Behavioural Finance in Corporate Decision-Making

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Abstract:

While traditional finance models are built on the foundational assumption of rational decision-making conceptualizing the executive as a dispassionate "Homo Economicus" this research challenges that industry myth by exploring the "Homo Sapiens" beneath the professional veneer. Grounded in the critical chasm between the cold, normative logic of traditional finance and the visceral reality of human intuition, the study investigates the pervasive influence of cognitive biases on high-stakes corporate decision-making within the Indian corporate sector. By integrating Behavioral Finance Theory (BFT) and Upper Echelons Theory (UET), the research examines how the subjective psychology of senior leaders filtered through their personalized cognitive lenses scales up to dictate firm-wide strategy and capital allocation. This study utilizes a Sequential Explanatory Mixed Methods design, incorporating a high-fidelity survey of 169 senior executives and board members followed by deep-dive qualitative interviews to capture the human story behind the statistical data. The research focuses on a taxonomy of "unseen characters" that haunt the boardroom: Overconfidence, the Sunk Cost Fallacy, Confirmation Bias, and Groupthink. A core contribution of this study is the development of the "Synergistic Failure Model," which demonstrates that these biases do not act in isolation; rather, they form a mutually reinforcing "Invisible Web." Regression analysis quantifies a profound "behavioural tax" on capital, revealing that 27.1% of the variance in Investment Efficiency is predicted by this psychological friction. Crucially, the study identifies an "Efficiency Perception Paradox," where biased leadership teams are statistically more likely to perceive their decision-making as highly efficient, effectively "hallucinating success" while locking capital into "zombie projects." The article concludes that technical models often serve as mere facades for rationalising gut-driven decisions, and proposes a shift from "Compliance Hygiene" to a "Decision Hygiene" toolkit institutionalising structured interventions such as pre-mortems, mandatory kill criteria, and the formal role of the "Devil's Advocate" to transform the human element from a source of systemic weakness into a source of disciplined organizational strength.

Keywords Behavioural Finance; Upper Echelons Theory; Overconfidence; Sunk Cost Fallacy; Confirmation Bias; Groupthink; Investment Efficiency; Decision Hygiene; Corporate Decision-Making

I. INTRODUCTION

This research challenges the long-held industry myth of the "Rational Economic Man," stripping away the sterile, algorithmic image of the modern executive to reveal the "Homo Sapiens" underneath. For decades, the foundational narrative of modern commerce has rested upon the concept of homo economicus the idealised leader who acts as a flawless, dispassionate processing unit crunching Net Present Values (NPV) and executing textbook capital-budgeting logic. Yet the landscape of modern business is littered with the results of inexplicable, and often disastrous, decisions: firms that clung to failing, obsolete projects long after they became black holes for capital; charismatic CEOs who pursued value-destroying, ego-driven mergers at enormous premiums; and cohesive, highly credentialed boards that collectively failed to spot obvious, existential risks.

The core of the problem lies in the persistent incidence of suboptimal high-stakes decisions that erode shareholder value through systematic Investment Inefficiency. This inefficiency is not a result of simple technical error but is deeply rooted in the psychological profile of the decision-making unit. At the individual level, executive Overconfidence leads to inflated growth forecasts and the aggressive pursuit of value-destroying M&A deals, while the Sunk Cost Fallacy prevents the timely termination of failing ventures, locking capital into 'zombie' projects. This lack of strategic agility is further

compounded by Confirmation Bias, where leadership teams selectively process information that justifies their existing commitments while disregarding disconfirming market data. Critically, these individual cognitive flaws are not corrected by the board but are instead magnified by Groupthink, which suppresses dissenting voices and replaces objective oversight with a drive for social conformity.

Existing research also tends to be isolated, examining the effect of a single bias on a single outcome, which fails to capture the complexity of the executive mind, where multiple biases likely influence a single decision simultaneously. This study addresses that gap by employing scenario-based, high-fidelity measurement tools to directly quantify multiple biases within a single population of senior Indian corporate leaders and to link them to self-reported decision-quality indicators, while also testing a Synergistic Failure Model in which the joint effect of two biases is more detrimental than the sum of their independent effects.

