted directly from a 90-day forecast. The innovation therefore has a common horizon on both sides of the comparison.

SUE uses adjusted earnings per share (EPS) for consecutive semiannual and annual reports. Unexpected earnings subtract adjusted EPS for the same report type one year earlier; the denominator is the sample standard deviation of the current and four preceding unexpected-earnings observations. Average Future SUE uses the first two eligible publications after the later of trading day 30 and 45 calendar days after announcement, within 365 calendar days, and equals the first when only one is available. The disclosure-aligned version requires the releases to follow the relevant implementation disclosure. EPS-based news contains both operating information and the per-share effect of purchases.

3.5 Control Variables

The event-level control set contains log market value, book-to-market, return on assets (ROA), leverage, cash, Tobin’s Q, state ownership, momentum, and volatility. Size and valuation summarize differences in information and expected returns; profitability, cash, leverage, and investment opportunities capture capacity and motives for distribution (Dittmar 2000; Grullon and Michaely 2004). Momentum and volatility capture the price state relevant to contrarian purchases (Peyer and Vermaelen 2009). Accounting controls use fiscal year $t - 1$; momentum

and volatility precede the announcement. Current plan purposes enter the forecasting model and specified supplementary regressions, not the baseline control set.

The control blocks address distinct valuation channels. Log market value captures differences in firm scale that can affect information production, investor participation, and the relative importance of a repurchase. Book-to-market and Tobin’s Q describe valuation and investment opportunities, both of which can affect the incentive to distribute cash and the response to the announcement. Profitability, cash, and leverage describe resources and financial commitments. Those conditions can influence both anticipated execution and the value investors attach to a proposed distribution.

State ownership captures a persistent difference in ownership structure that can accompany financing conditions and payout decisions. Momentum describes the recent price path relevant to contrarian purchases, while volatility captures uncertainty surrounding that path. Their inclusion makes the focal coefficient a conditional association between the execution score and announcement returns rather than a direct comparison of firms in different price states. The additional plan and price-state specifications then examine particular channels beyond this common control set.

Some forecast inputs also appear individually as control variables. The announcement regression asks whether their historically estimated relationship with execution, together with current plan information, predicts CAR beyond their contemporaneous linear associations. This is the combined information represented by the index. The common-sample reputation comparison and the validation against subsequent purchases examine its economic content from complementary perspectives.

Later-return and earnings specifications also use Announcement CAR and the Early Price Path: stock return and market return over days [2, 30], and abnormal-return volatility over days [2, 20]. The disclosure-aligned earnings specification additionally includes the matching 30-day forecast used to construct its execution innovation.

The Kangmei comparison uses the annual execution-prior index constructed on the complete event sample. The index ranks expected follow-through relative to the information available for each announcement year. No Public Insurance Record equals one for firms without a disclosed D&O insurance record in the 2020 reporting-year classification. Post Judgment begins in December 2021; November contains the ruling and is omitted. Online Resource 1, Appendix C describes the legal event and exposure construction (Y. Liu et al. 2025).

3.6 Summary Statistics

Online Resource 1, Table B.1 defines the variables, including supplementary measures. Table 1 reports the full event sample. Expected Execution is available for 9,909 events, and Historical Execution Reputation is available for 6,657 events. Disclosure-Aligned Expected Execution uses 3,073 announcement observations after exchange-based program links, public-date requirements, and regression controls. Online Resource 1, Table D.10 reports annual fitted values, and the disclosure-aligned quintiles appear in Online Resource 1, Table D.11.

The execution variables distinguish early activity from eventual completion. Recorded purchases occur within the 30-day window for 26.500% of announcements, whereas the mean com-

pletion ratio is 0.857 among programs with an available final ratio. These statistics describe different horizons and samples. A firm can purchase little initially yet complete the plan later, so early nonexecution and final noncompletion measure different aspects of conduct. The distinction motivates measuring early action relative to an expectation rather than treating every inactive first month as a failed promise.

The forecast and plan distributions also differ in economically relevant ways. Expected Execution has an interquartile range from -0.425 to 0.152 , while its right tail extends well beyond the central range. Its mean and dispersion in prediction events need not equal zero and one because standardization uses the training distribution. Historical Execution Reputation has a narrower right tail and requires an observable earlier record. Announced Plan Scale has a median of 0.209% of market value and a mean of 0.995% , indicating that a small number of relatively large plans raise the average. These distributions distinguish the scale of a promise from the information used to forecast its execution.

Average Future SUE has a mean of -0.050 and spans both favorable and unfavorable earnings news, with quartiles of -0.775 and 0.582 . Execution Surprise likewise takes values on both sides of zero. These measures permit comparisons of realization above and below expectation with subsequent earnings news. Differences in their observation counts reflect the historical information and forward-reporting windows required by each measure.

Table 1: Summary Statistics

Variable	N	Mean	SD	P25	Median	P75	Max
Panel A. Returns and Earnings News							
Announcement-Window CAR (%)	10,752	0.674	4.331	-1.704	0.276	2.579	15.958
Post-Execution-Window Return [31, 180] (Decimal)	10,406	-0.003	0.360	-0.206	-0.005	0.195	3.197
Average Future SUE (Index)	10,185	-0.050	1.031	-0.775	-0.053	0.582	2.895
Panel B. Prior Beliefs and Promise Size							
Bayesian Historical Prior (Index)	10,751	0.000	0.999	-0.848	-0.119	0.793	3.458
Expected Execution (Index)	9,909	0.028	0.778	-0.425	-0.140	0.152	23.420
Historical Execution Reputation (Index)	6,657	0.000	1.000	-0.742	-0.447	0.341	6.352
Price-State-Adjusted Expected Execution (Index)	9,353	0.000	0.683	-0.335	-0.114	0.135	23.106
Large Announced Program (Dummy)	9,448	0.500	0.500	0.000	0.000	1.000	1.000
Announced Plan Scale (%)	9,448	0.995	1.712	0.011	0.209	1.388	46.028
Panel C. Execution and Belief Revisions							
30-Day Execution (Dummy)	10,752	0.265	0.441	0.000	0.000	1.000	1.000
30-Day Execution Intensity (Index)	10,752	0.017	1.033	-0.357	-0.357	-0.281	7.940
Fast First Execution (Dummy)	10,752	0.207	0.405	0.000	0.000	0.000	1.000
Program Completion Rate (Ratio)	7,496	0.857	0.216	0.673	1.000	1.000	1.000
Execution Surprise (Index)	8,969	0.107	0.939	-0.222	-0.053	0.099	7.957
Negative Execution Surprise (Index)	8,969	0.167	0.293	0.000	0.053	0.222	6.015
High Expected Execution (Dummy)	9,909	0.301	0.459	0.000	0.000	1.000	1.000
Weak 30-Day Execution (Dummy)	10,752	0.735	0.441	0.000	1.000	1.000	1.000
High-Expectation Weak Execution (Dummy)	9,909	0.104	0.306	0.000	0.000	0.000	1.000

This table reports summary statistics for 10,752 Chinese A-share repurchase announcements from 2010 to 2025. The columns report the number of observations (N), arithmetic mean (Mean), standard deviation (SD), 25th percentile (P25), 50th percentile (Median), 75th percentile (P75), and maximum (Max). Winsorization, where applied, uses the 1st and 99th percentiles.

