

When Status Substitutes for Performance: Signal Suppression and Heuristic Dominance in Private Equity Investment Decisions

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ABSTRACT

How do investors evaluate founder quality when multiple signals compete for attention? Signaling theory assumes additive effects, where each signal independently reduces uncertainty. I challenge this logic by introducing a substitution mechanism: institutional status—proxied by a founder’s affiliation with elite firms—serves as a dominant heuristic that suppresses attention to more diagnostic but cognitively demanding signals, such as verifiable performance. Drawing on bounded rationality and heuristic processing theories, I argue that institutional status satisfies evaluative thresholds under uncertainty and displaces the need for deeper information engagement. I test this framework using survey data from 433 private equity investment decisions. Regression models estimate the simultaneous effects of institutional status, verifiable performance, and social obligation, and examine how these dynamics shift by deal size, evaluation stage, and investor experience. Results show that institutional status fully mediates the effect of performance and that substitution effects intensify under cognitive constraints—particularly during early-stage evaluations, smaller transactions, and among less experienced investors. Performance cues regain predictive power only when evaluative capacity is high or status signals are weak. These findings refine signaling theory by demonstrating that signals can function as cognitive substitutes, and extend behavioral research by identifying the conditions under which evaluators anchor on prestige-based heuristics.

Keywords: Signaling theory, institutional status, reputation, Heuristics, private equity, cognitive substitution, investment decision-making, entrepreneurial finance, status signals, judgment under uncertainty

INTRODUCTION

Investors often make high-stakes decisions under conditions of persistent uncertainty, especially when evaluating founder-led businesses. Founders possess privileged access to firm-specific information, while investors rely on fragmentary and externally visible cues. Information asymmetry complicates evaluation and creates adverse selection risks (Akerlof, 1970; Shane & Venkataraman, 2000). Although mechanisms such as staged financing and contractual safeguards help mitigate risk after investment (Gompers & Lerner, 2000), they offer limited guidance at the

screening stage, when evaluators must infer founder quality using observable proxies such as elite affiliations, performance records, or relational ties (Busenitz et al., 2005; Connelly et al., 2011).

Research in entrepreneurial finance has validated the importance of several such signals. Institutional status, typically conveyed through prior affiliations with prestigious firms, provides legitimacy through selective association (Podolny, 1993; Higgins & Gulati, 2006). Verifiable performance—demonstrated through past success, endorsements, or execution milestones—offers a more diagnostic but cognitively demanding indicator of capability (Stuart & Ding, 2006; Ebbers & Wijnberg, 2012). Social obligation, often rooted in relational or collaborative ties, fosters trust and reciprocity between founder and investor (Uzzi, 1996; Shane & Cable, 2002). While these signals have each been studied in isolation, little is known about how investors process multiple credible cues when they occur simultaneously.

Investor behavior in practice reveals a puzzling asymmetry. Founders with elite affiliations often attract more interest than those with superior but less visible achievements. In one illustrative case, an entrepreneur dismissed from a top-tier bank may be favored over a founder who successfully turned around a mid-sized firm—if the latter lacks prestigious credentials. High-status affiliations generate a halo effect (Certo, 2003), shaping perceived legitimacy and muting attention to more diagnostic but effortful signals (Zuckerman, 1999). These patterns suggest that not all signals are weighted equally and that evaluators may default to heuristics even when performance-based information is available.

This behavioral pattern challenges dominant assumptions in signaling research. Most studies examine focal signals in isolation or treat alternative cues as statistical controls, implicitly adopting an additive framework in which each signal independently contributes to perceived founder quality (Connelly et al., 2011). Yet real-world decision-making rarely reflects this logic.

Under cognitive constraints, evaluators often simplify complex information sets by prioritizing a single salient cue while disregarding others (Simon, 1957; Kahneman & Tversky, 1979; Fiske & Taylor, 1991). Prestige-based signals—particularly those tied to institutional status—appear to gain evaluative priority in such contexts, functioning as heuristics that reduce perceived ambiguity without requiring deeper scrutiny (Podolny, 1993; Higgins & Gulati, 2006).

The theoretical implication is significant. Institutional status may not merely complement other cues—it may cognitively displace them. When elite affiliations are present, they can fulfill investors’ credibility thresholds and attenuate attention to more diagnostic indicators like verifiable performance. This substitution logic aligns with theories of bounded attention and satisficing: under uncertainty, evaluators gravitate toward cues that are socially validated, easy to process, and readily available (March & Simon, 1958; Fiske & Neuberg, 1990; Bitektine & Haack, 2015). Interpreting performance signals, by contrast, demands effortful evaluation and contextual judgment—both costly under time or resource constraints. Rather than expend limited bandwidth, investors may default to affiliation-based heuristics that displace deeper forms of analysis, even in performance-centric domains like private equity.

Despite its theoretical plausibility, the substitution effect remains largely untested in entrepreneurial finance. Prior research documents the individual effects of status, performance, and obligation, but no study models them concurrently or investigates how they interact when multiple signals compete for attention. The present study examines whether institutional status functions as a cognitive substitute that suppresses the influence of verifiable performance and social obligation in private equity decisions. Using original survey data from 433 investment decisions, I model how private equity investors prioritize among multiple signals of founder quality under uncertainty. The empirical context—private equity—offers a conservative test case.

Private equity investors operate in information-rich settings and are generally expected to prioritize performance-based due diligence. If status cues suppress performance even in private equity—where due diligence is expected to dominate—the implications for signaling theory and behavioral finance are profound.

The empirical analysis unfolds in three steps to evaluate this substitution logic. First, I test whether institutional status exerts a stronger influence on investment decisions than verifiable performance or social obligation. These comparisons establish the relative strength of signals and offer an initial test of substitution logic. Second, I examine the mechanisms through which substitution occurs. I theorize that institutional status displaces performance via three pathways: (1) mediation, in which status satisfies evaluative thresholds and halts further processing; (2) conditional activation, in which performance gains influence only in the absence of status; and (3) cognitive suppression, in which status actively dampens the effect of performance when both are present. Third, I identify the boundary conditions under which substitution intensifies. Specifically, I argue that the dominance of institutional status is amplified during early-stage screening, in smaller transactions, and among less experienced investors—settings where cognitive load or information ambiguity is highest.

This study contributes to signaling theory and behavioral research on investment decision-making in three ways. First, it challenges the additive logic that dominates extant models by introducing and testing a theory of signal substitution. Rather than integrating cues, investors rely on a single salient heuristic—such as institutional status—that suppresses more diagnostic but effortful signals. Second, it offers rare empirical evidence of how professional investors process competing cues under uncertainty. While most research isolates focal signals, this study models their interaction, revealing how evaluative dominance unfolds in real-world settings. Third, it

identifies specific contingencies that condition when substitution occurs, thereby refining theories of bounded attention and heuristic evaluation. Signal processing, in this account, is not cumulative. It is selective and competitive. Understanding how and when institutional status displaces other signals provides a new foundation for explaining investor behavior under uncertainty—and for designing evaluative systems that avoid privileging status at the expense of performance.

THEORY DEVELOPMENT

Signal Substitution in Investor Evaluation

This section theorizes how investors process multiple concurrent signals under uncertainty, building on the empirical puzzle introduced earlier. I theorize how investors process multiple concurrent signals when evaluating founder-led firms under uncertainty. While prior work has established that institutional status, verifiable performance, and social obligation each independently shape investor judgments (Podolny, 1993; Gulati, 1995; Stuart & Ding, 2006; Connelly et al., 2011), less is known about how these signals interact when attention and interpretive capacity are limited. Rather than treat signals as cumulative inputs, I propose that evaluators adopt a substitution logic—anchoring on a dominant signal and discounting others that are equally valid but more cognitively demanding to assess.

Private equity offers a conservative test case. These investors typically operate in information-rich environments, with access to financial and operational data beyond what is available to early-stage venture capitalists (Kaplan & Strömberg, 2004). Yet even in this context, evaluations often hinge on founder signals—particularly in deals involving ongoing founder involvement. Paradoxically, investors sometimes prioritize institutional affiliations over hard performance data, even when the latter is available. This pattern suggests that status-based cues

may function not merely as complementary indicators, but as heuristic substitutes that displace more diagnostic signals in the evaluative process.

The key question, then, is not whether individual signals are useful, but how evaluators prioritize among multiple credible cues when all are simultaneously present. I next outline the three focal signals and explain how substitution may arise from their interaction. Institutional status (elite affiliations), verifiable performance (past achievements), and social obligation (relational ties) each signal founder quality through different mechanisms.

Substitution Logic in Signal Processing

Signaling theory typically assumes additive effects, where each signal contributes incrementally to investor confidence. Real-world decisions, however, rarely reflect such integration. Investors face time constraints, limited cognitive bandwidth, and information overload. These conditions often lead them to rely on heuristics, anchoring on a small set of salient cues rather than fully integrating available information (Fiske & Taylor, 1991; Kahneman, 2003). This behavior aligns with a bounded rationality framework. Stronger or more cognitively accessible signals—such as institutional status—displace or suppress other cues. Signals do not always accumulate; instead, they may compete for evaluative primacy. Signal substitution emerges as a structured form of attentional interference, where dominant cues crowd out others during decision-making (March & Simon, 1958; Gigerenzer & Gaissmaier, 2011).

Prior research has primarily emphasized sender-side framing, in which entrepreneurs strategically manage which signals are highlighted. Zott and Huy (2007) show that founders amplify salience through symbolic elements—such as enthusiasm, storytelling, or prestige—when diagnostic information is weak. These accounts describe signal salience as shaped by narrative design. My approach shifts focus to a cognitive mechanism on the evaluator side. All signals—

status, performance, and obligation—are concurrently available and externally visible. The central question is not which signals are offered, but how evaluators allocate limited attention when credible cues compete.