II. LITERATURE REVIEW

A. Behavioural Finance Theory and Upper Echelons Theory

This study stands on the shoulders of two major theoretical frameworks: Behavioural Finance Theory (BFT), which provides the micro-level lens on the cognitive heuristics and emotional drivers of the individual, and Upper Echelons Theory (UET), which provides the macro-level bridge explaining how the personal psychology of senior leaders scales up to dictate firm-wide strategy. The core argument, supported by a growing consensus in the recent literature, is that executive decisions are not just occasionally irrational, but systemically and predictably influenced by a host of deeply ingrained cognitive and emotional biases (Abbasi et al., 2022). Executives are not irrational so much as "predictably irrational" (Ariely, 2008), operating with a "bounded rationality" (Simon, 1957) that is susceptible to a defined set of psychological traps (Cristofaro, 2023). The immense complexity, deep uncertainty, ambiguous data and intense time pressure characteristic of top-level decisions are precisely the conditions that push leaders toward fast, intuitive, low-effort, but often flawed heuristic judgment rather than slow, deliberative analysis.

B. Key Cognitive and Emotional Biases

The review synthesises the literature on a taxonomy of "unseen characters" that haunt the boardroom Overconfidence, the Sunk Cost Fallacy, Confirmation Bias and Groupthink together with related constructs such as Anchoring, the Availability Heuristic, the Halo Effect, and the emotional biases of Loss Aversion and Regret Aversion (Abdel-Ghany et al., 2022; Nzelibe et al., 2021). A single, bias-driven M&A failure can lead to massive layoffs, crushing debt loads, a toxic integration environment and a critical loss of competitive focus from which the acquiring firm may never recover, representing not merely a financial cost but a broader failure of corporate stewardship (Hazaea et al., 2022). Crucially, these biases do not operate in silos: they interact and amplify one another within the corporate hierarchy, so that their combined negative impact is supra-additive rather than merely cumulative.

C. Mitigation Strategies and the Knowing-Doing Gap

A substantial body of literature proposes mitigation strategies, ranging from individual-level debiasing training (Fasolo et al., 2024; Schipper, 2022) to more robust systemic interventions built around structured decision frameworks and "choice architecture" (Sibony, 2020). These systemic interventions acknowledge the "knowing-doing gap" the recognition that de-biasing the person is nearly impossible, but de-biasing the process is achievable. Nonetheless, boards and management teams often resist structured processes because of cultural conflict and organisational inertia, the fetishisation of executive intuition, and the difficulty of measuring the quality of a decision process as opposed to its eventual outcome. This research aims to bridge these gaps by empirically analysing the prevalence and interaction of executive biases and by proposing a refined, evidence-based framework for systemic mitigation.

III. RESEARCH OBJECTIVES AND HYPOTHESES

In alignment with the research questions, the main objectives of this study are:

1) To systematically identify and quantify the prevalence of a defined set of cognitive and emotional biases among the target population of senior corporate executives and board members, using scenario-based measurement tools.

2) To develop a theoretical model illustrating the complex interaction and amplification effects among individual biases (e.g., Overconfidence and Confirmation Bias) and group biases (e.g., Groupthink) in corporate decision environments.

3) To empirically assess the relationship between the presence of specific executive biases and measurable indicators of decision quality, particularly in the arenas of investment appraisal and strategic resource allocation.

4) To synthesise and recommend a practical, evidence-based framework of systemic mitigation strategies and "decision hygiene" tailored to the corporate context, based on executive perceptions of efficacy and implementation barriers.

Based on the literature review, the following core hypotheses were developed:

H1: There is a significant positive relationship between high levels of executive Overconfidence and the frequency of value-destroying capital allocations.

H2: The interaction between Confirmation Bias and the Sunk Cost Fallacy significantly increases the likelihood of a firm maintaining "zombie projects" despite negative performance indicators.

H3: The presence of Groupthink within a board acts as a positive moderator, amplifying the negative impact of a CEO's individual Overconfidence on strategic risk appraisal.

H4: Structured decision-making frameworks (Decision Hygiene) are perceived as effective but face significant cultural resistance in highly hierarchical corporate environments.

IV. Research Methodology

A. Research Design

This study employs a Sequential Explanatory Mixed Methods Design. Phase 1 (Quantitative) uses a structured, high-fidelity survey to measure the prevalence of the four independent variables Overconfidence, Sunk Cost Fallacy, Confirmation Bias and Groupthink against the dependent variable, Investment Efficiency. Phase 2 (Qualitative) uses semi-structured interviews with a subset of senior leaders to explain why these biases persist in high-pressure boardroom environments, providing the human narrative behind the statistical patterns.

