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THE ROLE OF COGNITIVE FACTORS IN SHAPING INVESTMENT PREFERENCES OF CORPORATE STRUCTURES

Chulkovidze I.D.
specialist degree, Sokhumi State University (Tbilisi, Georgia)

Vartanyan O.G.
specialist degree, Sokhumi State University (Tbilisi, Georgia)

РОЛЬ КОГНИТИВНЫХ ФАКТОРОВ В ФОРМИРОВАНИИ ИНВЕСТИЦИОННЫХ ПРЕДПОЧТЕНИЙ КОРПОРАТИВНЫХ СТРУКТУР

Чулковидзе И.Д.
специалист, Государственный университет Сухуми (Тбилиси, Грузия)

Вартанян О.Г.
специалист, Государственный университет Сухуми (Тбилиси, Грузия)

Abstract

This article provides a comprehensive examination of the role of cognitive factors in shaping investment preferences within corporate structures. Drawing on insights from behavioral economics, organizational psychology, and corporate finance, the study challenges the assumption of full rationality in institutional decision-making. It systematically categorizes cognitive biases-such as overconfidence, anchoring, framing, status quo bias, and loss aversion-and analyzes how these distortions manifest in strategic investment planning under uncertainty. The paper further explores how organizational variables, including governance structure, decision-making processes, and corporate culture, mediate the impact of these biases. Through an integrative approach, the article proposes an expanded framework of corrective mechanisms, such as standardized decision protocols, scenario-based evaluations, pre-mortem analysis, rotating committees, and decision support systems, designed to reduce behavioral distortions and enhance financial resilience. The findings emphasize that cognitive biases are not anomalies but structurally embedded tendencies in corporate behavior. Addressing them requires coordinated efforts at both the individual and institutional levels. Incorporating cognitive considerations into investment strategy and governance design improves the consistency, objectivity, and adaptability of capital allocation, especially in environments characterized by volatility, complexity, and information asymmetry.

Keywords: cognitive bias, investment decision-making, corporate finance, behavioral economics, capital allocation, governance structure, financial strategy, corrective mechanisms, risk perception, institutional behavior.

Аннотация

Статья представляет собой комплексный анализ роли когнитивных факторов в формировании инвестиционных предпочтений в рамках корпоративных структур. Опираясь на концепции поведенческой экономики, организационной психологии и стратегического финансового управления, исследование ставит под сомнение предпосылку полной рациональности в институциональном процессе принятия решений. В работе проводится

систематизация распространённых когнитивных искажений - таких как избыточная уверенность, эффект якоря, фрейминг, предпочтение статус-кво и избегание потерь - с акцентом на их проявление в условиях неопределённости. Дополнительно рассматривается, как организационные переменные (структура управления, культура принятия решений, тип мотивации) усиливают или ослабляют поведенческие искажения в корпоративной инвестиционной политике. На основе обобщения теоретических моделей и эмпирических данных предложен расширенный набор корректирующих механизмов, включая стандартизированные протоколы, сценарное планирование, анализ потенциальных неудач, ротацию инвестиционных комитетов и системы цифровой поддержки. Делается вывод о том, что когнитивные искажения являются устойчивыми элементами институционального поведения, и их минимизация требует, как индивидуальной подготовки, так и системного подхода к финансовому управлению. Внедрение таких мер позволяет повысить устойчивость, адаптивность и объективность инвестиционного процесса, особенно в условиях высокой волатильности и информационной асимметрии.

Ключевые слова: когнитивное искажение, инвестиционные решения, корпоративные финансы, поведенческая экономика, распределение капитала, структура управления, финансовая стратегия, корректирующие механизмы, восприятие риска, институциональное поведение.

Introduction

Investment decision-making within corporate structures is traditionally framed through rational models, emphasizing expected returns, risk-adjusted metrics, and capital allocation efficiency. However, a growing body of interdisciplinary research in behavioral and cognitive economics reveals that corporate investment preferences are significantly influenced by non-rational factors. These include perception biases, heuristic simplifications, overconfidence, loss aversion, and framing effects-elements often embedded in the strategic behavior of corporate decision-makers and finance teams.