Variable	N	Mean	SD	P25	Median	P75	Max
Panel D. Firm and Market Controls							
Firm Size (Log)	10,217	23.055	1.209	22.180	22.840	23.729	26.668
Book-to-Market (Ratio)	10,217	0.615	0.242	0.435	0.609	0.786	1.202
ROA (Ratio)	10,217	0.055	0.057	0.024	0.051	0.085	0.221
Leverage (Ratio)	10,217	0.396	0.182	0.249	0.394	0.531	0.878
Cash Holdings (Ratio)	10,217	0.195	0.127	0.105	0.161	0.252	0.851
Tobin's Q (Ratio)	10,217	2.021	1.216	1.273	1.642	2.299	8.435
State Ownership (Dummy)	10,217	0.148	0.355	0.000	0.000	0.000	1.000
Momentum (Ratio)	10,653	0.022	0.392	-0.237	-0.051	0.178	1.603
Volatility (Ratio)	10,752	0.027	0.010	0.020	0.026	0.032	0.056
Panel E. Cross-Sectional Information Conditions							
Lagged R&D Intensity (Index)	8,314	0.000	1.000	-0.587	-0.282	0.223	4.207
Listed-Customer Information (Index)	7,713	0.000	1.000	-0.171	-0.171	-0.171	7.558
Panel F. Alternative Motives							
U-Index	10,209	0.000	1.000	-0.829	-0.146	0.537	2.929
EPS Pressure Score (Index)	10,217	0.000	1.000	-1.014	-0.186	0.426	2.628
CEO EPS-Linked Incentive (Dummy)	10,752	0.013	0.115	0.000	0.000	0.000	1.000

4 Empirical Design

4.1 Matched Announcement Comparison

For each announcement preceded by a market-adjusted decline exceeding 1%, I select a same-year, same-industry firm with no active repurchase plan at the pseudo-event date and no lifecycle disclosure within 45 calendar days on either side. Matching with replacement restricts the pre-event CAR difference to 1% and the log-size difference to 0.300, then minimizes distance in book-to-market, momentum, and volatility. Both firms share the same event date. The comparison uses matching-pair fixed effects and two-way clustering by repurchaser and matched firm. A one-to-three specification relaxes the return caliper to 2% (Abadie and Imbens 2006).

The comparison measures the incremental announcement response conditional on the matching variables. It improves on a full-reversal reference by observing the contemporaneous price path of firms with similar pre-event returns and characteristics but no new authorization.

Matching with replacement allows the closest eligible firm to serve as the benchmark for more than one repurchase event. This improves the opportunity to find similar firms, but the resulting observations share information when the same firm appears repeatedly. The two-way clustering follows both sides of the match so that the reported inference reflects repeated repurchasers and repeated controls. Pair fixed effects make the estimate a comparison within matched event pairs.

Balance is assessed on the characteristics used to form the pairs. I also compare FF5 pre-event CAR, which evaluates similarity under the return model used in the reported price paths even though matching uses market-adjusted returns. The subsequent credibility regressions use variation in execution expectations across actual authorizations.

The one-to-three design asks whether the result depends on selecting a single control. Additional controls give each repurchase event a less idiosyncratic comparison path, at the cost of a wider return caliper. Its weights preserve the repurchase event as the focal comparison rather than allowing events with more matched rows to receive an unintended influence. Agreement between the two designs is informative because they balance match proximity against the number of comparison firms differently.

4.2 Announcement Pricing and Execution Validation

The announcement specification is

$$CAR_i^A = \alpha + \beta X_i + \gamma' \mathbf{C}_{i,t-1} + \varepsilon_i, \quad (10)$$

where X_i is Expected Execution, Historical Execution Reputation, or the price-state-adjusted score. Industry and announcement-year fixed effects account for common sector and time differences. Standard errors cluster by firm. A coefficient is a change per unit of the displayed index; an economic magnitude expressed in standard deviations also depends on the dispersion in its estimation sample.

The initial announcement tests distinguish three hypotheses about the score. A pure price-reversal account associates the score with a preceding decline and predicts that its announcement

relation should weaken when the price state is held fixed. A reputation account associates the score with prior conduct and predicts attenuation when Historical Execution Reputation enters. An expected-feasibility account predicts an incremental relation after both comparisons and a positive relation between the forecast and later execution. Together, the price-state, reputation, and execution-validation comparisons distinguish these accounts of the announcement response.

Within-firm comparisons answer a related question about persistent differences across companies. A firm fixed effect absorbs stable features of the issuer, so the remaining forecast variation concerns differences across that firm’s announcements and circumstances. The industry-and-year baseline instead uses both within-firm and between-firm information after conditioning on sector and year. These are different comparisons; their agreement is useful because a persistent issuer characteristic need not explain variation between successive authorizations by the same firm.

The subsequent-information test estimates

$$Y_{i,h} = \alpha + \theta \text{Surp}_i + \phi \text{CAR}_i^A + \boldsymbol{\eta}' \mathbf{P}_i + \boldsymbol{\gamma}' \mathbf{C}_{i,t-1} + \varepsilon_{i,h}, \quad (11)$$

where Y is the later return or Average Future SUE and $\mathbf{P}_i$ is the Early Price Path. The same event-level control variables, industry and year effects, and firm clustering apply. The disclosure-aligned earnings specification adds its matching 30-day forecast, so the execution innovation measures realization conditional on expected execution.

The early price path is relevant because purchases and returns can influence one another during implementation. Managers may buy after a decline, and the market can respond to information associated with buying. Conditioning on the observed price path asks whether the execution innovation predicts later information beyond those early movements. The specification therefore describes the incremental association with later returns or earnings at that information point. It does not equate that coefficient with the total value of implementing the plan.

The publication-aligned earnings comparison provides a second ordering. Forecast formation uses the information available at authorization, execution disclosure reveals the relevant implementation record, and an eligible earnings release follows that disclosure. Including the matching early-execution forecast holds expected early execution fixed in the regression. The innovation coefficient then describes what realized implementation predicts about the later report conditional on that forecast. This separation of the expected and realized components is the central empirical counterpart of the model’s updating argument.

For the disclosure-aligned comparison, two dates govern an execution observation: the end of the purchase window and publication of the record covering that window. Let T_i^h denote the endpoint for horizon h and d_i^h the corresponding publication date. The relevant availability date is

$$a_i^h = \max\{T_i^h, d_i^h\}, \quad h \in \{30, 90\}. \quad (12)$$

The historical estimation sample admits a label after this date, and the earnings comparison places the eligible report after the implementation disclosure. This ordering distinguishes a transaction observed retrospectively from information available to investors.

These dates matter most for the interpretation of returns. A return window beginning after the purchase cutoff can include an announcement that reveals purchases already made. A return beginning after the implementation disclosure instead measures valuation changes after that public revelation. The main return comparison uses the former convention; the publication-aligned earnings comparison establishes the ordering for subsequent reported news. The evidence therefore places prices and earnings within a common information sequence without assigning them identical disclosure clocks.

4.3 The Kangmei Enforcement Comparison

The Kangmei specification compares the announcement-return slope on the annual execution-prior index across firms with and without a public D&O insurance record:

$$CAR_i^A = \alpha + \delta EE_i NoDO_i Post_i + \sum_{g \in \mathcal{G}} \vartheta_g g_i + \gamma' \mathbf{C}_{i,t-1} + \varepsilon_i, \quad (13)$$

where $\mathcal{G}$ contains every constituent term and two-way interaction. The nine-month comparison excludes November 2021, absorbs industry and announcement-year effects, and clusters standard errors by firm. Event-quarter estimates assess the timing of the relative slope change. The permutation test reassigns insurance exposure across firms within industries while preserving each firm’s announcement history and each industry’s exposure count.