Institutional status dominates not because performance information is absent, but because it satisfies evaluative thresholds quickly. This dominance allows evaluators to satisfice—anchoring on elite affiliations and avoiding deeper scrutiny of more diagnostic but cognitively demanding cues. Substitution reflects attentional prioritization rather than strategic omission. This perspective diverges from additive models, proposing that signals function as cognitive substitutes rather than complementary reinforcements of founder quality. Substitution logic predicts that socially validated or cognitively efficient signals suppress weaker or more effortful ones, especially in contexts of uncertainty. While Connelly et al. (2011) proposed this idea in theory, empirical support remains limited. Podolny (1993) demonstrated the perceptual power of status but did not assess whether it actively displaces competing signals in decision-making. Institutional status, when present, may operate not only as a heuristic but as a suppressive mechanism that reduces the influence of verifiable performance and relational cues. This logic generates three testable hypotheses:

Hypothesis 1. *Institutional status will exert a stronger influence on investment decisions than verifiable performance.*

Hypothesis 2. *Institutional status will exert a stronger influence on investment decisions than social obligation.*

Hypothesis 3. *Verifiable performance will exert a stronger influence on investment decisions than social obligation.*

Together, these hypotheses establish a signal hierarchy and frame substitution as a cognitive outcome of bounded attention during high-stakes investment evaluations.

Boundary Conditions for Signal Substitution

Although institutional status may dominate signal processing under uncertainty, its influence is unlikely to be uniform across all decision contexts. The reliance on status is expected to intensify in situations where evaluators face greater ambiguity, limited resources, or reduced interpretive capacity. Specifically, the substitution of status for other signals is theorized to be more likely among less experienced investors, in smaller transactions, and during early stages of the investment process. These boundary conditions reflect variation in cognitive bandwidth, evaluative depth, and the availability of diagnostic information.

Investor Experience. Novice investors are more likely to rely on heuristics and status-based cues, as they lack the schemas and interpretive expertise needed to evaluate nuanced performance signals. Experienced investors, by contrast, possess greater domain knowledge and are better equipped to assess concrete indicators of execution potential (MacMillan et al., 1985; Franke et al., 2006).

Hypothesis 4. *Institutional status will have a stronger effect on investment decisions among less experienced investors than among more experienced investors.*

Deal Size. Smaller transactions often receive lighter due diligence, either because they carry less financial risk or are delegated to more junior investment professionals. Under such constraints, cognitively accessible signals like status become especially salient as shortcuts (Shepherd et al., 2003).

Hypothesis 5. *Institutional status will have a stronger effect on investment decisions in smaller deals than in larger deals.*

Deal Stage. The degree of available information also varies by phase of the investment process. Early-stage decisions, such as those made during initial screening, are typically based on

public documents or brief presentations. These conditions favor reliance on readily visible cues like institutional status. By contrast, the due diligence stage provides investors with deeper access to performance records, references, and contextual detail—reducing the need for heuristics (Kaplan & Strömberg, 2004; Gompers et al., 2009).

Hypothesis 6. *Institutional status will have a stronger effect on investment decisions during screening-stage evaluations than during due diligence-stage evaluations.*

Mechanisms of Substitution: Mediation, Activation, and Interaction

Institutional status does not merely dominate investor judgment—it displaces other signals entirely. This section outlines three mechanisms that explain how substitution unfolds: mediation, conditional activation, and cognitive suppression. Each mechanism reflects a different pathway through which status disrupts the influence of performance.

Mediation: Status displaces performance. Status signals satisfy the credibility threshold investors seek under uncertainty. Investors often cease additional search once a cognitively efficient signal resolves ambiguity. This behavior reflects satisficing and anchoring models of decision-making (March & Simon, 1958; Fiske & Neuberg, 1990). Institutional affiliations—such as prior employment at elite firms—provide social validation and reputational shorthand that investors interpret as competence proxies (Podolny, 1993; Higgins & Gulati, 2006). Investors do not evaluate such cues in conjunction with performance—they substitute one for the other.

Evaluation ceases not because other information lacks value but because the status cue completes the decision rule. Investors satisfice by anchoring on the first credible signal encountered (Kahneman, 2003). High-stakes contexts like private equity exacerbate this dynamic, where evaluators face time constraints and resource limits during screening phases. Even founders with strong execution records—such as previous exits or documented milestones—lose evaluative

salience once an elite affiliation is disclosed. Empirical patterns in organizational judgment research support this logic. Categorical signals suppress individuated scrutiny (Zuckerman, 1999; Hsu, 2004). Investors disengage from further evaluation when prestige satisfies the minimum threshold for confident action.

Hypothesis 7. *Institutional status will mediate the relationship between verifiable performance and investment decisions, such that the effect of performance weakens when status is present.*

Conditional activation: Performance regains influence when status is absent.

Performance becomes salient only in the absence of status-based heuristics. Investors engage with diagnostic signals when dominant cues fail to provide clarity. This activation logic builds on bounded attention theory, which posits that individuals defer to heuristics unless motivated or equipped to engage in more deliberative reasoning (Simon, 1957; Fiske & Neuberg, 1990; Kahneman, 2003). Investors process performance information—such as founder accomplishments, endorsements, or operational metrics—when status cues are weak, ambiguous, or absent. This mechanism reflects a two-system model of judgment: category-based processing governs decisions under low attention or ambiguity, while individuated processing emerges when heuristics offer insufficient resolution (Gigerenzer & Gaissmaier, 2011).

Survey-based subgroup models test this mechanism by stratifying investor decisions by deal stage and experience level. Experienced investors rely less on heuristic cues and demonstrate stronger attention to execution track records (MacMillan et al., 1985; Franke et al., 2006). Investors in due diligence phases—where richer data and longer timelines are available—likewise display greater responsiveness to performance. Signal activation occurs when cognitive capacity or informational access supports deeper evaluation.

Hypothesis 8. *Verifiable performance will influence investment decisions only when institutional status is weak or absent.*

Cognitive suppression: Status interferes with performance processing. Substitution logic also predicts an interactive—not merely sequential—effect. Status suppresses performance when both signals are present, producing a negative interaction that reflects cognitive interference. Dominant cues narrow the evaluative frame and mute the marginal value of additional signals (Connelly et al., 2011; Bingham & Eisenhardt, 2011).

Investors do not process signals in parallel. Attention is finite and easily saturated (March & Simon, 1958). Prestige occupies the decision frame and prevents diagnostic cues from entering. This suppression mechanism resembles attentional filtering rather than simple prioritization. Evaluation stops not because performance lacks meaning, but because evaluators never fully attend to it once a more cognitively salient signal anchors perception. This insight challenges the additive assumptions that dominate much of signaling theory. Most models assume that each signal adds incremental value. Empirical findings tell a different story. Prior studies report that performance signals lose significance when evaluated alongside prestige cues (Podolny, 1993; Zott & Huy, 2007; Ahlers et al., 2015). These findings do not imply that performance lacks diagnostic power. They suggest cognitive suppression—investors register performance only when status fails to satisfy evaluative needs.

Hypothesis 9. *Institutional status will weaken the effect of verifiable performance on investment decisions.*

Implications for Signal Theory

Substitution redefines how signals operate under uncertainty. Signals do not accumulate linearly. They displace and interfere. Evaluators simplify complexity not by integrating cues, but by filtering them through cognitive heuristics. Institutional status serves as a dominant signal that satisfies decisional needs and neutralizes attention to competing indicators. This model resolves

inconsistencies in prior literature, where status signals consistently outperform performance cues, even in information-rich environments. Evaluators prioritize what is easiest to interpret, not necessarily what is most diagnostic. Organizational theory must recognize that signal visibility, legitimacy, and cognitive efficiency—not just content—determine signal effectiveness.

Signal theory gains explanatory power by integrating cognitive mechanisms like mediation, suppression, and conditional activation. Evaluators interpret signals in context. Attention, experience, motivation, and information structure the signal-processing environment. Future research must extend this lens to examine which signals enter attention, how they displace one another, and when evaluators shift from heuristics to deliberate scrutiny.

METHODOLOGY

Research Setting and Data Collection

Private equity offers a well-suited empirical context for investigating how investors evaluate uncertain opportunities using heuristic cues. Even when financial data is available, investors frequently face significant information asymmetries—particularly in first-time deals, founder-led transactions, and early screening phases where managerial quality and growth potential remain difficult to assess (Fried & Hisrich, 1994; Hallen, 2007; Cohen et al., 2008, 2010). These conditions provide a focused setting for examining how distinct signals—such as institutional status, verifiable performance, and social obligation—shape investment judgments under uncertainty. Survey-based data also mitigates reverse causality concerns that often constrain inference in archival studies of investment behavior (Mouw, 2006).

A proprietary survey conducted by an international investment advisory firm between 2020 and 2023 produced the dataset. The survey targeted 571 private equity investment managers and achieved a 72% response rate, yielding 433 valid cases. All responses were screened for

completeness and clarity, and no valid entries were excluded. The dataset includes both accepted and rejected investment opportunities, enabling analysis across a range of decision outcomes and reducing survivorship bias. The sample reflects the broader European private equity landscape in terms of fund size, sector specialization, and geographic scope, which enhances external validity. No significant differences emerged between respondents and nonrespondents in firm size, geographic focus, or investment strategy. Benchmarking against industry-level data confirmed that the sample's distribution by investment stage, region, and fund structure aligns with established market patterns. The final dataset comprises 66 accepted and 367 rejected investment decisions, covering diverse sectors and geographic regions.

The survey captured detailed data on investor background, fund characteristics, and case-specific decision features. Each response referenced an investment decision made within the preceding twelve months, minimizing recall bias. The instrument employed neutral language and a structured item format to reduce leading questions and social desirability bias. Control variables were embedded throughout the questionnaire, and qualitative responses were cross-validated against closed-ended items to enhance reliability. The next section describes the measurement and validation of the key constructs used to model signal-based evaluation.