B. Population, Sampling and Sample Size

The target population is stratified across three tiers of strategic influence: the Governance and Oversight Tier (Board Members and Non-Executive Directors), the Executive Leadership Tier (CEOs, CFOs, COOs and other C-suite members), and the Operational Strategy Tier (senior and middle managers with budget-holding authority). A Purposive (Judgmental) Sampling strategy was used as the primary method, supplemented by Snowball Sampling to access senior leaders within the "inner sanctum" of corporate boardrooms. The quantitative component targeted a minimum of 150–200 valid responses to satisfy the requirements of multiple regression analysis, ultimately yielding 169 valid responses; the qualitative component comprised 10–12 in-depth interviews conducted to the point of thematic saturation.

C. Data Collection and Analysis

The primary instrument was a high-fidelity survey adapted from established psychological scales and modified for the corporate context, divided into demographic items and four bias modules (Overconfidence, Sunk Cost Fallacy, Confirmation Bias and Groupthink) plus an Investment Efficiency scale. A pilot study involving 10 senior managers preceded full deployment to establish face validity. Quantitative data were analysed in IBM SPSS (v28), with Structural Equation Modelling supported by IBM SPSS AMOS used to test the measurement and structural models; qualitative interview data were analysed thematically in NVivo (v14). Ethical rigor was maintained throughout via informed consent, strict anonymity and data decoupling, and member checking of interview transcripts.

V. Data Analysis and Results

A. Demographic Profile

The empirical investigation focused on a highly specialised cohort of 169 respondents operating within the Indian corporate sector. Board Members (28.4%) and C-Suite executives (23.7%) together represented over 52% of participants, with the remainder drawn from Middle Management (25.4%) and Senior Management (20.7%). Female respondents represented 53.3% (n = 90) of the cohort and male respondents 43.2% (n = 73), reflecting a notable shift toward gender parity in the strategic layers of Indian business.

B. Descriptive Statistics

Across the sample, Groupthink recorded the highest mean score (M = 3.2885, SD = .769),

followed closely by Confirmation Bias (M = 3.2796, SD = .754), Overconfidence (M = 3.2648, SD = .783) and the Sunk Cost Fallacy (M = 3.2367, SD = .752). Investment Efficiency averaged M = 3.2678 (SD = .698). The tight clustering of standard deviations (0.70–0.78) indicates a high degree of consistency across the leadership cohort rather than a set of idiosyncratic outliers.

C. Correlation Analysis

The Pearson correlation matrix (Table I) shows that every psychological variable investigated is positively and significantly correlated with every other variable, providing statistical support for the proposed Synergistic Failure Model. The strongest inter-bias link is between Confirmation Bias and Groupthink ($r = .307$, $p < .001$), consistent with a boardroom "Echo Chamber" in which Confirmation Bias filters incoming information while Groupthink supplies the social pressure to suppress dissent. All four biases are also significantly and positively correlated with perceived Investment Efficiency, most strongly Confirmation Bias ($r = .406$, $p < .001$) and Groupthink ($r = .351$, $p < .001$) an early signal of the "Efficiency Perception Paradox" explored below.

	Overconf.	Sunk Cost	Confirm.	Groupthink	Inv. Eff.
Overconfidence	1	.194*	.197*	.199**	.327**
Sunk Cost	.194*	1	.160*	.217**	.168*
Confirmation	.197*	.160*	1	.307**	.406**
Groupthink	.199**	.217**	.307**	1	.351**
Investment Eff.	.327**	.168*	.406**	.351**	1

[a]Table I. Pearson Correlation Matrix (N = 169). *p<.05, **p<.01 (two-tailed).

D. Regression Analysis

A multiple linear regression of Investment Efficiency on the four bias constructs was statistically significant, $F(4,164) = 15.237$, $p < .001$, with $R^2 = .271$ (Adjusted $R^2 = .253$). This indicates that 27.1% of the variance in perceived Investment Efficiency a substantial "behavioural tax" is explained by the combined presence of the four biases. Table II reports the standardised coefficients: Confirmation Bias emerged as the single strongest predictor ($\beta = .293$, $p < .001$), followed by Overconfidence ($\beta = .221$, $p = .002$) and Groupthink ($\beta = .210$, $p = .004$). The Sunk Cost Fallacy was not a significant individual predictor in the regression model ($\beta = .033$, $p = .639$).