The complexity of modern investment environments, marked by market volatility, technological disruption, and regulatory uncertainty, intensifies the relevance of cognitive mechanisms in shaping corporate responses. Unlike individual investors, corporate entities operate within institutional constraints, governance layers, and collective decision processes. Nonetheless, the cognitive patterns of key actors-such as executives, CFOs, and board members-directly affect portfolio diversification, risk appetite, and investment horizons.

This study aims to investigate how cognitive factors influence investment preference formation within corporate structures. Through an analysis of empirical findings, theoretical models, and case-driven evidence, the paper seeks to identify the cognitive distortions and adaptive patterns that prevail in organizational finance. Special attention is given to how cognitive biases manifest under uncertainty, how organizational culture and leadership mediate these effects, and what implications arise for financial strategy and capital planning in a corporate context.

Main part

Cognitive influences in financial decision-making have traditionally been studied in the context of individual behavior; however, their relevance in collective and institutionalized settings such as corporate investment planning is gaining increased academic and practical attention. Unlike classical finance theory, which assumes investor rationality and full information efficiency, cognitive economics acknowledges that decision-makers operate under bounded rationality, incomplete information, and subjective heuristics. These limitations manifest not only at the individual level but also at the organizational level, where investment strategies are shaped by a combination of analytical models and human judgment [1].

Within corporate structures, investment preferences emerge through interactions between formal governance frameworks and the informal beliefs, attitudes, and expectations of key financial actors. Cognitive factors may influence how risk is perceived, how opportunities are framed, and how

competing investment options are prioritized. For instance, overconfidence can lead to underestimation of downside risk, while anchoring may result in misaligned valuation baselines. Moreover, groupthink and confirmation bias can affect investment committees and strategic boards, leading to suboptimal consensus or inertia in capital allocation decisions.

Empirical studies have shown that cognitive distortions are particularly salient in environments characterized by uncertainty and high information asymmetry. In such contexts, heuristics-mental shortcuts based on experience or perceived similarity-serve as a coping mechanism, though they often introduce systematic biases [2]. For example, status quo bias may deter firms from reallocating capital even when evidence suggests improved returns elsewhere, while framing effects can shift risk preferences depending on how outcomes are presented to stakeholders.

In practice, these cognitive mechanisms interact with organizational culture, leadership styles, and incentive systems. The risk profile of a corporation, its tolerance for ambiguity, and its historical investment performance all shape how cognitive factors are either amplified or mitigated. As such, understanding investment preferences in corporate finance requires not only quantitative financial modeling but also an examination of the psychological and institutional context in which decisions are made.

Cognitive biases in corporate investment decisions: a conceptual framework

To systematically analyze the impact of cognitive influences on corporate investment behavior, it is essential to identify and categorize the specific biases that shape how decision-makers process information, evaluate risk, and prioritize opportunities. Unlike retail investors, whose biases are often driven by emotion or lack of expertise, corporate decision-makers operate in more complex environments where institutional structures and strategic constraints coexist with individual cognition.

The most frequently observed cognitive distortions in corporate investment contexts include:

- **Overconfidence bias**: Overestimation of the firm's ability to predict market outcomes or control investment risks, often leading to excessive capital commitment or under-diversification. This is particularly evident in high-growth sectors or in firms with strong past performance.
- **Anchoring**: Reliance on initial estimates or historical benchmarks when evaluating new investment opportunities, even when updated information is available. Anchoring can affect project valuations, M&A pricing, and capital budgeting thresholds.
- **Framing effect**: Variation in investment choices depending on how options are presented-whether as gains or losses, costs or opportunities. For instance, the same investment may appear risk-averse when framed as potential loss avoidance, and aggressive when framed as potential return gain.
- **Status quo bias**: Preference for existing asset allocations and investment strategies, even when market conditions warrant change. This bias may stem from organizational inertia, career risk aversion, or decision fatigue.
- **Loss aversion**: Tendency to weigh potential losses more heavily than equivalent gains, resulting in underinvestment in higher-risk, higher-return assets or delayed exit from underperforming positions.

These biases are not isolated-they often interact and reinforce each other within the corporate environment. For example, an overconfident management team may frame investment alternatives in a way that minimizes perceived downside risk, while anchoring their expectations to prior market cycles or outdated strategic benchmarks [3].