5 Empirical Results

5.1 Incremental Recovery around the Announcement

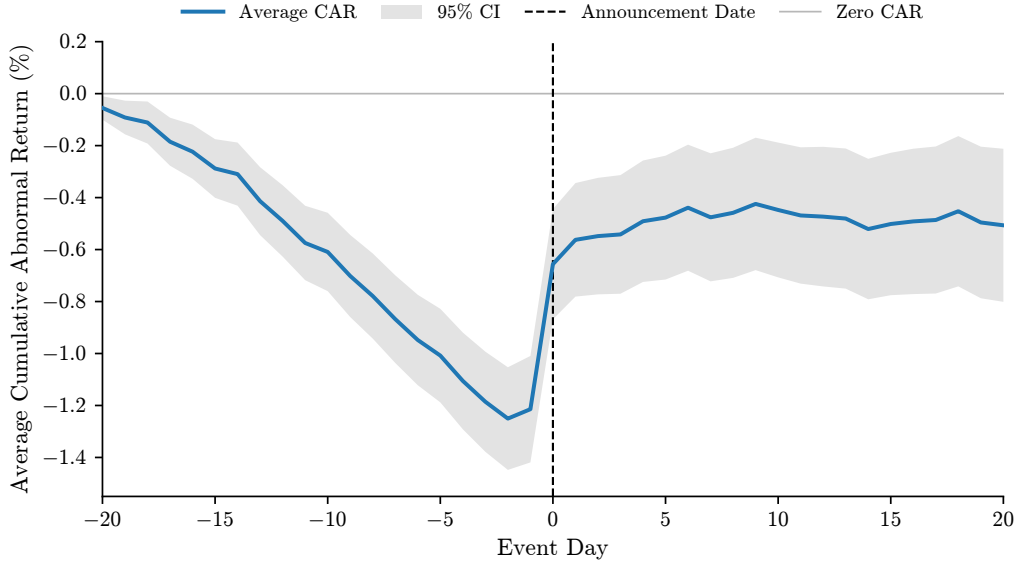
Figure 1 shows the pre-announcement decline and immediate positive response. Average FF5-adjusted CAR is -1.323% before the event, 0.674% over the announcement window, and -0.629% over the wider window. The negative wider path includes information that precedes the authorization. The matched comparison asks whether the authorization changes that path relative to similar firms.

Table 2 contains 3,343 matched pairs. The maximum absolute standardized mean difference across the five matching variables is 0.047. Repurchasers and controls have FF5-adjusted pre-event CARs of -4.885% and -5.053% , respectively. Their announcement-window CARs are 0.961% and 0.084% . The difference is 0.877% , with a t-statistic of 10.430. Repurchasers reverse a larger fraction of the preceding loss during the announcement window: bounded recovery is 29.800% , versus 20.670% for controls.

The recovery fraction distinguishes the value of favorable news from restoration of an earlier valuation. Repurchasers reverse a larger share of the preceding loss, but the mean recovered fraction remains below one-third. In the model, the authorization adds value through anticipated follow-through on the recoverable part of that loss. It leaves other information in the earlier decline intact. The matched evidence fits this distinction: the plan has incremental value, yet that value is too small to restore the earlier abnormal-return benchmark. This is economically compatible with valuable implementation discretion. Investors can welcome a firm’s

Fig. 1 Fama–French Five-Factor (FF5)-Adjusted Cumulative Abnormal Returns (CARs) around Repurchase Announcements

This figure plots the Fama–French five-factor (FF5)-adjusted average cumulative abnormal return (CAR) from event day -20 to event day $+20$, where day 0 is the first trading day on or after the legal disclosure date. The shaded area reports the 95% confidence interval.



willingness to buy at attractive prices while assigning a lower value to the firm than before the decline.

Controls continue to rebound during days $[+2, +20]$, when the repurchaser-minus-control difference is -0.393% . The wider-window difference is 0.539% , while repurchasers' own wider CAR remains -3.905% . These comparisons distinguish two economic margins. Repurchasers recover more than matched firms, yet remain below their own pre-decline prices on an abnormal-return basis. The authorization therefore carries incremental favorable information without implying that the preceding loss is fully reversible. In Equation (1), the matched path benchmarks the no-announcement adjustment, while the incremental response measures the value attached to the promise. Online Resource 1, Appendix F reports one-to-three matching and balance. The next comparison asks which observable information predicts that value.

5.2 Expected Execution and Announcement Valuation

Table 3 links announcement valuation to expected follow-through. The Expected Execution coefficient is 0.980, the Historical Execution Reputation coefficient is 0.238, and the price-state-adjusted forecast coefficient is 0.803. Each coefficient measures the announcement-CAR difference associated with a one-unit increase in its index, conditional on the control variables and fixed effects.

The common-sample comparison in Online Resource 1, Table D.8 distinguishes current information from earlier conduct. Expected Execution retains a coefficient of 0.986 when both measures enter. Historical Execution Reputation falls from 0.236 when entered alone to 0.097 in the joint regression and becomes statistically insignificant. Current firm and plan condi-

Table 2: Matched Non-Repurchase Benchmark for Price Recovery

FF5-Adjusted Measure	Matched Mean		Repurchaser – Control	
	Non-Repurchase Controls	Repurchase Firms	Difference	t-Statistic
CAR[−20, −1]	-5.053	-4.885	0.168	1.580
CAR[0, +1]	0.084	0.961	0.877***	10.430
CAR[+2, +20]	0.404	0.011	-0.393*	-1.850
CAR[−20, +20]	-4.444	-3.905	0.539**	2.210
Bounded Recovery Fraction	0.207	0.298	0.091***	11.000

This table compares repurchase announcements with matched non-repurchase firms. Each repurchase event with a market-adjusted cumulative abnormal return (CAR) below -1% over days $[-20, -1]$ is matched with replacement to one firm in the same announcement year and industry. The match requires a negative pre-event CAR within 1% and a log-market-value difference no greater than 0.300 , then minimizes distance in book-to-market, pre-event momentum, and volatility. The repurchase announcement date serves as the matched firm's pseudo-event date. A control firm has no active repurchase plan at that date and no plan, implementation, progress, completion, or termination disclosure within 45 calendar days before or after it. Matching uses market-adjusted pre-event CAR; all reported CARs use the Fama–French five-factor (FF5) model. The sample contains 3,343 matched pairs, and the maximum absolute standardized mean difference across the matching variables is 0.047 . The first two columns and the pair-fixed-effect estimate use the same sample, matching weights, variable definitions, and 1st-and-99th-percentile winsorization, so Difference equals the repurchaser mean minus the non-repurchaser mean. All difference regressions absorb matching-pair fixed effects and cluster standard errors by both the repurchasing firm and the matched stock. Bounded Recovery Fraction equals $\text{CAR}[0, +1]$ divided by the absolute $\text{CAR}[-20, -1]$ and is bounded between zero and one. CARs appear in %, and the final column reports t-statistics. *, **, and *** denote significance at 10%, 5%, and 1%.

Table 3: Announcement Returns and Expected Execution

Panel A . Event-Window Cumulative Abnormal Returns			
Event Window	Mean CAR (%)	t-statistic	
$[-20, -1]$	-1.323***	-14.074	
$[0, +1]$	0.674***	15.674	
$[+2, +20]$	-0.030	-0.333	
$[-20, +20]$	-0.629***	-4.729	

Panel B . Announcement-Window Pricing Regressions			
Predictor	Coefficient	t-statistic	N
Expected Execution	0.980***	13.610	9,351
Historical Execution Reputation	0.238***	3.699	6,414
Price-State-Adjusted Expected Execution	0.803***	11.990	9,351
Large Announced Program	1.078***	11.350	8,934
Announced Plan Scale (%)	0.494***	14.930	8,934

Panel **A** reports mean Fama–French five-factor (FF5)-adjusted cumulative abnormal returns (CARs) around the announcement. Panel **B** reports separate regressions of announcement-window CAR on each execution or plan measure. Event day 0 is the first trading day on or after disclosure. Controls include log market value, book-to-market, return on assets, leverage, cash holdings, Tobin’s Q, state ownership, pre-announcement momentum, and pre-announcement volatility. The regressions absorb industry and announcement-year fixed effects and cluster standard errors by firm. Event-window CARs and continuous controls are winsorized at the 1st and 99th percentiles. CARs and coefficients are in %. Firm-clustered t-statistics appear in adjacent columns. *, **, and *** denote significance at 10%, 5%, and 1%.

tions therefore contain incremental pricing information beyond the history summarized by the reputation index.