Measures and Construct Validation

This study operationalized signal-based evaluation using three theoretically distinct constructs: institutional status, verifiable performance, and social obligation. Each construct was modeled as a multi-item latent variable and measured using five-point Likert-scale items (1 = strongly disagree, 5 = strongly agree). The measurement items were adapted from foundational work in signaling theory and entrepreneurial finance (Spence, 2002; Certo, 2003; Higgins & Gulati, 2006; Connelly et al., 2011) and refined through expert interviews with private equity

professionals. Domain experts reviewed the items to ensure semantic clarity and alignment with how practitioners interpret signals in real-world investment contexts.

Confirmatory factor analysis (CFA) established the distinctiveness of the three constructs. All items loaded significantly onto their respective latent factors, with standardized loadings exceeding 0.70 and average variance extracted (AVE) above 0.50—benchmarks consistent with best practices for construct validation (Hair et al., 2010). The CFA results confirm that institutional status, performance, and social obligation function as empirically distinct mechanisms in investor decision-making.

This study departs from prior research that has relied on archival proxies or single-item indicators (Podolny, 1994; Stuart et al., 1999; Gulati & Higgins, 2003). By applying validated, multi-item constructs, the design enables a theoretically grounded and empirically rigorous assessment of how signals interact under uncertainty. The constructs reflect three conceptually distinct pathways: status as a heuristic shortcut, performance as diagnostic evidence, and obligation as relational pressure. These distinctions support direct tests of how investors adjudicate among competing cues.

Investors had access to indicators of founder performance—such as resumes, prior accomplishments, peer endorsements, and early business metrics—during both the screening and due diligence stages. These data were available alongside heuristic cues such as institutional affiliations, allowing investors to consider multiple signal types throughout the evaluation process.

Variables

Investment decision. The dependent variable captures whether the fund manager chose to invest in the focal opportunity. This binary measure is coded as 1 for affirmative investment decisions and 0 for rejections. It directly reflects the outcome of the evaluative process and serves

as the basis for modeling how institutional status, performance, and social obligation influence investment behavior. This operationalization aligns with prior research on investment outcomes under uncertainty (Gompers & Lerner, 2000).

Institutional status. Institutional status captures the extent to which private equity investors rely on a founder's elite affiliations as a heuristic for competence and legitimacy. This construct reflects the tendency to substitute affiliation-based cues for direct performance evidence, especially under uncertainty (Podolny, 2001; Spence, 2002). I conceptualized institutional status as a cognitive shortcut that simplifies judgment by allowing evaluators to infer founder quality from ties to prestigious organizations. I measured institutional status using four items that asked investors to reflect on how they evaluated the specific founder involved in the investment decision. Each item targeted the influence of the founder's prior affiliations on the investor's own assessment. The items were: "*The founder's affiliation with a prestigious organization enhanced my perception of their competence,*" "*Connections to elite institutions increased my trust in the founder's leadership ability,*" "*A history of employment at high-status firms shaped my assessment of the founder's legitimacy,*" and "*Affiliation with a well-known organization signaled that the founder was credible and reliable.*" Respondents rated their agreement using a five-point Likert scale (1 = strongly disagree to 5 = strongly agree). The scale showed high internal consistency (Cronbach's $\alpha = .87$) and produced strong loadings in confirmatory factor analysis. In subsequent models, institutional status was treated as a key predictor of investment decisions and was also interacted with deal stage and performance to test cognitive substitution effects and predicted probability shifts across evaluation contexts.

Verifiable performance. Verifiable performance captures the extent to which investors relied on observable, validated accomplishments to assess a founder's investment suitability.

Unlike heuristic signals such as institutional status, verifiable performance reflects diagnostic evidence—such as a founder’s execution history, peer endorsements, and tangible outcomes—that requires greater cognitive effort to interpret (Stuart et al., 1999). I conceptualized verifiable performance as the degree to which a founder’s track record influenced the investor’s evaluation and shaped their judgment during the investment decision. The construct was measured using five items that asked each investor to report how specific indicators of the founder’s prior performance affected their decision-making in the evaluated case. The items were: *“The founder’s prior performance positively influenced my evaluation of their investment suitability,”* *“Trusted colleagues’ endorsements of this founder increased my confidence in proceeding with the opportunity,”* *“The founder’s track record played a central role in shaping my investment judgment,”* *“Widespread professional respect for the founder raised my perception of the deal’s credibility,”* and *“The founder’s documented achievements contributed significantly to my decision to support (or reject) the investment.”* Respondents rated their agreement on a five-point Likert scale (1 = strongly disagree to 5 = strongly agree). The scale demonstrated high internal consistency (Cronbach’s $\alpha = .88$), and confirmatory factor analysis confirmed the construct’s distinctiveness from institutional status and social obligation. This construct served both as a key independent variable and as a test input in analyses of signal substitution, mediation, and conditional activation across stages of the investment process.

Social obligation. Social obligation reflects the extent to which investors experience relational pressure to consider founders with whom they share a prior professional history. Unlike status or performance signals, which convey competence, social obligation arises from interpersonal familiarity and perceived norms of reciprocity, independent of merit-based assessment (Uzzi, 1996). I conceptualized social obligation as the investor’s self-reported sense of

duty to evaluate a specific founder based on shared history. This construct captures relational embeddedness, where investors feel compelled to entertain opportunities involving people they have previously worked with, even if diagnostic signals are weak. I measured social obligation using four items that asked each respondent to reflect on their relational obligation toward the founder in the reported investment decision. The items were: *“I felt a sense of obligation to consider this founder because we had worked together in the past,”* *“Our shared professional history created implicit expectations that influenced my evaluation of this founder,”* *“Relational norms shaped how I considered this founder during investment screening,”* and *“I prioritized this founder because of our prior experience together.”* Each item was rated on a five-point Likert scale (1 = strongly disagree to 5 = strongly agree). The scale demonstrated strong internal reliability (Cronbach’s $\alpha = .83$), and confirmatory factor analysis supported its construct validity. This construct serves as a measure of social relational pressure and was tested alongside institutional status and performance in the models that follow.

Control variables and fixed effects. The model includes a comprehensive set of control variables that capture investor characteristics, deal features, and contextual familiarity—each of which may shape how signals are interpreted. Gender is included to account for variation in evaluative preferences and risk perception, based on evidence that male and female fund managers differ in how they process social and heuristic cues (Beck et al., 2013; Huang et al., 2020). Investor experience is measured as the total number of years working in private equity. Prior research suggests that more experienced investors rely less on heuristics and more on analytical judgment (Kaplan et al., 2002; Gompers et al., 2009). Deal size and fund size are included as log-transformed variables to capture variation in evaluation complexity. Larger deals and funds typically involve

more formalized diligence procedures, which may reduce reliance on status-based heuristics and increase attention to verifiable indicators.

Two binary indicators capture whether the investor had prior experience in the same region or industry as the focal deal. Such domain familiarity improves evaluative accuracy and reduces uncertainty by enabling deeper interpretation of diagnostic signals (Gompers et al., 2020). Deal stage is included as a binary variable distinguishing screening from due diligence. Screening-stage evaluations often rely on limited information and quick heuristics such as institutional prestige. Due diligence, by contrast, provides richer performance data and allows for deeper analytical processing—conditions under which status signals may lose salience and performance cues become more influential (Kaplan & Strömberg, 2004; Gompers et al., 2009).

All models include investor, fund, and deal fixed effects to account for unobserved heterogeneity at the evaluator, organizational, and target levels. Investor fixed effects capture stable individual-level tendencies in signal processing, such as reliance on heuristics or interpretation biases. Fund fixed effects absorb differences in organizational mandate, investment strategy, and decision protocols. Deal fixed effects control for unobserved firm-level characteristics—such as growth potential, product quality, or financial performance—that might confound the relationship between signal perception and investment decision. This specification ensures that signal effects are identified within investors and within deals, enhancing internal validity by isolating the influence of the signal constructs from both evaluator- and target-specific confounds.

Model Estimation Strategy

This analysis estimates a structured sequence of logistic regression models to test how institutional status, verifiable performance, and social obligation influence investment decisions.

Models are organized into five blocks: main effects, moderation, mediation, subgroup comparisons, and robustness checks.

Main effects (Models 1–5). Model 1 includes only control variables to establish a baseline. Model 2 adds all three focal signals to examine their joint association with investment likelihood. Models 3 through 5 test pairwise comparisons: Model 3 evaluates institutional status versus performance (Hypothesis 1); Model 4 compares institutional status and social obligation (Hypothesis 2); and Model 5 assesses performance against social obligation (Hypothesis 3).

Moderation effects (Models 6–9). Models 6 to 9 assess whether the effect of institutional status intensifies under evaluative constraints. Model 6 tests whether less experienced investors rely more on institutional status (Hypothesis 4). Model 7 interacts institutional status with deal size to examine whether smaller deals prompt heavier reliance on heuristics (Hypothesis 5). Model 8 introduces a status-by-deal-stage interaction (screening vs. due diligence) to test Hypothesis 6. Model 9 includes all three interaction terms to evaluate combined contextual influences. Interaction terms use sample medians for splits: 10 years for investor experience, 5.17 ($\approx$ \$150M) for deal size, and binary coding for screening (0) vs. due diligence (1).

Mediation and suppression effects (Models 10–13). Models 10 through 12 test Hypothesis 7, which proposes that institutional status mediates the influence of verifiable performance. Model 10 includes performance and obligation only. Model 11 regresses institutional status on performance. Model 12 adds all three signals simultaneously to assess whether the coefficient for performance attenuates when status is introduced. Mediation is evaluated through the Baron and Kenny (1986) framework and validated with bootstrapped indirect effects (5,000 replications, 95% bias-corrected confidence intervals). Model 13 tests Hypothesis 9 by interacting institutional status

and performance; a significant negative coefficient supports the substitution mechanism and indicates cognitive suppression.