To visualize these dynamics in a structured and applicable format, table 1 presents a synthesized framework mapping the most prevalent cognitive distortions to their behavioral characteristics and corresponding impacts on corporate investment decisions. This classification provides a clear lens through which the interplay between psychological factors and organizational financial outcomes can be interpreted. By identifying typical manifestations of each bias, the table helps bridge theoretical insights with practical implications, offering a deeper understanding of how investment preferences are shaped beyond the assumptions of classical economic rationality.

Table 1

Cognitive biases and their impact on corporate investment decisions

Cognitive bias	Description	Typical corporate impact
Overconfidence bias	Overestimation of predictive accuracy or control over outcomes, leading to aggressive investment strategies.	Excessive capital allocation, poor diversification, unrealistic ROI assumptions.
Anchoring	Dependence on initial reference points for valuations, regardless of updated market data.	Mispricing of assets, resistance to revise forecasts, flawed capital budgeting.
Framing effect	Decision-making influenced by the way options are presented rather than objective value.	Shifts in perceived risk-return profiles depending on communication style.
Status quo bias	Reluctance to alter existing strategies despite changing market conditions or evidence.	Inertia in portfolio reallocation, missed opportunities, underreaction to trends.
Loss aversion	Stronger sensitivity to losses than gains, leading to risk-averse investment behavior.	Avoidance of high-yield projects, reluctance to divest from failing assets.

As shown in table 1, cognitive biases manifest in multiple dimensions of corporate investment strategy, influencing both quantitative outcomes and qualitative decision-making frameworks. While each bias operates through a distinct psychological mechanism, their cumulative impact can introduce significant inefficiencies into capital allocation processes.

For instance, overconfidence bias may lead senior executives to authorize overly ambitious projects with inflated return expectations, often without adequate downside analysis [4]. Similarly, anchoring can cause investment teams to anchor projections to outdated benchmarks, thus underestimating emerging risks or failing to capitalize on favorable market trends. These biases tend to be particularly pronounced in firms that prioritize internal expertise over market feedback or operate in historically stable sectors where disruption has been minimal.

The framing effect further illustrates how linguistic and contextual nuances can distort investment perceptions. Depending on how a proposal is presented-emphasizing either potential loss prevention or upside potential-the same data set may lead to entirely different strategic conclusions. This highlights the importance of neutral, standardized communication protocols in investment committees and corporate boards.

Biases such as status quo preference and loss aversion reinforce structural inertia, limiting the adaptability of investment portfolios in dynamic environments [5]. These tendencies are often institutionalized through legacy systems, compensation models, or risk-averse corporate cultures, leading to underinvestment in innovation and overcommitment to declining assets.

Organizational conditions and their influence on cognitive investment biases

The manifestation and intensity of cognitive biases within corporate investment processes are not solely the result of individual perception or behavior-they are significantly shaped by the broader organizational environment in which decisions are made. Governance structures, decision-making protocols, incentive systems, and corporate culture all play a critical role in either amplifying or mitigating the effects of cognitive distortions [6].

For instance, centralized decision-making may increase efficiency but also concentrate cognitive blind spots, particularly if dissenting views are suppressed. Conversely, diverse investment committees tend to reduce the influence of anchoring and groupthink by introducing heterogeneity of thought and risk perspectives. Similarly, organizational cultures that reward innovation and adaptability are less likely to exhibit status quo bias and more likely to update investment strategies in response to external signals.

Incentive structures represent a particularly nuanced variable. Performance-based compensation, if not carefully designed, can push managers toward risk-seeking behavior or short-

term optimization, exacerbating overconfidence and undercutting prudence [7]. On the other hand, appropriately balanced reward schemes can encourage more deliberate, bias-aware decision-making.

Table 2 provides an overview of key organizational factors and their typical effects on the emergence or suppression of cognitive biases in investment decisions.

Table 2

Organizational factors and their effect on cognitive biases

Organizational factor	Effect on cognitive biases
Centralized decision-making	May amplify overconfidence and status quo bias due to concentration of power.
Diverse investment committees	Mitigates anchoring and confirmation bias by incorporating varied perspectives.
Performance-based incentives	Can either reduce loss aversion or encourage risk-seeking behavior, depending on design.
Corporate culture of innovation	Reduces status quo bias and supports dynamic portfolio adjustments.
Risk-averse governance structures	Strengthens loss aversion and slows investment response to changing conditions.

