

RESEARCH PROPOSAL

Critical Thinking as an Organizational Governance Capability: Deliberative Architecture, Corporate Information Robustness and Strategic Performance

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Research line: Corporate Information, Performance & Governance

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1. Contextualization

For several decades, corporate governance research has focused primarily on structural mechanisms of control: board independence, ownership dispersion, executive compensation schemes, audit and monitoring systems (Fama & Jensen, 1983; Jensen, 1993; Shleifer & Vishny, 1997). These mechanisms have been crucial for institutionalizing modern governance standards and mitigating classical agency problems. However, repeated episodes of strategic failure and value destruction in firms that, on paper, are “well-governed” suggest that structural compliance alone does not guarantee good judgment.

A growing number of corporate crises share a similar pattern: governance structures are in place, formal independence is assured, diversity metrics are met, but the board fails to question core assumptions, to challenge dominant narratives, or to anticipate obvious risks. In other words, what fails is not the architecture of formal control, but the quality of deliberation.

Today’s boards operate in an environment characterized by informational overload, regulatory complexity, heightened ESG scrutiny, technological disruption, geopolitical instability, and macroeconomic uncertainty. The problem is not lack of information; it is the inability to interpret information with discipline, to separate signal from noise, and to avoid predictable cognitive distortions.

Behavioral research has documented a long list of systematic biases in managerial judgment: overconfidence, confirmation bias, anchoring, availability heuristics, escalation of commitment, groupthink, and many others (Tversky & Kahneman, 1974; Janis, 1972; Kahneman, 2011; Lovallo & Sibony, 2010; Powell, Lovallo, & Fox, 2011). Corporate governance scholars have incorporated some of these ideas into the analysis of boards as decision-making groups (Forbes & Milliken, 1999; Westphal & Bednar, 2005), but the integration remains partial and often descriptive.

The central premise of this research proposal is that **critical thinking should be conceptualized as an organizational governance capability**, not merely as an individual cognitive skill. This capability is embedded in what I will call **deliberative architecture**: the set of formal and informal processes through which boards and top

management teams evaluate arguments, test hypotheses, tolerate structured dissent, and mitigate bias.

Rather than treating critical thinking as a soft skill that individuals may or may not possess, the project treats it as a property of the governance system: something that can be designed, observed, and eventually measured. This implies moving from a purely structural view of governance (“who sits on the board”) toward a process-oriented view (“how the board thinks”).

The proposal is anchored in the research line **Corporate Information, Performance & Governance** because it explicitly links the quality of deliberation with the quality of information produced by the firm and, in turn, with its performance and resilience. The argument is that **deliberative robustness** influences the way information is demanded, questioned, aggregated, and disclosed, and therefore shapes both the internal information environment and the external reporting profile of the organization.

2. Research Gap and Theoretical Positioning

Three interrelated gaps motivate this project.

First gap: the structural bias of governance research.

Agency theory and the large empirical literature on governance indices have been very effective in explaining variance in monitoring intensity and shareholder protection (Eisenhardt, 1989; Gompers, Ishii, & Metrick, 2003; Bebchuk, Cohen, & Ferrell, 2009). However, most of these models focus on structural variables (board size, independence, separation of CEO and chair, ownership dispersion, etc.) and implicitly assume that “better structures” lead to “better decisions”. The cognitive and deliberative steps between structure and decision are rarely formalized.

Second gap: the missing link between information quality and deliberation.

Studies on earnings quality, disclosure transparency, and the information environment of firms have identified important determinants of accounting quality and reporting behavior (Bushman & Smith, 2001; Healy & Wahlen, 1999; Dechow & Dichev, 2002; Kothari, Leone, & Wasley, 2005). Governance variables often appear as control variables in these models, but the *process* by which boards interpret information, question management, and decide what to disclose remains largely implicit. The idea that the *critical thinking capacity* of a board may be a determinant of information robustness is underexplored.

Third gap: limited integration of behavioral strategy with governance empirics.

Behavioral strategy has generated powerful insights into how biases and heuristics affect strategic decisions (Powell et al., 2011; Kahneman, 2011; Lovallo & Sibony, 2010; Posen, Leiblein, & Chen, 2018). Yet these insights are often explored through experiments, case studies, or conceptual essays, not through large-sample governance-performance models. There is a disconnect between what we know about human judgment and what we actually measure in empirical studies of boards.

This project seeks to bridge these gaps by:

- Positioning **Board-Level Critical Thinking Capacity (BCTC)** as a **micro-foundation of governance** (Adams, Hermalin, & Weisbach, 2010).
- Connecting BCTC to **corporate information quality**, specifically to earnings quality, disclosure transparency, and the textual properties of corporate reports.
- Examining how BCTC interacts with **environmental uncertainty** to influence performance volatility and resilience.