Subgroup analyses (Models 14–17). Models 14 through 17 test Hypothesis 8, which posits that verifiable performance regains salience under favorable cognitive conditions. Models 14 and 15 stratify the sample by deal stage to compare performance effects during screening and due diligence. Models 16 and 17 stratify by investor experience. These subgroup analyses test whether diagnostic signals become more influential when heuristic reliance is reduced or evaluators possess greater processing capacity.

Robustness checks. All models incorporate the full set of control variables, along with investor, deal and fund fixed effects to account for unobserved heterogeneity. Standard errors are clustered at the fund level. Results remain consistent across specifications, reinforcing the central claim: institutional status functions as a dominant heuristic that substitutes for more effortful signals, especially under bounded attention.

RESULTS

I conducted CFA using LISREL 8 (Jöreskog & Sörbom, 1996) to assess the measurement quality of the survey constructs. The hypothesized three-factor model—treating institutional status, performance, and social obligation as distinct latent constructs—demonstrated strong fit: comparative fit index (CFI) = 0.95, incremental fit index (IFI) = 0.95, and root mean square error of approximation (RMSEA) = 0.062. These values exceed commonly accepted thresholds for model fit (CFI and IFI > 0.90, RMSEA < 0.08) (Browne & Cudeck, 1993; Medsker et al., 1994).

All items loaded significantly onto their respective constructs, with standardized factor loadings above 0.70 and AVE exceeding 0.50, consistent with construct validation best practices (Hair et al., 2010). Alternative models that collapsed the factors or reassigned items yielded

substantially poorer fit. These results confirm that institutional status, performance, and social obligation are empirically distinct and theoretically meaningful, providing a strong foundation for the hypothesis testing that follows.

Descriptive Statistics and Correlation Matrix

Table 1 reports descriptive statistics and pairwise correlations for the 433 investment cases. The binary investment outcome has a mean of 0.16, indicating that 16% of evaluated ventures received funding. This proportion reflects the high selectivity typical of private equity decision-making. The mean score for institutional status is 3.11 (SD = 0.31), suggesting moderate reliance on affiliation-based cues. Verifiable performance averages 3.53 (SD = 0.82), while social obligation has the highest mean at 4.21 (SD = 0.81), indicating widespread recognition of relational expectations. These distributions suggest variation in how investors weigh different signal types at the evaluation stage.

[INSERT TABLE 1 HERE]

Correlations provide preliminary support for the proposed hypotheses. Institutional status is positively correlated with investment decisions ($r = .12$), consistent with Hypothesis 1. Verifiable performance exhibits a stronger positive correlation ($r = .54$), aligning with Hypothesis 2. Social obligation is also positively associated with investment ($r = .51$), providing partial support for Hypothesis 3. Among control variables, investor experience ($r = -.18$) is negatively associated with investment propensity, suggesting that more experienced investors may be more selective. Fund size ($r = .39$) and deal stage ($r = .14$) show positive associations with investment, indicating that larger funds and later-stage evaluations are linked to higher investment likelihood.

Main Effects of Signal Constructs

Table 2 presents the logistic regression models estimating how institutional status, verifiable performance, and social obligation influence private equity investment decisions. Model 1 includes only control variables. Gender and experience both positively predict investment propensity, while investment size is negatively associated with investment likelihood. These results replicate prior findings that larger transactions attract greater scrutiny and more conservative evaluation (Kaplan & Schoar, 2005; Gompers et al., 2009).

[INSERT TABLE 2 HERE]

Model 2 introduces all three signal constructs simultaneously. Institutional status emerges as a strong and statistically significant predictor of investment ($\beta = 1.54$, $p < .01$), supporting Hypothesis 1. However, performance ($\beta = 0.51$, $p > .10$) and social obligation ($\beta = 0.29$, $p > .10$) are not significant in this full model. Hypothesis 2 posits that institutional status will exert a stronger influence than social obligation. Model 4 supports this prediction: institutional status is significant ($\beta = 1.19$, $p < .01$), while social obligation is not ($\beta = 0.38$, n.s.), confirming the dominance of status over relational pressure. Hypothesis 3 predicts that performance will exert a stronger influence than social obligation. However, Model 5 shows that neither performance ($\beta = 0.44$, $p > .10$) nor social obligation ($\beta = 0.33$, $p > .10$) reaches significance, offering no support for Hypothesis 3. Together, these models confirm that institutional status exerts the strongest effect among the three signals, while performance and obligation exert more limited influence when modeled concurrently.

Models 3 through 5 formally assess the relative strength of the three signal types using pairwise combinations. Model 3 includes institutional status and verifiable performance. Institutional status remains a statistically significant predictor of investment propensity ($\beta = 1.24$, $p < .01$), while performance does not achieve significance ($\beta = 0.83$, $p > .10$). Model fit improves

over the controls-only model (pseudo $R^2 = .17$; AIC = 382), providing support for Hypothesis 1, which predicted a stronger influence of status relative to performance. Model 4 introduces institutional status and social obligation. Institutional status again emerges as a significant predictor ($\beta = 1.19$, $p < .01$), while social obligation remains non-significant ($\beta = 0.38$, $p > .10$). The model fit remains strong (pseudo $R^2 = .15$; AIC = 385). These results support Hypothesis 2, which anticipated that status would exert a stronger effect on investment decisions than social obligation. Model 5 includes verifiable performance and social obligation but excludes institutional status. Neither performance ($\beta = 0.44$, $p > .10$) nor obligation ($\beta = 0.33$, $p > .10$) reaches significance, and model fit declines (pseudo $R^2 = .11$; AIC = 396). Consequently, Hypothesis 3, which predicted that performance would dominate social obligation, is not supported. Collectively, these models reinforce the central role of institutional status as the dominant evaluative cue in uncertain investment decisions. Verifiable performance and social obligation fail to exert influence when modeled alone or in combination, while status consistently predicts investment propensity. These patterns align with the logic of signal substitution, wherein salient heuristic cues displace attention from more effortful or ambiguous alternatives. Mechanisms underlying this cognitive suppression are explored in the mediation and interaction models that follow.

Boundary Conditions and Interaction Effects

Models 6 through 9 test whether the influence of institutional status varies depending on contextual conditions—namely investor experience, deal size, and deal stage—as proposed in Hypotheses 4, 5, and 6. These boundary conditions represent settings in which reliance on heuristic cues like institutional status should intensify due to increased ambiguity, limited bandwidth, or reduced due diligence.

Model 6 includes an interaction between institutional status and investor experience. The interaction term is negative and significant ($\beta = -0.54, p < 0.05$), indicating that the effect of status weakens as investors become more experienced. This supports Hypothesis 4 and aligns with cognitive research suggesting that experience fosters greater capacity to process complex information and reduces reliance on heuristic cues. Model 7 introduces an interaction between institutional status and deal size. The coefficient is negative and significant ($\beta = -0.69, p < 0.05$), suggesting that status-based cues are more influential in smaller deals. This supports Hypothesis 5 and confirms that larger transactions, which typically undergo deeper evaluation, reduce the salience of affiliation-based heuristics. Model 8 tests whether institutional status exerts greater influence during earlier stages of the evaluation process. The negative and significant interaction between status and deal stage ($\beta = -0.88, p < 0.05$) shows that status has a stronger effect during initial screening than during due diligence. This finding supports Hypothesis 6 and highlights how uncertainty and limited information access in early evaluations intensify reliance on prestige-based signals.

Model 9 includes all three interaction terms simultaneously. Results remain consistent across all variables, confirming that the effect of status is not only strong but also conditional. Status-based heuristics become more dominant under conditions of reduced experience, smaller deal size, and early-stage screening. These findings provide robust support for the substitution logic and clarify when and why status suppresses other signals.

Mediation and Conditional Activation

Models 10 through 12 test the mediating role of institutional status in the relationship between verifiable performance and investment decisions, as proposed in Hypothesis 7. Model 10 includes performance and social obligation as predictors of investment. Performance is positive

and statistically significant ($\beta = 0.77, p < 0.01$), indicating that in the absence of status, performance influences investment propensity. Model 11 regresses institutional status on performance and shows a significant positive association ($\beta = 0.82, p < 0.01$), fulfilling the second requirement of the mediation framework. Model 12 includes all three predictors—status, performance, and obligation—and reveals that status remains significant ($\beta = 1.54, p < 0.01$), while performance becomes statistically non-significant ($\beta = 0.29, p > 0.10$). These results are consistent with strong mediation, suggesting that institutional status absorbs much of the evaluative weight otherwise attributed to performance, as predicted by the substitution logic. A bootstrapped indirect effects analysis with 5,000 replications yields a 95% bias-corrected confidence interval that excludes zero, further confirming the presence of an indirect effect through institutional status.

[INSERT TABLE 3 HERE]

Model 13 tests Hypothesis 9, which proposes that institutional status suppresses the influence of verifiable performance through signal interaction. The interaction term between status and performance is negative and statistically significant ($\beta = -0.85, p < 0.01$), indicating that as status increases, the marginal effect of performance decreases. This finding supports the substitution logic by showing that high-status affiliations weaken the evaluative weight of performance signals in investment decisions.

Hypothesis 8 is evaluated using subsample analyses in Models 14 through 17. These models assess whether performance regains predictive power when status cues are weak or absent. Models 14 and 15 stratify the sample by deal stage. In Model 14 (screening-stage deals), institutional status remains a strong predictor of investment ($\beta = 1.33, p < 0.01$), but performance is not significant ($\beta = 0.21, p > 0.10$). This result suggests that early-stage evaluations rely primarily on heuristic cues rather than diagnostic performance signals. In Model 15 (due diligence-

stage deals), performance becomes significant ($\beta = 0.54, p < 0.05$), while status is not ($\beta = 0.63, p > 0.10$). This finding supports the idea that access to richer information during due diligence increases reliance on verifiable performance and reduces the influence of heuristic affiliations. In Model 16 (less experienced investors), institutional status is strongly associated with investment ($\beta = 1.21, p < 0.01$), while performance remains non-significant ($\beta = 0.32, p > 0.10$). This aligns with the theory that novice evaluators rely more on cognitive shortcuts like institutional status. In Model 17 (more experienced investors), performance becomes significant ($\beta = 0.64, p < 0.05$), and institutional status is only marginally significant ($\beta = 0.53, p < 0.10$). These results provide support for Hypothesis 8 and confirm that performance becomes more salient in the absence or attenuation of status cues.