As the table demonstrates, organizational architecture is a key determinant in the behavioral dynamics of investment decision-making. Strategic design of governance and incentives can serve as a structural buffer against cognitive inefficiencies. Recognizing these relationships enables firms to proactively align their institutional frameworks with objective investment goals, thereby reducing the risk of suboptimal capital allocation driven by psychological biases [8].

Corrective mechanisms for reducing cognitive distortions in investment decisions

Recognizing the presence of cognitive biases is essential, but it is the implementation of structured corrective mechanisms that translates awareness into improved decision-making. In corporate investment settings, this often involves embedding institutional safeguards, redesigning information flows, and promoting analytical diversity.

Standardized decision protocols, for instance, reduce framing effects and anchoring by ensuring each investment proposal is reviewed through a consistent evaluative format [9]. Training programs enhance awareness of heuristic traps among financial decision-makers, while scenario planning forces a more balanced view of possible investment outcomes.

In addition, procedural innovations such as pre-mortem analysis and checklist-based evaluation introduce formal cognitive "speed bumps" that slow premature judgment and encourage critical reassessment. Digital tools such as decision support systems also mitigate bias by quantifying risk estimates through probabilistic models and data aggregation.

The expanded Table 3 outlines a broader set of tools, linking each mechanism to the bias it addresses and providing examples of implementation in practice.

Table 3

Expanded set of corrective mechanisms for cognitive bias mitigation

Corrective mechanism	Targeted bias or issue	Implementation example
Decision protocol standardization	Framing effect, overconfidence, anchoring	Uniform investment templates with structured scoring models
Bias awareness training	Overconfidence, confirmation bias	Workshops on cognitive bias awareness in strategic finance teams
Scenario-based planning	Status quo bias, loss aversion	Multi-scenario modeling of project risk and return projections
Rotating investment committees	Groupthink, anchoring, inertia	Annual or semi-annual reassignment of committee membership
Independent external review	General bias mitigation, external validation	Engagement of independent consultants for investment audits

Corrective mechanism	Targeted bias or issue	Implementation example
Pre-mortem analysis	Overconfidence, optimism bias, confirmation bias	Project teams assess reasons why an initiative might fail before launch
Checklist-based evaluation	Omission bias, inconsistency, heuristic shortcuts	Standardized checklists for due diligence and capital budgeting
Use of decision support systems	Anchoring, data neglect, over-simplification	Use of AI-enabled platforms for probabilistic risk estimation

The expanded framework provides a multidimensional toolkit for managing behavioral distortions in corporate finance. These mechanisms do not replace strategic judgment but rather enhance its objectivity and reliability. When properly institutionalized, they help firms transform cognitive limitations into opportunities for governance innovation and improved investment outcomes [10].

It is important to emphasize that no single corrective mechanism is universally effective across all organizational contexts. The choice and design of each intervention must align with the firm's size, industry, decision culture, and governance maturity. For instance, while rotating investment committees may be feasible in large publicly traded corporations with dedicated finance departments, small and medium-sized enterprises (SMEs) may benefit more from checklist-based evaluations and external advisory input due to resource constraints [11].

Similarly, decision support systems are most impactful when integrated with real-time operational data and embedded within enterprise resource planning (ERP) platforms. When poorly calibrated or isolated from strategic workflows, such systems risk reinforcing the very biases they are meant to mitigate by offering a false sense of precision.

The effectiveness of corrective mechanisms also depends on organizational commitment to transparency and accountability [12]. For example, the benefits of scenario planning or pre-mortem analysis may be nullified if executive teams disregard downside projections or if critical feedback is discouraged. A culture of openness to dissenting views and structured challenge is therefore essential for bias mitigation efforts to translate into tangible financial discipline.

In practice, many of these tools are most successful when implemented in combination, creating a layered system of cognitive safeguards. By designing decision architectures that combine analytical rigor, diverse input, and structured skepticism, firms can reduce the likelihood of systematic misjudgment and improve the alignment between investment outcomes and long-term corporate objectives [13].