The joint estimate sharpens the distinction from A. A. Bonaimé (2012). Past completion can predict a favorable response because it informs investors about the next authorization. Here, the current execution forecast continues to predict that response when the historical index enters for the same firms and announcements. The contribution lies in separating information about past conduct from information about a current plan’s feasibility. History can matter through both persistent behavior and its association with present circumstances; the joint regression measures the incremental pricing information in each index. The smaller historical coefficient supports an expectation-based account in which current conditions add pricing information to the historical record.

The 0.980% baseline coefficient measures how the immediate CAR differs with a one-unit increase in the execution index. The model explains its positive direction: for otherwise comparable plans, a higher expectation of follow-through raises the value investors assign before purchases occur. Current resources and plan terms also affect the amount and value of feasible implementation, so the empirical coefficient summarizes their joint pricing content. The price-state-adjusted estimate and comparisons among firms with similar preceding losses sharpen this interpretation. The forecast matters beyond the recent price path that can both encourage management to announce and create scope for a rebound.

The disclosure-aligned forecast offers a second view of expected delivery. It forecasts continuous 90-day execution intensity using only information available by each training and prediction date. The forecast has a coefficient of 0.557 for announcement CAR and 0.158 for realized 90-day intensity. Realized intensity rises monotonically across forecast quintiles. The estimates show that dated public information ranks subsequent execution and predicts announcement valuation.

Forecast validation distinguishes expected delivery from a return-predicting characteristic score. The forecast ranks realized purchases, and the market response varies with that forecast when the plan becomes public. These two relations place the same information on both sides of the firm’s subsequent decision: it predicts what investors value beforehand and what management delivers afterward. The evidence thus supports the economic link in Equation (4). Current circumstances help investors assess the use of managerial discretion, not simply the maximum amount the firm authorizes. A credible plan is one for which the expected action supports its announcement value.

5.3 Execution Innovations and Later Information

Table 4 compares realization with its forecast. Execution Surprise predicts the FF5-adjusted return over trading days [31, 180] with a coefficient of 0.009 and a standard error of 0.004. A one-unit increase in the standardized innovation therefore predicts a 0.900% higher later return.

Execution Surprise also predicts Average Future SUE with a coefficient of 0.059 and a standard error of 0.013. The measure averages up to two subsequent reports. Its positive coefficient links execution above expectation to favorable later earnings news, as the model predicts when execution and earnings share information about firm prospects. Per-share earnings reflect both

Table 4: Execution Innovations, Later Returns, and Earnings News

Panel A. Measurement-Clock Returns and Earnings				
Specification	Return [31, 180]		Average Future SUE	
	Baseline (1)	+ Price Path (2)	Baseline (3)	+ Price Path (4)
Execution Surprise	0.009** (0.004)	0.009** (0.004)	0.063*** (0.013)	0.059*** (0.013)
Announcement-Window CAR	0.001 (0.001)	0.001* (0.001)	0.021*** (0.002)	0.021*** (0.002)
Controls	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
SE Clustered by Firm	Yes	Yes	Yes	Yes
R-squared	0.247	0.250	0.109	0.121
N	8,219	8,219	8,134	8,134

This table separates the purchase-measurement clock from the public-information clock. Panel A relates 30-Day Execution Surprise to the Fama–French five-factor (FF5)-adjusted return over days [31, 180] and to Average Future standardized unexpected earnings (SUE), the mean of up to two eligible reports. Even-numbered columns add the Early Price Path: stock return over [2, 30], market return over [2, 30], and abnormal-return volatility over [2, 20]. Panel B uses exchange-based plans, admits execution labels only after their measurement windows and implementation disclosures, and admits accounting predictors only after their publication dates. Its mean SUE uses reports released after implementation disclosure and includes the matching 30-day execution forecast. Return and SUE regressions include Announcement-Window cumulative abnormal return (CAR), log market value, book-to-market, return on assets, leverage, cash holdings, Tobin’s Q, state ownership, pre-announcement momentum, and pre-announcement volatility. Announcement-CAR regressions omit Announcement-Window CAR from the right-hand side and use the remaining control variables. The regressions absorb industry and announcement-year fixed effects; the execution-intensity regression absorbs year fixed effects. Event-level returns, continuous controls, and execution innovations are winsorized at the 1st and 99th percentiles. Return coefficients are in decimal units. Firm-clustered standard errors appear in parentheses. *, **, and *** denote significance at 10%, 5%, and 1%.

Panel B. Disclosure-Aligned Expectations and Earnings				
Dependent Variable	Disclosure-Aligned Expected Execution	Historical Reputation	Execution Innovation	N
90-Day Execution Intensity	0.158*** (0.007)			3,032
Announcement-Window CAR	0.557*** (0.124)			3,073
Announcement-Window CAR, Joint	0.721*** (0.170)	0.188** (0.094)		1,748
Mean Post-Disclosure SUE			0.094*** (0.029)	1,263

reported performance and changes in shares outstanding.

The positive earnings coefficient gives execution an informational role beyond the immediate purchase transaction. When a firm buys more than its public circumstances predict, its action can reveal resources or prospects not fully captured by the initial forecast. If these circumstances also enter subsequent reported earnings, stronger execution raises expected earnings news conditional on the announcement information. Online Resource 1, Appendix A makes this shared-information condition explicit. The SUE result supports that link between delivery and later reports. Its coefficient is in standardized earnings-news units: it does not measure a percentage change in operating profitability.

The comparison distinguishes two accounts of stronger execution. Under a purely predictable-capacity account, firms purchase more because their favorable circumstances are already evident at authorization. Under an information account, action reveals something beyond those circumstances. The innovation measures realization relative to its forecast, and the regression conditions on the initial CAR and the early price path. Its positive earnings coefficient shows that this deviation contains information beyond the observed announcement response and early returns. Expected execution and realized execution therefore have separate empirical roles: one predicts the value attached to the promise, and the other predicts information arriving after it.

The disclosure-aligned specification orders expectation, public execution information, and earnings by their actual dates. The forecasting model uses earlier execution records only after their measurement windows close and their contents become public, and it selects accounting inputs by publication date. The earnings regression includes the matching 30-day forecast and uses releases after implementation disclosure. The execution innovation predicts mean post-disclosure SUE with a coefficient of 0.094 and a standard error of 0.029. This comparison connects publicly revealed realization relative to expectation to later earnings news. It adds an *ex ante* execution benchmark to the study of implementation disclosures in Barger, A. Bonaimé, Docimo, et al. (2024).

The timing determines which part of learning a return can measure. When prices incorporate public execution news immediately, the valuation response occurs at disclosure even if the purchases precede it. Returns over days [31, 180] can include that response because the purchase-measurement window closes before some implementation disclosures. The positive return coefficient is therefore compatible with information entering price when it becomes public. A strictly post-disclosure return relation would instead concern subsequent adjustment or other return components. The disclosure-aligned SUE result establishes a different and cleaner temporal ordering: publicly reported execution predicts earnings news released afterward. Together, the comparisons connect realization to prices and later reports without equating a purchase cutoff with public revelation.