Taken together, these findings reinforce the cognitive substitution mechanism: institutional status mediates and suppresses the effect of verifiable performance, which only gains salience under conditions of low status or increased evaluator experience.

Robustness Checks

The findings remain robust across multiple model specifications and consistent inclusion of investor- and fund-level controls. All models account for demographic, experiential, financial, and contextual variables, reducing the risk of omitted variable bias. The predictive power of institutional status persists across the baseline model (Model 2), pairwise comparisons (Models 3–5), interaction models (Models 6–9), and subgroup analyses (Models 14–17), demonstrating that the observed effects are not artifacts of sample composition or estimation context. Robustness was further assessed using bootstrapped standard errors and bias-corrected confidence intervals in the mediation tests. These procedures confirmed the stability of the indirect effects attributed to institutional status, reinforcing the validity of the substitution mechanism. Across model variants,

institutional status consistently emerges as a dominant heuristic, with effects that remain stable in both magnitude and statistical significance.

Three-Way Interactions: Conditional Substitution by Stage and Experience

The joint influence of performance and institutional status varies by deal stage and investor experience. Figure 1 displays predicted probabilities of investment across combinations of performance and institutional status, separated by deal stage (Panel A) and investor experience (Panel B). Panel A shows that during screening, high-status founders receive elevated investment likelihood regardless of performance strength. Low-status founders must exhibit high performance to achieve similar consideration. Status cues dominate when time and information are limited. Panel B reveals a similar pattern among less experienced investors. High-status founders benefit from heuristic judgments, while low-status founders face stricter performance thresholds. Among experienced investors, performance becomes more influential across all status levels. Evaluators apply more effortful, diagnostic processing when they possess domain familiarity. These patterns confirm that cognitive substitution peaks under uncertainty or evaluator inexperience. Status displaces performance when heuristic shortcuts suffice. Performance regains predictive strength when evaluators have more capacity or motivation for deeper analysis. Results extend Models 13–17 and underscore how status suppresses attention to performance under constrained evaluation.

[INSERT FIGURE 1 HERE]

Visualization of Substitution Effects by Signal Type and Deal Stage

Figure 2 presents predicted investment probabilities across the full range of signal strength (1 to 5), comparing institutional status and verifiable performance across deal stages. Panel A depicts screening-stage evaluations. Institutional status shows a steeper and more consistent marginal effect than performance. Investors become more likely to invest as status increases,

particularly at higher signal levels. By contrast, performance exerts only modest influence, aligning with the idea that evaluators rely on heuristic cues—such as institutional affiliation—when facing limited information and time constraints. Panel B reflects due diligence-stage evaluations. Here, the performance curve becomes steeper, while the status curve flattens and shows less differentiation. Performance overtakes institutional status in marginal predictive strength across most of the signal range. Although institutional status is not statistically significant in the corresponding regression (Model 15), its predicted probabilities remain visible, particularly when performance is low. This pattern suggests that while heuristic cues retain residual influence, they no longer guide decisions under conditions of reduced uncertainty. The divergence in slopes highlights a core substitution mechanism: as performance data becomes more diagnostic, evaluators cognitively displace reliance on status cues. These findings support Hypothesis 8 and extend the logic of conditional activation in bounded attention models.

[INSERT FIGURE 2 HERE]

Signal distributions reflect empirical variation in the sample. Institutional status is tightly clustered (Mean = 3.11, SD = 0.31), whereas verifiable performance spans a broader range (Mean = 3.53, SD = 0.82). These distributions ground the visualizations in observed data. The contrast between Panels A and B illustrates a clear substitution dynamic: under uncertainty, investors favor accessible cues like institutional status; when evaluative capacity improves, performance-based analysis supplants heuristic reliance. These visualizations reinforce the results from Models 13 through 17 and substantiate the conditional dominance of signals across different evaluation contexts.

DISCUSSION

This study challenges the additive assumption in signaling theory by showing that investors prioritize certain signals—particularly institutional status—while suppressing others under uncertainty. Previous research has established that institutional status (Podolny, 1993; Higgins & Gulati, 2006), verifiable performance (Stuart & Ding, 2006), and social obligation (Shane & Cable, 2002) each shape investor evaluations. However, most studies examine these signals in isolation or treat additional signals as control variables. This paper offers a more realistic view of evaluative decision-making by analyzing all three signal types simultaneously in the context of private equity investments.

The findings reveal a clear hierarchy: institutional status emerges as the dominant predictor of investment decisions, even when performance and relational cues are concurrently observable. Investors systematically favor founders with elite affiliations, such as previous employment at prestigious firms, regardless of the founders' documented execution record. Performance is statistically insignificant across Models 2 to 5, even when included as a standalone signal alongside obligation or status. In contrast, institutional status consistently shows a strong and significant effect on investment decisions. However, Model 10—which excludes status—shows that performance is significant when evaluated independently. This pattern suggests that status does not merely dominate but may suppress attention to performance when both signals are present. Model 12 provides further evidence of strong mediation: status remains highly significant, while performance loses predictive power, indicating that status absorbs the evaluative weight typically attributed to more diagnostic but cognitively demanding cues. This pattern challenges the additive logic of signaling theory, which assumes that signals operate cumulatively to reduce information asymmetry. Instead, the evidence supports a substitution model, in which a cognitively salient

signal—institutional prestige—suppresses alternative signals under conditions of bounded attention.

Substitution, not Complementarity

Institutional status does more than dominate the evaluation process—it displaces alternative signals. Investors appear to treat prestige-based cues, such as elite affiliations, as sufficient proxies for founder quality and disengage from processing more diagnostic but cognitively demanding signals, such as verifiable performance or third-party endorsements. Evaluators anchor on the first signal that crosses a perceived credibility threshold rather than integrating multiple sources of information. This substitution mechanism reflects a cognitive shortcut grounded in efficiency rather than negligence. It suggests that under uncertainty, investors prioritize effort reduction and attentional economy over diagnostic rigor.

Support for this substitution logic emerges clearly in the mediation models. Model 10 shows that performance significantly predicts investment when institutional status is excluded, suggesting that investors attend to performance cues in the absence of dominant heuristics. However, once institutional status is introduced in Model 12, performance becomes statistically insignificant while status remains a strong and significant predictor. This shift is consistent with a mediation process in which institutional status absorbs the evaluative weight typically attributed to performance. It also indicates attentional displacement, where evaluators no longer engage with performance signals once a high-status cue satisfies their credibility threshold. Model 13 further demonstrates this logic through a significant negative interaction between status and performance. As institutional status increases, the predictive power of performance declines. Performance does not lose value per se; rather, evaluators stop attending to it once a dominant heuristic guides their judgment. Under bounded attention, a cognitively salient cue—such as institutional prestige—

substitutes for more diagnostic analysis. These findings reveal a pattern of cognitive suppression in which investors satisfice: they rely on the most accessible credible signal instead of processing multiple cues.

Figure 2 visualizes this dynamic. Panel A shows that in early-stage screening, institutional status exerts a steeper influence on investment likelihood than performance. In contrast, Panel B shows that during due diligence, performance regains predictive strength as evaluative conditions improve. These stage-contingent effects reinforce that signal processing is context-dependent. Evaluators satisfice under time pressure or uncertainty and shift to diagnostic signals only when cognitive resources, motivation, or information richness allow. This behavior aligns with bounded rationality (Simon, 1957; March & Simon, 1958), where attention is optimized through reliance on heuristics that are socially legitimate, cognitively efficient, and contextually credible.

Conditional Reactivation of Performance

Signal substitution is not absolute. Verifiable performance regains predictive influence when institutional status is weak or when evaluative conditions support deeper processing. Models 14 through 17 and Figure 1, Panel B, confirm this conditional reactivation. In screening-stage evaluations and among less experienced investors, status dominates decisional weight. Greater cognitive bandwidth and domain expertise enable evaluators to re-engage with diagnostic signals, which explains why performance regains significance during due diligence and among experienced investors. This conditional reactivation shows that substitution is not a fixed cognitive default but a malleable outcome shaped by evaluative capacity and context.

This finding also supports dual-process theories of judgment (Fiske & Taylor, 1991; Kahneman, 2003). When evaluators operate in System 1 mode—fast, intuitive, and heuristic—they prioritize status. Under System 2 conditions—slow, deliberate, and analytical—they engage

more deeply with performance-based evidence. The results highlight an important boundary condition: performance is not uniformly ineffective, but its impact is contingent on context and evaluator characteristics.

Subgroup analyses show that experienced investors are better able to interpret and utilize performance signals, likely due to developed schemas and deeper domain knowledge. Experienced private equity investors override default heuristics and engage in more diagnostic processing. In contrast, novices anchor on institutional prestige due to limited interpretive capacity and time pressure. The divergence reflects attentional gatekeeping—where signal uptake depends on cognitive accessibility and evaluative motivation.

Implications for Signaling Theory: From Additivity to Attentional Competition

These findings call for a reorientation in signaling theory—from a model of informational accumulation to one of attentional prioritization. Signals do not operate as stable, additive indicators. Instead, they compete for evaluative focus, and their influence varies depending on evaluator conditions. Institutional status acts not merely as a high-weighted input, but as a suppressive heuristic that shortcuts signal processing. Verifiable performance is effective only when evaluators are willing and able to engage with it. Signal salience, cognitive load, and evaluative sophistication jointly determine signal reception.