Conclusion

Cognitive factors play a critical but often underestimated role in shaping corporate investment preferences. While traditional financial models emphasize rational choice, risk-return optimization, and market efficiency, this study highlights the profound influence of psychological distortions on strategic capital allocation. Biases such as overconfidence, anchoring, framing effects, and status quo preferences emerge not in isolation, but within the institutional and cultural frameworks of corporate governance. The analysis demonstrates that cognitive distortions can significantly affect the quality of investment decisions, particularly in volatile or complex environments where uncertainty magnifies reliance on heuristics. Through classification of these biases and an examination of organizational variables that mediate or exacerbate their effects, this article offers a structured understanding of how corporate decision-making deviates from normative rationality. Furthermore, the identification of corrective mechanisms-ranging from standardized protocols and bias awareness training to advanced decision support systems-illustrates the actionable pathways through which firms can mitigate behavioral inefficiencies. The expanded framework of tools and interventions emphasizes that effective bias reduction requires both individual awareness and systemic institutional design. Ultimately, the integration of cognitive insights into corporate finance is not a challenge to rationality, but a refinement of it. Recognizing and managing cognitive factors enables organizations to develop more resilient, adaptive, and strategically consistent investment processes. As corporate environments become increasingly data-driven and decision speed accelerates, the deliberate

management of cognitive behavior will become a central competency in sustainable financial leadership.

References

1. Haidari M.N. Impact of Decision-Making on Investment Performance: A Comprehensive Analysis // Journal of Asian Development Studies. 2023. Vol. 12. No. 4. P. 980-990.
2. Gabhane D., Sharma A., Mukherjee R. Behavioral finance: exploring the influence of cognitive biases on investment decisions // Boletin de Literatura Oral-The Literary Journal. 2023. Vol. 10. No. 1. P. 3133-3141.
3. Suriyanti S., Mandung F., Afiah N., Irmayani I. Exploring Financial Behavior: A Qualitative Investigation into Psychological Factors Influencing Risk Preferences and Investment Decisions // Golden Ratio of Finance Management. 2024. Vol. 4. No. 2. P. 100-112.
4. Sachdeva M., Lehal R. Contextual factors influencing investment decision making: a multi group analysis // PSU Research Review. 2024. Vol. 8. No. 3. P. 592-608.
5. Zhang M., Nazir M.S., Farooqi R., Ishfaq M. Moderating role of information asymmetry between cognitive biases and investment decisions: A Mediating effect of risk perception // Frontiers in psychology. 2022. Vol. 13. P. 828956.
6. Attah-Boakye R., Costanzo L.A., Guney Y., Rodgers W. The effects of top management team strategic cognition on corporate financial health and value: an interactive multi-dimensional approach // The European Journal of Finance. 2023. Vol. 29. No. 13. P. 1461-1492.
7. Umeaduma C.M.G. Behavioral biases influencing individual investment decisions within volatile financial markets and economic cycles // Int J Eng Technol Res Manag. 2024. Vol. 8. No. 03. P. 191.
8. Horani O.M., Khatibi A., Al-Soud A.R., Tham J., Al-Adwan A.S. Determining the factors influencing business analytics adoption at organizational level: a systematic literature review // Big Data and Cognitive Computing. 2023. Vol. 7. No. 3. P. 125.
9. Almansour B.Y., Elkrghli S., Almansour A.Y. Behavioral finance factors and investment decisions: A mediating role of risk perception // Cogent Economics & Finance. 2023. Vol. 11. No. 2. P. 2239032.
10. Boudreaux C.J., Bennett D.L., Lucas D.S., Nikolaev B.N. Taking mental models seriously: institutions, entrepreneurship, and the mediating role of socio-cognitive traits // Small Business Economics. 2023. Vol. 61. No. 2. P. 465-493.
11. Mishra A.K., Bansal R., Maurya P.K. Investing for a better tomorrow: Values-driven antecedents of investment in socially responsible equity funds by Indian retail investors // Journal of Cleaner Production. 2023. Vol. 420. P. 138441.
12. Zhou J., Jin S. Corporate environmental protection behavior and sustainable development: the moderating role of green investors and green executive cognition // International Journal of Environmental Research and Public Health. 2023. Vol. 20. No. 5. P. 4179.
13. Ahmad M. The role of cognitive heuristic-driven biases in investment management activities and market efficiency: a research synthesis // International Journal of Emerging Markets. 2022. Vol. 19. No. 2. P. 273-321.