Investor demand asks whether the same shortfall changes the willingness to hold the firm. Online Resource 1, Table D.5 compares long- and short-horizon funds holding the same stock in the same quarter. Long-horizon funds sell more and more often cease disclosing a position following execution disappointment. Stock-by-quarter effects hold common company information fixed, while fund-by-quarter effects absorb contemporaneous fund-wide trading conditions. The

estimate therefore concerns a difference in how investors with different horizons adjust their holdings after the same firm’s shortfall. It connects execution relative to expectation to the composition of investor demand.

Patient ownership creates a useful tension. A temporary implementation delay can leave a long-term investment case intact, giving patient funds a reason to hold through weak early purchases. A shortfall that changes the assessment of management’s follow-through can instead affect the basis for holding through future uncertainty. Starks et al. (2026) show that long-horizon funds respond less negatively to earnings shortfalls but sell more after adverse environmental and social incidents. Their evidence distinguishes patience with transitory performance from sensitivity to particular information about corporate conduct. The repurchase evidence extends that distinction to the gap between expected and actual delivery of a payout promise.

The fund estimates also have a direct probability interpretation. In Online Resource 1, Table D.5, the interaction between Execution Disappointment and Long-Horizon Fund is 0.027 for Sell and 0.026 for Disclosed Exit. A one-unit larger shortfall therefore corresponds to a 2.700-percentage-point larger increase in selling probability and a 2.600-percentage-point larger increase in disclosed-exit probability for long-horizon funds relative to short-horizon funds. The Buy interaction is -0.016 , indicating a 1.600-percentage-point lower relative probability of increasing the position.

The continuous-horizon estimates point in the same direction. Higher adjusted churn denotes a shorter horizon, and its negative interaction with disappointment for selling and disclosed exit indicates a weaker response among higher-churn funds. Both horizon measures therefore associate patient ownership with a stronger relative withdrawal after an execution shortfall. This pattern favors an interpretation in which the shortfall matters for the investment assessment, beyond routine patience toward a temporary delay. The holdings comparison identifies the trading difference; the earnings evidence supplies the related information about later reports. A disclosed exit records disappearance from reported positions, not necessarily complete liquidation.

5.4 Calendar-Time Pricing of Execution Information

The event regressions follow each authorization from its own announcement date. A calendar-time comparison asks whether execution information also distinguishes returns across stocks facing the same month. This perspective matters because event windows can overlap and firms announce plans in different market conditions. The monthly comparison retains the central economic object, execution relative to expectation, while changing the time aggregation of returns. Online Resource 1, Table D.3 reports the two-step estimates.

Step 1 estimates a cross-sectional excess-return regression in each month:

$$R_{i,m}^e = a_m + b_m S_{i,m} + \mathbf{c}_m' \mathbf{X}_{i,m-1} + \epsilon_{i,m}, \quad (14)$$

where $S_{i,m}$ is Execution Surprise or Low Disappointment and $\mathbf{X}_{i,m-1}$ contains the lagged characteristics. Industry indicators enter each monthly cross-section. The Execution Surprise speci-

fication also includes Expected Execution, retaining the distinction between the initial execution expectation and the later innovation. Each stock-month uses the latest eligible announcement, so simultaneous active signals do not create multiple copies of the same stock’s monthly return.

Step 2 averages the monthly signal coefficients:

$$\bar{b} = \frac{1}{M} \sum_{m=1}^M \hat{b}_m. \quad (15)$$

Newey–West inference allows the monthly coefficients to be serially correlated; the lag is two for three-month signals and five for six-month signals. This is the two-step cross-sectional approach of Fama and MacBeth (1973). The averaged coefficient describes a return difference across stocks per unit of the signal, conditional on the characteristics included in the monthly regressions.

I find a positive execution-information relation under both signal horizons. In the six-month specification, a one-standard-deviation increase in Execution Surprise corresponds to a 0.298% higher monthly excess return, with a t-statistic of 2.267. The coefficient for Low Disappointment is 0.315, with a t-statistic of 2.752. The three-month estimates are 0.367 and 0.403, respectively. Both horizons therefore associate more favorable execution information with higher subsequent monthly returns. The signal horizon describes how long a signal remains in the panel, not an annualized return or the length of the forecasting window.

The positive monthly coefficients extend the event-return evidence to a common-calendar comparison. They are characteristic-conditioned return slopes, not portfolio alphas or net trading profits. They link implementation information to subsequent returns conditional on firm characteristics.

The eligibility date is the later of trading day 30 and announcement day 45, with returns starting in the following month. This convention separates measurement from the subsequent monthly return. Actual progress-disclosure dates can differ across firms, so the monthly estimates describe return predictability after the execution measurement window. The publication-aligned earnings comparison addresses the separate question of what publicly disclosed implementation predicts about a later earnings release. This division preserves the distinction between evidence about subsequent prices and evidence ordered by actual information disclosure.

The return evidence adds a timing dimension to the theory. Bayesian updating explains how information changes conditional valuation, but it does not by itself imply predictable abnormal returns after full public revelation. Online Resource 1, Appendix A separates the value revision at disclosure from any component incorporated later. The monthly signal convention can admit either, because eligibility follows measurement rather than each firm’s actual disclosure date. Accordingly, the monthly coefficients establish subsequent return predictability associated with execution information.

5.5 Information Conditions and Alternative Explanations

The execution forecast is one source of information about a firm, and its valuation role can depend on what other information investors possess. Online Resource 1, Table D.6 examines two conditions: R&D intensity and listed-customer information. These variables concern

the information environment surrounding the issuer rather than another transformation of its own repurchase history. Their interactions ask when the baseline forecast-return association strengthens or weakens.

R&D makes part of firm value depend on investments whose benefits do not appear fully in current earnings. In such firms, a feasible cash-distribution plan can provide information about resources and management's assessment of the investment opportunity set. I find an interaction coefficient of 0.184, with a t-statistic of 2.363. A one-unit increase in standardized R&D intensity increases the announcement-return slope on Expected Execution by 0.184%. The estimate concerns the additional pricing weight on expected follow-through, not the direct return to an extra unit of research expenditure.

Listed customers provide another observable source of information about the firm's commercial relationships. Their public disclosures can help investors assess demand and business conditions without relying exclusively on statements by the repurchasing firm. The interaction with Listed-Customer Information is -0.217 , with a t-statistic of -3.790 . Thus the execution forecast carries less additional pricing weight when a larger share of the major-customer network is publicly listed. This direction connects the forecast's valuation role to the availability of alternative information.

The opposing interactions distinguish information relevance from firm quality. If the forecast simply marked firms with uniformly favorable characteristics, its pricing relation would not naturally weaken when other public information becomes available. The negative customer interaction fits substitution: information about commercial relationships reduces the incremental value of the execution forecast. The positive R&D interaction fits greater reliance on that forecast where current accounts reveal less about investment prospects. In the model, a signal receives more weight when it is informative relative to the other information investors possess. These conditional relations apply that logic to the announcement premium; they do not require R&D or customer links themselves to determine execution credibility.

Alternative explanations concern why an execution forecast predicts announcement CAR in the first place. The forecast includes recent market conditions and current plan characteristics, which can also accompany undervaluation, earnings news, or reporting incentives. Online Resource 1, Table D.7 examines these channels in a common sequence: the preceding price state, persistent firm differences and nearby disclosures, earnings information, payout motives, and the representation of the forecast. Each comparison addresses a specific interpretation of the baseline relation.

Panel A of Online Resource 1, Table D.7 asks whether the coefficient simply reflects the size of the preceding decline. The Expected Execution coefficient remains 0.953 after the additional price-state term enters. The specification that interacts the forecast with Pre-Announcement Decline produces a positive interaction of 0.019. Since the decline measure equals the negative of pre-announcement CAR, a larger prior decline accompanies a steeper forecast-pricing relation. This matches the model's prediction when expected follow-through raises the value of the recoverable component of a preceding loss.