This study recasts a core assumption in signaling theory by showing that evaluators process signals hierarchically rather than cumulatively. Signals that are more cognitively accessible—such as institutional status—suppress the evaluative weight of more diagnostic but demanding cues like performance. The concept of *cognitive substitution* offers a crucial refinement: status does not function as a neutral complement to performance but actively displaces it when decision-makers satisfice under bounded attention. Models 10 through 13 provide consistent evidence of this

dynamic. Once institutional status enters the evaluative frame, performance loses predictive power. The diminished role of performance reflects signal suppression, not failure—prior studies reporting null or inconsistent performance effects may have overlooked this interference mechanism.

This substitution logic aligns signaling theory with dual-process models of cognition and behavioral theories of evaluation. Under ambiguity, time pressure, or limited experience, evaluators favor fast and frugal heuristics (Gigerenzer & Gaissmaier, 2011; Kahneman, 2003). Institutional prestige serves as a socially sanctioned shortcut, especially in environments where elite affiliations carry legitimacy. Dominant signals such as status alter how competing cues are processed, making signal effects interactive rather than independent. Contextual moderators clarify this dynamic. Evaluator experience, investment stage, and transaction size shape which signals are activated and how they are weighted. Those with deeper domain knowledge or more time for deliberation attend more seriously to performance-based evidence. Those under pressure or lacking expertise rely more on status heuristics. Signal effects thus depend not only on informational content but also on the cognitive and institutional context in which signals are received and interpreted.

This attentional prioritization is not driven by cognitive efficiency alone. Institutional norms frequently validate elite affiliations as markers of competence. In many professional ecosystems, prior ties to prestigious firms carry social approval, reinforcing status as a default heuristic embedded in evaluative routines (Zuckerman, 1999; Deephouse & Suchman, 2008). The dominance of status over performance reflects both cognitive accessibility and socially constructed legitimacy. The findings raise new theoretical questions: How do organizations design evaluative environments that encourage attention to diagnostic signals? When do social validation norms

reinforce substitution? And how can strategic actors manipulate signal reception under bounded attention? Signaling theory must now account for these dynamics of attentional competition, where signal dominance depends not only on availability or intent but on the evaluator's capacity, constraints, and social context.

Practical Implications for Investors and Founders

The substitution mechanism uncovered in this study reveals important implications for both capital allocators and founders seeking investment. For investors, the findings expose a vulnerability in evaluation processes: reliance on institutional status as a proxy for founder competence can lead to systematic misallocation of capital. Decision-makers who default to prestige-based heuristics may overlook founders with superior execution histories but non-elite affiliations. This bias can constrain innovation by reinforcing the status quo—funding entrepreneurs who signal legitimacy through elite ties rather than demonstrated capability. Awareness of this bias creates an opportunity for reform. Investment committees can revise screening protocols to explicitly incorporate performance-based metrics and structured assessments of execution potential, especially in early-stage evaluations where status cues dominate. Training less experienced investors to recognize and correct for heuristic substitution may also reduce misjudgment.

For founders, the study surfaces a harsh but actionable reality. Credentials from elite employers—such as McKinsey, Goldman Sachs, or top-tier tech firms—carry disproportionate influence, especially in early-stage pitches or when engaging time-constrained investors. Founders without such affiliations face an uphill battle, even when backed by strong track records. These entrepreneurs may benefit from targeted strategies: delaying outreach until performance

milestones are clear, emphasizing third-party endorsements, or selecting investor audiences with domain expertise who are more likely to engage with diagnostic cues.

For organizations, these findings carry broader implications for the design of evaluation systems. High-stakes decisions—such as funding, hiring, or promotion—filtered through status-based heuristics risk perpetuating inequities and suppressing merit-based advancement. Institutions that embed structured evaluation frameworks—giving systematic weight to verifiable performance, contextual experience, and relational credibility—can reduce their over-reliance on pedigree and improve long-term decision quality. This design imperative constitutes a tangible theory–practice bridge: cognitive substitution is not merely a descriptive finding but a diagnosable bias that organizations can address through evaluative engineering. The results suggest that capital is not misallocated due to lack of information but because evaluators anchor on socially sanctioned shortcuts. Solving this problem requires more than better data—it demands deliberate design of attention structures in how institutions assess quality under uncertainty.

Limitations and Future Research

This research has several limitations that invite further investigation. First, the survey-based design offers valuable insight into how investors weigh competing signals, but it limits causal inference. Although the models are robust and grounded in validated constructs, future studies using experimental methods, natural experiments, or archival decision audits could better establish causality. Second, the focus on private equity may limit generalizability. While the findings likely apply to other uncertain decision contexts, such as venture capital, hiring, or board appointments, differences in signal salience or evaluative norms warrant further comparative study. Third, the signal space in this study is necessarily constrained. Signals such as founder charisma, customer traction, or peer endorsements may interact with institutional status in

unobserved ways. Including such dimensions in future analyses could illuminate additional mechanisms of substitution or amplification. Fourth, this study examines decisions at a single point in time. Longitudinal data could reveal how substitution patterns evolve as evaluators gain experience, revisit opportunities, or operate within changing institutional norms.

Future research can extend this substitution logic into other organizational contexts. Decision environments such as hiring, alliance formation, peer review, and board selection also involve multiple signals and bounded attention. Understanding how evaluators allocate focus, suppress cues, and satisfice under complexity can move signaling theory beyond additive models. Substitution, suppression, and selective inattention are not anomalies—they reflect how real-world decisions are made.

CONCLUSION

This study challenges a foundational assumption in signaling theory: that signals accumulate additively to reduce uncertainty. The evidence instead reveals a process of attentional competition, where institutional status operates as a cognitive substitute that suppresses more diagnostic signals such as verifiable performance and social obligation. Investors anchor on status-based heuristics—especially under ambiguity, time pressure, or limited expertise—not because these cues are more informative, but because they are more cognitively accessible and socially sanctioned.

The theoretical contribution lies in reframing signal processing as a competitive, resource-constrained activity. Signals interact and suppress one another rather than functioning as independent inputs. Status does not complement performance—it displaces it. By introducing the concept of cognitive substitution and demonstrating its empirical effects, this paper advances a more cognitively grounded, context-sensitive model of how evaluators simplify complexity.

Signaling theory gains both precision and relevance when reoriented toward attentional prioritization, not informational accumulation.

These insights also carry important practical implications. A structural asymmetry underlies investor evaluations: founders with elite affiliations receive disproportionate attention, even when performance indicators suggest superior capability elsewhere. Recognizing how and when substitution occurs can inform the design of evaluative systems—helping investors, hiring managers, and institutional gatekeepers make fairer and more diagnostic decisions. Substitution, suppression, and selective inattention are not deviations from rationality—they reflect adaptive responses to the cognitive structure of high-stakes judgment under uncertainty. Signaling theory must evolve accordingly.

REFERENCES

- Ahlers, G.K.C., Cumming, D., G€unther, C., & Schweizer, D. (2015). Signaling in equity crowdfunding. *Entrepreneurship Theory and Practice*, 39(4), 955–980.
- Akerlof, G. A. (1970). The market for “lemons”: Quality uncertainty and the market mechanism. *The Quarterly Journal of Economics*, 84(3), 488–500.
- Amit, R., Glosten, L., & Muller, E. (1990). Entrepreneurial ability, venture investments, and risk sharing. *Management Science*, 36(10), 1232–1245.
- Baron, R. M., & Kenny, D. A. 1986. The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6): 1173–1182.
- Beck, T., Behr, P., & Guettler, A. (2013). Gender and banking: Are women better loan officers? *Review of Finance*, 17(4), 1279–1321.
- Bitektine, A., & Haack, P. (2015). The “macro” and the “micro” of legitimacy: Toward a multilevel theory of the legitimacy process. *Academy of Management Review*, 40(1), 9–75.
- Bottazzi, L., Da Rin, M., & Hellmann, T. (2016). The importance of trust for investment: Evidence from venture capital. *The Review of Financial Studies*, 29(9), 2283–2318.
- Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. *Sociological Methods & Research*, 21(2), 230–258.
- Busenitz, L. W., Fiet, J. O., & Moesel, D. D. (2005). Signaling in venture capitalist–new venture team funding decisions: Does it indicate long-term venture outcomes? *Entrepreneurship Theory and Practice*, 29(1), 1–12.
- Certo, S. T. (2003). Influencing initial public offering investors with prestige: Signaling with board structures. *Academy of Management Review*, 28(3), 432–446.
- Cohen, W. M., Nelson, R. R., & Walsh, J. P. (2008). Links and impacts: The influence of public research on industrial R&D. *Management Science*, 48(1), 1–23.