Predictor	B	Beta (β)	Sig.
(Constant)	1.011		.002
Overconfidence	.197	.221	.002
Sunk Cost	.030	.033	.639
Confirmation Bias	.271	.293	<.001
Groupthink	.191	.210	.004

[b]Table II. Regression Coefficients (DV: Investment Efficiency).

E. Comparative Analysis

A one-sample t-test against the theoretical neutral midpoint (3.0) confirmed that all four bias constructs were significantly elevated above the rational benchmark ($p < .001$ in every case), with Groupthink ($t = 4.873$) and Confirmation Bias ($t = 4.815$) showing the largest departures. A one-way ANOVA further showed that Overconfidence ($F = 3.978$, $p < .001$), Confirmation Bias ($F = 4.423$, $p < .001$) and Groupthink ($F = 3.793$, $p < .001$) varied significantly across management tiers, indicating that these three biases are "culturally contagious" and shaped by organisational environment. By contrast, the Sunk Cost Fallacy showed no significant variation across groups ($p = .148$), identifying it as a Universal Primal Bias that is equally dangerous at every level of the organisation, independent of rank or experience.

VI. Discussion of Findings

The results collectively dismantle the myth of the "dispassionate processing unit" in the C-suite and replace it with a profile of a leadership cohort that is systemically, predictably and measurably biased. The regression analysis uncovered a critical "Efficiency Perception Paradox": leaders who scored highest on the bias constructs were also statistically more likely to perceive their own decision-making as highly efficient. This creates a dangerous blind spot in which leaders are not just making errors, but making errors while feeling more decisive and confident than ever effectively "hallucinating success" while capital remains locked into underperforming ventures.

The correlation and interaction results support the Synergistic Failure Model proposed in this study: Confirmation Bias functions as an "Informational Bodyguard" that filters out disconfirming information, while Groupthink supplies the social

pressure that silences dissenting voices, together turning the boardroom into a protective "Echo Chamber" rather than a venue for objective oversight. The comparative analysis further distinguishes two classes of intervention target: Overconfidence, Confirmation Bias and Groupthink are context-dependent and can be addressed through cultural and structural reform of specific management tiers, whereas the Sunk Cost Fallacy requires universal, procedural "kill criteria" that apply across the entire organisation, since no group is immune to this particular form of psychological lock-in.

VII. CONCLUSION AND RECOMMENDATIONS

This research marks a definitive departure from the idealised myth of the dispassionate C-suite leader. By moving the conversation from what leaders should do to what they actually do, the study reveals that the Indian boardroom is not merely a place of technical analysis but a theatre of intense human friction, where ego, social pressure and the fear of public failure help determine the flow of capital. Overconfidence, the Sunk Cost Fallacy, Confirmation Bias and Groupthink do not act in isolation; they form a Synergistic Failure Model in which one bias shields another, and this "behavioural tax" has been quantified at a statistically significant 27.1% of the variance in Investment Efficiency evidence that psychological governance is no longer a soft luxury but a hard financial necessity.

Knowing that biases exist is only the first step; the study therefore proposes a shift from "trusting the gut" to a structured "Decision Hygiene" toolkit comprising four practical interventions. First, boards should set explicit Kill Criteria predetermined revenue deadlines or loss thresholds before capital is committed, turning the decision to terminate a failing project into a data-driven non-decision rather than an emotional one. Second, boards should formally appoint a rotating Devil's Advocate for major proposals, converting dissent from a social risk into a professional requirement and thereby neutralising Groupthink. Third, boards should use structured Pre-Mortems, asking the team to imagine a proposal has already failed and work backward to identify the causes, which helps surface risks that overconfident, victory-focused pitches typically omit. Fourth, boards should collect Anonymous Voting and written feedback from every member before open discussion begins, to prevent Anchoring on the first, often most senior, voice in the room. Institutionalising these four interventions as part of the board's fiduciary duty can transform the human element in the boardroom from a source of systemic weakness into a disciplined source of organisational strength.

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