Panel B of Online Resource 1, Table D.7 changes the source of variation and the event sample. Firm fixed effects leave a forecast coefficient of 0.922, with a standard error of 0.099. This

comparison uses changes across a firm's own announcements after absorbing persistent issuer characteristics. Excluding same-day earnings disclosures yields 1.029, and excluding disclosures within one calendar day yields 1.030. A sample with more than 180 calendar days since the preceding repurchase announcement yields 0.958. These estimates keep the positive relation visible when the comparison focuses on repeated issuers, removes nearby earnings information, or spaces successive repurchase events farther apart.

The disclosure screens are informative because an earnings release can influence both the recent stock-price path and the response around a repurchase announcement. Without distinguishing the two information events, a favorable or unfavorable earnings surprise could be attributed to the authorization. The event screens compare repurchase announcements whose immediate windows do not contain the specified earnings disclosures. They preserve the interpretation of the response as information arriving around the repurchase event while allowing other contemporaneous market information to remain in returns.

Panel C of Online Resource 1, Table D.7 examines earnings information before the announcement. Expected Execution has a negative coefficient for the pre-announcement return and a positive coefficient for the immediate CAR. Adding the prior return leaves an announcement coefficient of 0.953. Excluding the specified prior earnings information yields 1.037, while conditioning on an earnings forecast in the preceding ten trading days yields 0.964. The forecast-pricing relation therefore accompanies a preceding decline but does not disappear when recent price and earnings information enter the comparison.

This timing distinction matters for the recovery interpretation. A negative pre-announcement association can reflect the circumstances under which firms choose to announce a repurchase. The positive immediate association asks how the market values expected execution once the plan becomes public. Finding different signs across these windows reinforces the need to distinguish the selection environment from the announcement response. It also motivates the distant pre-event placebo, which asks whether the execution forecast merely tracks an earlier return pattern far from the authorization.

Panel D of Online Resource 1, Table D.7 separates expected execution from undervaluation and EPS-linked incentives. The U-index summarizes value characteristics, smaller size, weak preceding returns, and the repurchase motive, following Peyer and Vermaelen (2009). EPS Pressure Score measures the pre-announcement reporting position, while chief executive officer (CEO) EPS-Linked Incentive identifies a disclosed EPS condition in an active equity-incentive plan. These measures concern why management might favor a repurchase, whereas Expected Execution concerns the delivery the current public circumstances predict.

The Expected Execution coefficient remains 0.947, with a standard error of 0.071, when these motive measures enter. The U-index is positively associated with CAR, and CEO EPS-Linked Incentive is negatively associated with it. EPS Pressure Score has little incremental association in this specification. These estimates distinguish the current execution forecast from the valuation and incentive measures included in the comparison. A plan can be motivated by undervaluation or reporting considerations while still differing in the probability that investors expect it to be implemented.

Panel E of Online Resource 1, Table D.7 examines the forecast's tail and scale. Standard-

ization against an earlier training distribution can place a small number of current observations far from the center. Winsorizing the score yields a coefficient of 1.171, and capping it at $[-3, 3]$ yields 1.163. The annual-rank specification yields 2.321. Because the rank and level variables use different scales, their coefficient magnitudes are not directly comparable. Their common positive direction shows that the announcement relation remains when the analysis limits extreme values or uses within-year ordering instead of the numerical distance between scores.

The same panel shifts the announcement window and examines distant returns. Price-State-Adjusted Expected Execution predicts $CAR[+1, +2]$ with a coefficient of 0.175 and a standard error of 0.060. The distant-window coefficients for Winsorized Expected Execution and Historical Execution Reputation are statistically indistinguishable from zero. The shifted window retains an immediate post-disclosure comparison, while the distant window assesses price variation well before the plan. These exercises describe the timing of the pricing relation without treating a mechanical measurement date as the publication date of implementation information.

5.6 External Enforcement: The Kangmei Judgment

Table 5 compares the insurance-record groups before the judgment. Expected Execution is similar across groups, while firms with a public insurance record are larger, have higher book-to-market ratios, and are more often state-owned. The regression conditions on these characteristics and compares changes in the execution-pricing slope rather than group levels.

Table 5: Pre-Judgment Characteristics by Insurance Disclosure

Variable	Public Record	No Public Raw	No Public Weighted	Raw SMD	Weighted SMD
Expected Execution	-0.057	-0.087	-0.006	0.044	-0.076
Log Market Value	23.850	23.010	23.850	0.624	0.000
Book-to-Market	0.670	0.554	0.670	0.412	0.000
Return on Assets	0.056	0.063	0.056	-0.114	0.000
Leverage	0.438	0.391	0.438	0.253	0.000
Cash Holdings	0.211	0.200	0.211	0.082	0.000
Tobin's Q	2.161	2.395	2.161	-0.138	0.000
State Ownership	0.274	0.118	0.274	0.397	0.000
Momentum	0.243	0.116	0.243	0.251	0.000
Volatility	0.027	0.028	0.027	-0.154	0.000

This table reports pre-judgment means for the estimation sample within nine months before November 2021. Public Record denotes a disclosed directors' and officers' (D&O) insurance practice in the 2020 reporting-year classification; No Public Record combines explicit nonpurchase with an observable annual record containing no public insurance disclosure. The comparison includes 95 Public Record and 718 No Public Record events. Entropy balancing assigns firm-level weights to the No Public Record group so that the pre-judgment means of the nine control variables equal those of the Public Record group. The standardized mean difference (SMD) is the Public Record mean minus the No Public Record mean divided by the square root of the average group variance. Characteristics use the values entering the announcement regression; continuous control variables are winsorized at the 1st and 99th percentiles.

Table 6 reports the enforcement comparison. The execution-pricing slope rises by 2.155 in the Public Insurance Record group and falls by 0.987 in the No Public Insurance Record group.

The triple difference is -3.142 , with a firm-clustered standard error of 0.920 , across $1,741$ events. The estimate captures a relative change in the price weight placed on the annually standardized execution forecast. The comparison uses the same Expected Execution measure as the announcement regressions. Its scale is specific to each training year, so the estimate describes a change in the pricing of that index.

The negative relative slope distinguishes substitution from complementarity in the pricing of a promise. Under complementarity, stronger accountability makes an already feasible promise especially valuable, steepening the relation between the forecast and announcement CAR among more exposed firms. Under substitution, accountability increases the credibility attached to current statements and reduces the additional corroboration investors need from the firm-specific forecast. The estimate has the latter sign. Its economic content is therefore a change in the information weight attached to Expected Execution, not simply a favorable or unfavorable average response to a legal judgment.

The interaction structure makes the relative comparison explicit. Let β_0 denote the coefficient on Expected Execution, β_N its interaction with No Public Insurance Record, and β_P its interaction with Post Judgment. With triple coefficient δ , the four conditional slopes are

$$\begin{aligned} b_{\text{public,pre}} &= \beta_0, & b_{\text{public,post}} &= \beta_0 + \beta_P, \\ b_{\text{no,pre}} &= \beta_0 + \beta_N, & b_{\text{no,post}} &= \beta_0 + \beta_N + \beta_P + \delta. \end{aligned} \tag{16}$$

The public-record group's change is β_P , the no-public-record group's change is $\beta_P + \delta$, and their difference is δ . This is why the triple coefficient describes a relative price weight rather than either group's announcement-return level. The full table reports the constituent terms so that the group-specific and relative comparisons remain visible.