- Cohen, W. M., Nelson, R. R., & Walsh, J. P. (2010). Protecting their intellectual assets: Appropriability conditions and why US manufacturing firms patent (or not). *Research Policy*, 32(2), 175-199.
- Connelly, B. L., Certo, S. T., Ireland, R. D., & Reutzel, C. R. (2011). Signaling theory: A review and assessment. *Journal of Management*, 37(1), 39-67.
- Deephouse, D. L., & Suchman, M. C. (2008). Legitimacy in organizational institutionalism. In R. Greenwood, C. Oliver, K. Sahlin, & R. Suddaby (Eds.), *The SAGE Handbook of Organizational Institutionalism* (pp. 49–77). London: SAGE Publications.
- Ebbers, J. J., & Wijnberg, N. M. (2012). Nascent ventures competing for start-up capital: Matching reputations and investors. *Organization Science*, 23(1), 260-283.
- Fiske, S. T., & Neuberg, S. L. (1990). A continuum of impression formation, from category-based to individuating processes: Influences of information and motivation on attention and interpretation. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 23, pp. 1–74). Academic Press.
- Fiske, S. T., & Taylor, S. E. (1991). Social cognition (2nd ed.). *McGraw-Hill*.
- Franke, N., Gruber, M., Harhoff, D., & Henkel, J. (2006). What you are is what you like—Similarity biases in venture capitalists' evaluations of start-up teams. *Journal of Business Venturing*, 21(6), 802–826.
- Fried, V. H., & Hisrich, R. D. (1994). Toward a model of venture capital investment decision making. *Financial Management*, 23(3), 28-37.
- Gigerenzer, G., & Gaissmaier, W. (2011). *Heuristic decision making*. *Annual Review of Psychology*, 62, 451–482.
- Gompers, P. A., & Lerner, J. (2000). The really long-run performance of initial public offerings: The pre-Nasdaq evidence. *The Journal of Finance*, 56(4), 1355-1392.
- Gompers, P., Kovner, A., Lerner, J., & Scharfstein, D. (2009). Performance persistence in entrepreneurship. *Journal of Financial Economics*, 96(1), 18-32.
- Gompers, P. A., Gornall, W., Kaplan, S. N., & Strebulaev, I. A. (2020). How do venture capitalists make decisions? *Journal of Financial Economics*, 135(1), 169–190.
- Granovetter, M. (1985). Economic action and social structure: The problem of embeddedness. *American Journal of Sociology*, 91(3), 481-510.
- Gulati, R. (1995). Social structure and alliance formation patterns: A longitudinal analysis. *Administrative Science Quarterly*, 40(4), 619-652.
- Gulati, R., & Higgins, M. C. (2003). Which ties matter when? The contingent effects of interorganizational partnerships on IPO success. *Strategic Management Journal*, 24(2), 127-144.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis* (7th ed.). *Pearson Prentice Hall*.
- Hallen, B. L. (2007). The causes and consequences of the initial network positions of new organizations: From whom do entrepreneurs receive investments? *Administrative Science Quarterly*, 52(4), 685-718.
- Hart, O. (2001). Financial contracting. *Journal of Economic Literature*, 39(4), 1079-1100.
- Higgins, M. C., & Gulati, R. (2006). Stacking the deck: The effects of top management backgrounds on investor decisions. *Strategic Management Journal*, 27(1), 1-25.
- Hsu, D. H. (2004). What do entrepreneurs pay for venture capital affiliation? *The Journal of Finance*, 59(4), 1805–1844.

- Huang, L., Pearce, J. L., & Crossan, M. M. (2020). How creative potential and feasibility perceptions affect entrepreneurial ideation. *Entrepreneurship Theory and Practice*, 44(4), 739–767.
- Jöreskog, K. G., & Sörbom, D. (1996). LISREL 8: User's reference guide. *Scientific Software International*.
- Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica*, 47(2), 263–291.
- Kahneman, D. (2003). A perspective on judgment and choice: Mapping bounded rationality. *American Psychologist*, 58(9), 697–720.
- Kaplan, S. N., Sensoy, B. A., & Strömberg, P. (2002). How well do venture capital databases reflect actual investments? *The Journal of Finance*, 57(3), 1236–1260.
- Kaplan, S. N., & Strömberg, P. (2004). Characteristics, contracts, and actions: Evidence from venture capitalist analyses. *The Journal of Finance*, 59(5), 2177–2210.
- Kaplan, S. N., & Schoar, A. (2005). Private equity performance: Returns, persistence, and capital flows. *The Journal of Finance*, 60(4), 1791–1823.
- MacMillan, I. C., Siegel, R., & Subba Narasimha, P. N. (1985). Criteria used by venture capitalists to evaluate new venture proposals. *Journal of Business Venturing*, 1(1), 119–128.
- March, J. G., & Simon, H. A. (1958). Organizations. *Wiley*.
- Medsker, G. J., Williams, L. J., & Holahan, P. J. (1994). A review of current practices for evaluating causal models in organizational behavior. *Journal of Management*, 20(2), 439–464.
- Mouw, T. (2006). Estimating the causal effect of social capital. *Annual Review of Sociology*, 32(1), 79–102.
- Podolny, J. M. (1993). A status-based model of market competition. *American Journal of Sociology*, 98(4), 829–872.
- Pollock, T. G., Fund, B. R., & Baker, T. (2010). Dance with the one that brung you? Venture capital firms and the retention of founder-CEOs. *Strategic Entrepreneurship Journal*, 4(2), 111–130.
- Shane, S., & Venkataraman, S. (2000). *The promise of entrepreneurship as a field of research. Academy of Management Review*, 25(1), 217–226.
- Shane, S., & Cable, D. (2002). Network ties, reputation, and the financing of new ventures. *Management Science*, 48(3), 364–381.
- Shepherd, D. A., Ettenson, R., & Crouch, A. (2003). New venture strategy and profitability: A venture capitalist's assessment. *Journal of Business Venturing*, 15(5–6), 449–467.
- Simon, H. A. (1957). Administrative behavior: A study of decision-making processes in administrative organization (2nd ed.). *Macmillan*.
- Spence, M. (1973). Job market signaling. *The Quarterly Journal of Economics*, 87(3), 355–374.
- Spence, M. (2002). Signaling in retrospect and the informational structure of markets. *The American Economic Review*, 92(3), 434–459.
- Stuart, T. E., Hoang, H., & Hybels, R. C. (1999). Interorganizational endorsements and the performance of entrepreneurial ventures. *Administrative Science Quarterly*, 44(2), 315–349.
- Stuart, T. E., & Ding, W. W. (2006). When do scientists become entrepreneurs? The social structural antecedents of commercial activity in the academic life sciences. *American Journal of Sociology*, 112(1), 97–144.
- Uzzi, B. (1996). The sources and consequences of embeddedness for the economic performance of organizations: The network effect. *American Sociological Review*, 61(4), 674–698.

- Venkataraman, S. (2000). The distinctive domain of entrepreneurship research: An editor's perspective. In R. Katz & J. Brockhaus (Eds.), *Advances in entrepreneurship, firm emergence and growth* (Vol. 3, pp. 119–138). **Emerald Group Publishing**.
- Zott, C., & Huy, Q. N. (2007). How entrepreneurs use symbolic management to acquire resources. *Administrative Science Quarterly*, 52(1), 70–105.
- Zuckerman, E. W. (1999). The categorical imperative: Securities analysts and the illegitimacy discount. *American Journal of Sociology*, 104(5), 1398–1438.

Table 1 Descriptive Statistics for the Analysis of Prior Employment Ties: Survey Responses

Variables	N	Mean	SD	1	2	3	4	5	6	7	8	9	10	11
1 <i>Investment (0/1)</i>	433	0.16	0.08	1										
2 <i>Status (0/5)</i>	433	3.11	0.31	.12	1									
3 <i>Performance (0/5)</i>	433	3.53	0.82	.54	.39	1								
4 <i>Social obligation (0/5)</i>	433	4.21	0.81	.51	.15	.11	1							
5 <i>Gender (male=1)</i>	433	0.83	0.09	.13	.11	.12	.10	1						
6 <i>Experience (in years)</i>	433	10.17	4.38	-.18	-.09	.34	.61	-.22	1					
7 <i>Fund size (log assets)(in millions)</i>	433	6.54	0.39	.05	.39	.28	.13	.38	.63	1				
8 <i>Deal size (log assets)(in millions \$)</i>	433	5.17	2.70	.14	.28	.27	.33	.25	.42	.34	1			
9 <i>Region (0/1) (regional experience=1)</i>	433	0.52	0.08	.28	.34	.52	.21	.39	.37	.24	.31	1		
10 <i>Industry (0/1) (industrial experience=1)</i>	433	0.67	0.12	.31	.23	.42	.28	.33	.33	.14	.19	.39	1	
11 <i>Deal stage (screening=0, due diligence=1)</i>	433	0.29	0.17	.14	.18	.27	.14	.32	.41	.44	.11	.25	.28	1

Table 2 Main and Moderation Models

Dependent Variable	Investment	Investment	Investment	Investment	Investment	Investment	Investment	Investment
Variables	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Independent Variables								
<i>Status</i>	-	1.54*** (0.32)	1.24*** (0.39)	1.19*** (0.31)	-	1.01*** (0.39)	1.16*** (0.35)	1.11*** (0.34)
<i>Performance</i>	-	0.51 (0.62)	0.83 (0.91)	-	0.44 (0.55)	0.55 (0.64)	0.44 (0.37)	0.76** (0.35)
<i>Social obligation</i>	-	0.29 (0.44)	-	0.38 (0.37)	0.33 (0.52)	0.52 (0.63)	0.23 (0.44)	0.39 (0.33)
<i>Status*Experience</i>	-	-	-	-	-	- 0.54** (0.21)	-	-
<i>Status*Deal size</i>	-	-	-	-	-	-	- 0.69** (0.33)	-
<i>Status*Deal Stage</i>	-	-	-	-	-	-	-	- 0.88*** (0.32)
Control Variables								
<i>Gender</i>	1.29*** (0.43)	1.20*** (0.38)	1.11** (0.45)	0.94** (0.41)	0.88** (0.44)	0.93** (0.52)	0.71 (0.52)	0.77** (0.35)
<i>Experience</i>	1.05** (0.51)	0.99** (0.41)	0.92** (0.39)	0.8 (0.58)	0.79 (0.68)	0.88** (0.43)	0.66 (0.54)	1.01*** (0.43)
<i>Fund size</i>	-0.43 (0.32)	-0.74 (0.54)	-0.45 (0.44)	-0.99 (0.88)	-1.22 (0.92)	0.31* (0.19)	0.03 (0.31)	0.22** (0.11)
<i>Deal size</i>	-1.48* (0.82)	-1.01*** (0.37)	-1.07*** (0.34)	-0.92** (0.39)	-0.44* (0.24)	- 0.84** (0.41)	0.33 (0.68)	0.44 (0.41)
<i>Region</i>	0.39* (0.21)	0.66 (0.44)	0.43* (0.25)	0.45 (0.82)	0.62 (0.81)	0.29 (0.41)	0.63 (0.83)	0.33 (0.22)