Online Resource 1, Appendix A expresses substitution as a comparison of information-precision responses. Accountability lowers the weight on firm-specific execution information when it improves the credibility of current disclosure more strongly, in relative terms, than it improves that information. The negative triple difference matches this directional prediction. The regression estimates a relative announcement-pricing slope; the precision response is the mechanism that rationalizes its sign. Insurance-history checks, a common weighting sample, and monthly fixed effects then examine whether the observed slope change instead reflects exposure classification, sample composition, or common contemporaneous conditions.

The interpretation depends on the stability of the counterfactual difference in pricing slopes around the judgment. The event-time estimates describe its observed pre-event path, and the included controls absorb specified differences in firm circumstances. Insurance practice can also reflect unobserved governance or litigation demand. Identification rests on the change around the judgment conditional on the specified controls, not on cross-sectional insurance differences alone. This distinction explains why the timing and exposure checks are central to the enforcement argument.

Panel C examines the exposure definition, time controls, and observable group differences. The relative slope change remains negative when insurance records require prior shareholder approval or a recent supporting disclosure. The same $1,261$ -observation weighting sample produces an unweighted estimate of -2.576 with a standard error of 1.261 and an entropy-balanced

Table 6: The Kangmei Enforcement Comparison: Pricing Expected Execution

Panel A. Post-Judgment Change in the Expected Execution Slope			
	Public Record	No Public Record	Difference
Execution-forecast-slope change	2.155** (0.840)	−0.987*** (0.380)	−3.142*** (0.920)

This table reports the enforcement comparison around the 12 November 2021 Kangmei Pharmaceutical judgment. The dependent variable is the Fama–French five-factor (FF5)-adjusted cumulative abnormal return (CAR) over the announcement window, in %. Panel A translates the triple difference into post-judgment execution-forecast-slope changes; Difference is the No Public Record change minus the Public Record change. Panel B reports the identifying interaction first and all constituent terms below it. Panel C reports timing, exposure, fixed-effect, reweighting, and permutation comparisons. Public Record denotes a disclosed directors' and officers' (D&O) insurance practice in the 2020 reporting-year classification. Post Judgment begins in December 2021. The main sample covers nine months on each side and removes November 2021. The judgment-minus-litigation comparison uses the 2019 insurance classification and distinguishes the period after the 16 April 2021 litigation conversion from the period after judgment. Approved Practice retains public-record firms with a 2019 or 2020 insurance-year record approved by shareholders before 16 April 2021. Recent Disclosure retains public-record firms whose supporting disclosure occurs from 2020 through 11 November 2021. Entropy balancing assigns firm-level weights from the pre-judgment sample and exactly aligns the means of the nine control variables. Weighting requires firms to appear before the judgment, leaving 1,261 observations; Same Weighting Sample applies no weights to that sample. The announcement-month fixed-effects comparison replaces announcement-year fixed effects with announcement-month fixed effects. Controls include log market value, book-to-market, return on assets, leverage, cash holdings, Tobin's Q, state ownership, pre-announcement momentum, and pre-announcement volatility. The regressions absorb industry and announcement-year fixed effects unless indicated otherwise and winsorize the dependent CAR and continuous controls at the 1st and 99th percentiles. Firm-clustered standard errors appear in parentheses. The permutation test uses 1,000 industry-stratified firm-level reassignments and reports the studentized randomization p-value. *, **, and *** denote significance at 10%, 5%, and 1%.

Panel B. Triple-Difference Regression	
Dependent Variable	Announcement CAR (%)
Expected Execution × No Public Record × Post Judgment	−3.142*** (0.920)
Expected Execution × No Public Record	1.802*** (0.546)
Expected Execution × Post Judgment	2.155** (0.840)
No Public Record × Post Judgment	0.384 (0.676)
Expected Execution	−0.147 (0.467)
No Public Record	−0.674 (0.549)
Post Judgment	−0.576 (0.674)
Controls / Industry FE / Year FE	Yes / Yes / Yes
Firm-clustered SE / R-squared / N	Yes / 0.074 / 1,741

Panel C. Timing and Exposure Comparisons		
Comparison	Estimate	N
Judgment minus litigation stage	−3.178*** (1.027)	2,079
Approved insurance practice	−3.442*** (1.239)	1,684
Recent insurance disclosure	−3.052** (1.255)	1,674
Same weighting sample, unweighted	−2.576** (1.261)	1,261
Entropy-balanced exposure	−2.520** (1.264)	1,261
Announcement-month fixed effects	−3.268*** (0.932)	1,741
Permutation p-value	0.006	1,741

estimate of -2.520 with a standard error of 1.264 . Entropy balancing aligns the pre-judgment means of all nine control variables; their largest post-weighting absolute standardized mean difference is below 0.001 . Replacing announcement-year with announcement-month fixed effects yields -3.268 with a standard error of 0.932 . These comparisons connect the result to documented insurance arrangements, common monthly conditions, and similar observable firm composition. Public insurance records measure exposure through disclosed practice; policy limits and exclusions also determine the liability that individual directors ultimately bear.

The balanced-sample comparison distinguishes composition from reweighting. Firms need a pre-judgment observation to receive an exposure-group weight, which explains the smaller estimation sample. Comparing weighted and unweighted estimates within that same sample holds the included announcements fixed. Their similar coefficients indicate that equalizing the observed pre-judgment characteristics does not drive the estimated sign. The month-effects comparison addresses a different concern by absorbing common changes in market and policy conditions at a finer frequency. These comparisons examine separate sources of variation while retaining the same execution index and exposure logic.

The timing and permutation evidence strengthen this comparison. Figure 2 displays the first six months after the judgment and shows statistically insignificant differential slopes before it; the pre-period joint-test p-value is 0.237 . The slope changes after the ruling, with a six-month post-period joint-test p-value below 0.001 . The main triple difference uses nine months on each side. The intermediate litigation stage produces no significant change, while the judgment stage produces a negative relative shift. Figure 3 places the observed studentized statistic in the tail of the industry-stratified firm-level permutation distribution, with p-value 0.006 . The timing accords with a change in the pricing of expected delivery when the judgment assigns monetary liability.

The enforcement comparison shows why the execution-pricing relation can change even when a forecast continues to predict purchases. Expected delivery summarizes firm-specific information; the legal consequences of disclosure affect how much investors rely on that information when valuing a statement. The negative relative slope change accords with substitution be-

Fig. 2 Expected Execution Pricing around the Kangmei Judgment

This figure plots quarterly triple-difference coefficients around the 12 November 2021 Kangmei judgment and displays the first six post-judgment months. Each coefficient measures the relative Expected Execution slope for firms without a public directors' and officers' (D&O) insurance record in the 2020 reporting-year classification. The quarter covering months $[-3, -1]$ is the normalized reference period, and the judgment month is omitted. The dependent variable is Fama–French five-factor (FF5)-adjusted cumulative abnormal return (CAR) over days $[0, +1]$, in %. Controls include log market value, book-to-market, return on assets, leverage, cash holdings, Tobin's Q, state ownership, pre-announcement momentum, and pre-announcement volatility. The model includes all constituent terms and two-way interactions, industry fixed effects, and announcement-year fixed effects. CAR and continuous controls are winsorized at the 1st and 99th percentiles. Vertical bars show 95% confidence intervals based on firm-clustered standard errors.

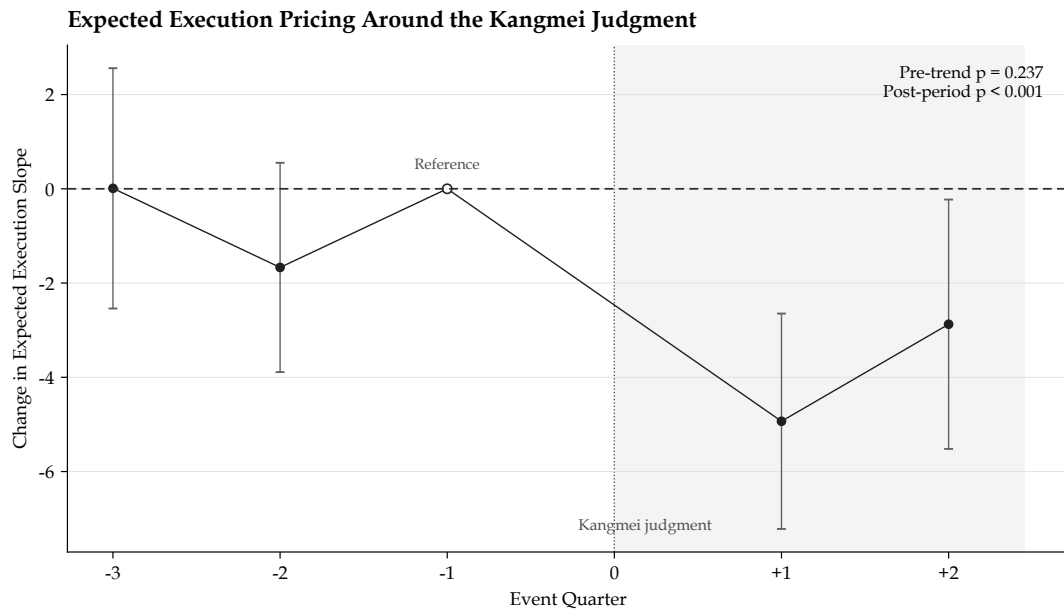
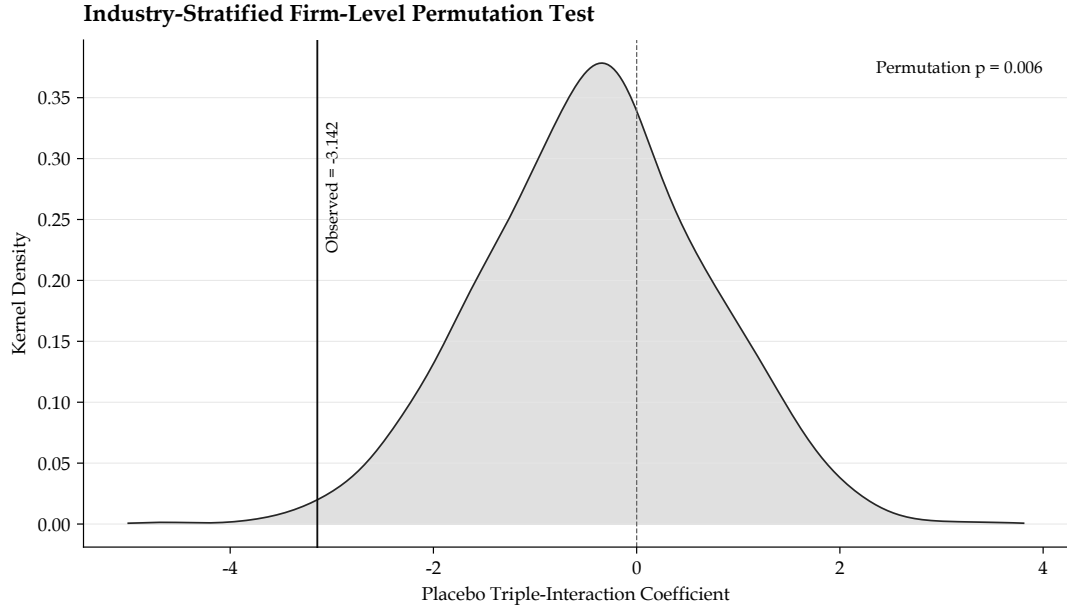


Fig. 3 Permutation Test for the Kangmei Enforcement Comparison

This figure plots the kernel density of 1,000 triple-interaction estimates from firm-level reassignment of directors' and officers' (D&O) insurance exposure within industries. Each permutation preserves announcement dates, firm-level event histories, and the number of exposed firms in each industry before re-estimating the full triple-difference specification. The dependent variable is Fama–French five-factor (FF5)-adjusted cumulative abnormal return (CAR) over days $[0, +1]$, in %. The sample covers nine months on each side of the judgment, excluding November 2021. Controls include log market value, book-to-market, return on assets, leverage, cash holdings, Tobin's Q, state ownership, pre-announcement momentum, and pre-announcement volatility. All models include the constituent terms and two-way interactions, industry and announcement-year fixed effects, and firm clustering. CAR and continuous controls are winsorized at the 1st and 99th percentiles. The vertical line marks the observed triple-interaction estimate.



tween the forecast and accountability attached to current disclosure. This result connects the institutional comparison to the announcement evidence: the forecast has pricing value, but that value depends on the setting in which the promise is made.

6 Conclusion

A repurchase authorization acquires value before the firm distributes cash. I show that the market response reflects expected delivery of the current plan as well as the firm's earlier execution record. An out-of-sample forecast based on current firm and plan information predicts announcement returns when historical reputation enters jointly. Matched firms experiencing similar declines provide the no-announcement benchmark: the promise adds an immediate response, even though the repurchasers' preceding loss remains partly unreversed. The central question is consequently how investors value anticipated action before observing delivery.

Subsequent implementation gives that expectation a testable realization. Execution Surprise predicts returns after the purchase-measurement window and later earnings news; dated implementation disclosures precede the earnings releases in the disclosure-aligned comparison. Long-horizon funds sell more after execution shortfalls. Around the Kangmei judgment, the forecast's pricing weight declines relatively more among firms without a public insurance record. Together, these comparisons connect reputation, expected delivery, and realized action without treating them as interchangeable measures of credibility. A promise is priced against current expectations, and subsequent conduct reveals whether those expectations are met.

For firms, the evidence makes the distinction between an authorization ceiling and an expected distribution consequential. Feasible terms give the market a basis for valuing the plan; timely implementation disclosures let investors assess how management uses its discretion. Explaining changes in financing needs, purchase conditions, or investment opportunities helps distinguish a justified adjustment from an unsupported statement. For investors, the relevant comparison combines earlier conduct with current feasibility and subsequent delivery. A modest purchase can exceed a low forecast, whereas a larger purchase can fall short of a more demanding forecast. Its valuation content depends on the announcement information and the likelihood of that action under different assessments of the firm.

For regulators, the relevant disclosure unit is the connected sequence of authorization, implementation, and status changes. A consistent program identifier, dated cumulative purchases, and clear explanations of material amendments make the sequence easier to evaluate. Accountability complements this information by making current statements more consequential. The same economic distinction applies wherever authorizations leave implementation discretion, although disclosure requirements and enforcement determine how readily investors can observe delivery. The Chinese evidence therefore identifies the information investors need to value a flexible promise, rather than prescribing an identical repurchase rule across markets.

The remaining limitations concern the financial content and timing of delivery. Earnings measured per share combine reported performance with changes in shares outstanding; linking execution to operating cash flow and share-count changes would separate those channels. Transaction and disclosure timestamps would locate the price response at public revelation and

distinguish it from later adjustment. Policy-level insurance terms would refine the measurement of personal liability exposure. Across markets, these comparisons can establish how disclosure rules and enforcement shape the same economic relation. The central insight is that the value of a corporate promise rests on the delivery investors expect, the information in subsequent conduct, and the accountability attached to the original statement.

Statements and Declarations

Data Availability. This study uses licensed financial-market data from CSMAR and the Mingshi Database, together with publicly available corporate disclosures. Access to the licensed data is subject to the providers' subscription terms.

Use of Artificial Intelligence. I used artificial intelligence solely for language editing.

Supplementary Information

Online Resource 1: Formal model, variable construction, Kangmei institutional setting, and supplementary empirical evidence.

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