<i>Industry</i>	0.48*	0.17	0.33	0.22	0.11	0.31	0.09	0.21
	(0.29)	(0.11)	(0.23)	(0.34)	(0.81)	(0.29)	(0.11)	(0.19)
<i>Deal Stage</i>	1.36***	1.28***	1.28***	1.33***	1.22***	1.11***	1.36*	0.77**
	(0.3)	(0.24)	(0.29)	(0.41)	(0.34)	(0.33)	(0.8)	(0.41)
<i>Observations</i>	433	433	433	433	433	433	433	433
<i>Pseudo R-squared</i>	0.08	0.18	0.17	0.16	0.15	0.19	0.19	0.22
<i>Log-Likelihood</i>	-5042.2	-4329.9	-4459.3	-4650.8	-4901.4	-4328.3	-4302.1	-4202.1
<i>AIC</i>	392	371	382	385	396	377	370	351
<i>Fund fixed effects</i>	Y	Y	Y	Y	Y	Y	Y	Y
<i>Deal fixed effects</i>	Y	Y	Y	Y	Y	Y	Y	Y
<i>Investor fixed effects</i>	Y	Y	Y	Y	Y	Y	Y	Y

Standard errors are in parentheses. * p < .10; ** p < .05 ; *** p < .01 (two tailed tests)

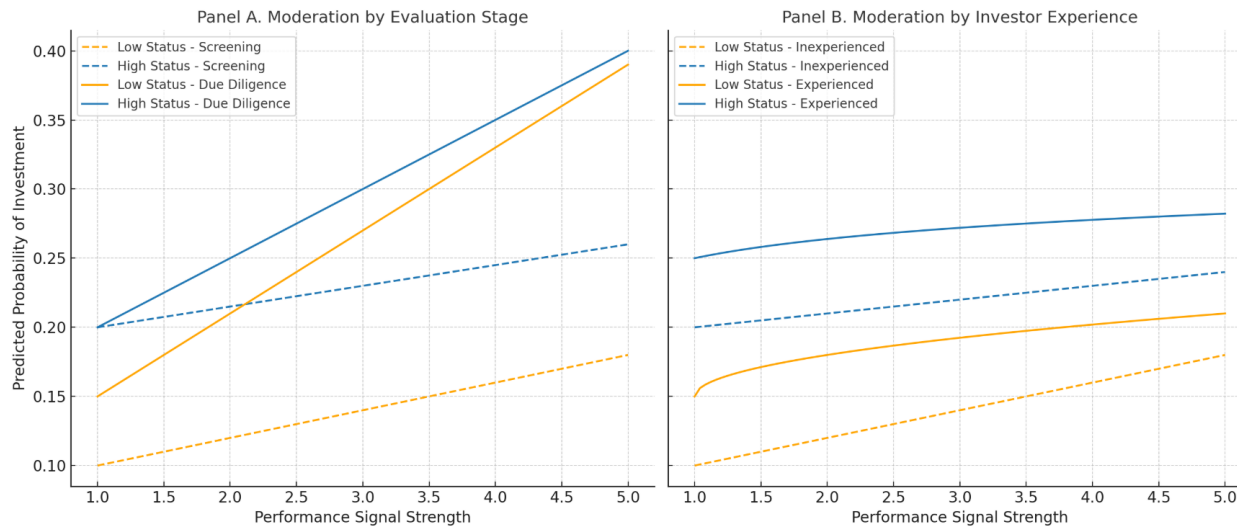
Table 3 Mediation and Subgroup Models

Dependent Variable	Investment	Status	Investment	Investment	Investment	Investment	Investment	Investment
Variables	Model 10	Model 11	Model 12	Model 13	Model 14	Model 15	Model 16	Model 17
Independent Variables								
<i>Status</i>	-	-	1.54*** (0.32)	1.23*** (0.39)	1.33*** (0.33)	0.63 (0.51)	1.21*** (0.44)	0.53* (0.35)
<i>Performance</i>	0.77** (0.35)	0.82** (0.4)	0.51 (0.62)	0.66 (0.49)	0.21 (0.37)	0.54** (0.25)	0.32 (0.33)	0.64** (0.31)
<i>Social obligation</i>	0.25 (0.19)	-	0.29 (0.44)	0.51 (0.62)	0.23 (0.21)	0.33 (0.27)	0.13 (0.29)	0.29 (0.23)
<i>Status*Experience</i>	-	-	-	-				
<i>Status*Deal size</i>	-	-	-	-	-	-	-	-
<i>Status*Deal Stage</i>	-	-	-	-	-	-	-	-
<i>Status*Performance</i>	-	-	-	- 0.85*** (0.26)	-	-	-	-
Control Variables								
<i>Gender</i>	0.69** (0.33)	0.77** (0.38)	1.20*** (0.38)	1.07*** (0.31)	0.88** (0.39)	0.77** (0.35)	0.82** (0.41)	0.65** (0.39)
<i>Experience</i>	0.89** (0.41)	0.84** (0.42)	0.99** (0.41)	1.09** (0.49)	0.77 (0.61)	0.88 (0.69)	-	-
<i>Fund size</i>	-0.37 (0.61)	-0.93 (0.84)	-0.74 (0.54)	-0.53 (0.49)	-0.78 (0.98)	-1.01 (0.82)	-0.55 (0.59)	-0.88 (0.71)
<i>Deal size</i>	-1.02 (0.82)	-0.89** (0.42)	-1.01*** (0.37)	-0.88** (0.40)	-0.88** (0.36)	-0.64** (0.31)	- 0.84** (0.41)	- 0.66** (0.33)
<i>Region</i>	0.22 (0.39)	0.66** (0.33)	0.69 (0.44)	0.53 (0.62)	0.55 (0.65)	0.58 (0.69)	0.65 (0.64)	0.65** (0.33)
<i>Industry</i>	0.85*** (0.33)	0.21* (0.11)	0.17 (0.11)	0.21 (0.19)	0.51 (0.44)	0.44 (0.61)	0.55 (0.64)	0.44 (0.78)
<i>Deal Stage</i>	0.83* (0.33)	1.08*** (0.11)	1.28*** (0.11)	0.99*** (0.19)	-	-	1.01*** (0.64)	0.95** (0.78)

	(0.47)	(0.30)	(0.24)	(0.29)			(0.35)	(0.42)
<i>Observations</i>	433	433	433	433	307	126	192	241
<i>Pseudo R-squared</i>	0.13	0.09	0.18	0.19	0.24	0.16	0.14	0.28
<i>Log-Likelihood</i>	-4559.2	-4678.9	-4329.9	-4377.9	-4061.8	-4441.4	-4429.2	-4237.4
<i>AIC</i>	388	441	371	367	356	378	389	380
<i>Fund fixed effects</i>	Y	Y	Y	Y	Y	Y	Y	Y
<i>Deal fixed effects</i>	Y	Y	Y	Y	Y	Y	Y	Y
<i>Investor fixed effects</i>	Y	Y	Y	Y	Y	Y	Y	Y

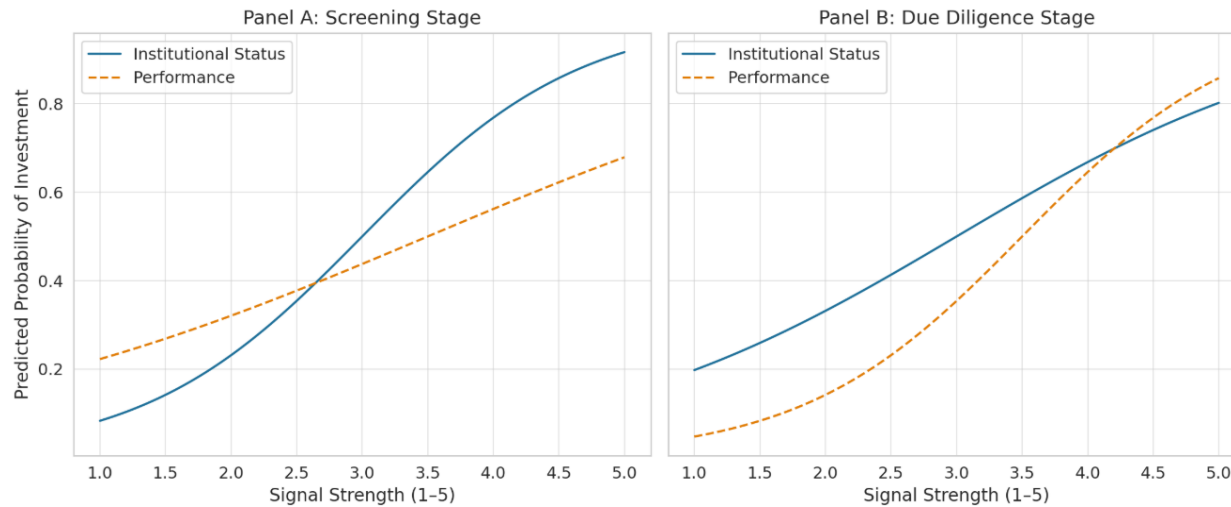
Standard errors are in parentheses. * $p < .10$; ** $p < .05$; *** $p < .01$ (two tailed tests)

Figure 1. Predicted Investment Probability by Performance and Institutional Status.



Panel A compares screening-stage and due diligence-stage evaluations. Status exerts a dominant influence during screening, while performance becomes more predictive during due diligence. Panel B compares less experienced and more experienced investors. Inexperienced evaluators rely more on institutional status and show limited responsiveness to performance. Experienced investors reverse this pattern, placing greater weight on verifiable performance. Both panels reflect predicted probabilities derived from Model 13 and visualize conditional substitution effects under different evaluative contexts.

Figure 2. Predicted Probability of Investment by Signal Strength, Separated by Deal Stage.



Panel A presents screening-stage evaluations, where institutional status exerts a stronger marginal effect than verifiable performance. Panel B shows due diligence-stage evaluations, where performance becomes the dominant predictor across most of the signal range. Both panels visualize predicted probabilities derived from Model 13 and illustrate conditional substitution effects: when status cues are salient, performance has limited impact; as information access improves, diagnostic signals like performance gain influence.