The theoretical backbone combines:

- **Agency theory** (Eisenhardt, 1989; Jensen, 1993).
- **Stewardship theory** (Davis, Schoorman, & Donaldson, 1997).
- **Resource dependence theory** (Pfeffer & Salancik, 1978).
- **Upper echelons theory** (Hambrick & Mason, 1984).
- **Behavioral governance and board cognition** (Forbes & Milliken, 1999; Westphal & Bednar, 2005).

The contribution is not to replace structural governance research, but to complement it with a process-level lens rooted in critical thinking.

3. Research Objectives

The overall aim of the project is to develop and empirically test a framework in which **deliberative architecture** and **board-level critical thinking capacity (BCTC)** play a central role in explaining information quality and performance outcomes.

More specifically, the project pursues four objectives:

1. **Conceptual objective**
To develop a theoretically grounded definition and multidimensional model of BCTC, integrating insights from governance, behavioral strategy, and decision sciences.
2. **Measurement objective**
To propose and validate proxies for BCTC using observable features of boards (composition, tenure dispersion, diversity metrics, meeting patterns) and textual analysis of corporate communications (complexity, argumentation, and tone).
3. **Information objective**
To test whether firms with higher BCTC exhibit higher quality of financial and non-financial information (better accrual quality, lower earnings management, more transparent disclosure practices).
4. **Performance objective**
To analyze whether BCTC moderates the impact of uncertainty shocks on firm performance and whether it predicts superior long-term value creation following major strategic decisions (e.g., M&A).

4. Conceptual Framework

The proposed framework assumes three levels:

1. **Structural governance**
Classical variables: board independence, size, CEO duality, committee structure, ownership concentration, etc.
2. **Deliberative architecture and BCTC**
 - Evaluative rigor: the extent to which evidence is systematically examined, alternative scenarios considered, and assumptions challenged.
 - Structured dissent: the presence of norms and mechanisms that make disagreement legitimate and productive.
 - Argumentative diversity: variety of perspectives, mental models, and expertise represented in the discussion (beyond demographic diversity).
 - Bias mitigation: explicit use of techniques to reduce known biases (e.g., devil's advocacy, premortems, independent scenario analysis).
 - Learning orientation: institutionalization of post-mortem reviews and feedback loops.
3. **Outcomes**
 - Information quality: accrual quality, earnings management metrics, narrative transparency, consistency between narrative and numbers.
 - Performance and resilience: profitability, risk-adjusted returns, volatility, and long-term abnormal returns after strategic events.

The key claim is that **BCTC acts as a mediating layer**: structural governance makes certain deliberative architectures more likely, and those architectures in turn condition how information is produced and how decisions are made.

5. Research Design and Projects

5.1 Project 1 – Conceptual Development and Operationalization of BCTC

Aim

To define and structure the construct of BCTC and to identify potential observable proxies.

Method

A systematic literature review will be conducted using PRISMA guidelines. Web of Science and Scopus will be searched for articles on:

- Board processes and cognition.
- Behavioral decision-making in governance contexts.
- Information quality and disclosure.
- Strategic decision processes under uncertainty.

Bibliometric mapping and thematic coding will be used to identify clusters and patterns. The outcome will be a conceptual article proposing:

- A clear definition of BCTC.
- A set of dimensions and sub-dimensions.
- A set of propositions linking BCTC to information quality and performance.

Expected output

A theoretical paper suitable for journals such as *Corporate Governance: An International Review* or *Journal of Business Ethics*.

5.2 Project 2 – Governance, Deliberation and Information Quality

Aim

To test whether firms with stronger deliberative architecture exhibit higher information quality and lower earnings management.

Data

Panel dataset (2010–2026) for listed European and U.S. firms, drawing on:

- Compustat / Refinitiv (financials and accounting data).
- Orbis / Refinitiv Eikon (governance and board characteristics).
- Annual reports and management commentary (for textual analysis).

Variables

- **Dependent variables**
 - Accrual quality (Dechow & Dichev, 2002).
 - Discretionary accruals (Kothari et al., 2005).
 - Indicators of non-financial disclosure intensity and narrative clarity.
- **Independent variables (governance and BCTC proxies)**
 - Board independence, tenure dispersion, expertise diversity.
 - Meeting frequency and committee structure.
 - Text-based proxies for deliberative intensity derived from MD&A and risk sections (e.g., argument complexity, presence of counter-arguments, degree of forward-looking analysis).
- **Control variables**
 - Firm size, leverage, industry, country, ownership structure, growth opportunities.

Methodology

The project will use panel econometric techniques:

- Fixed-effects and random-effects models.
- Dynamic panel models (Arellano & Bond, 1991) to control for persistence and potential endogeneity.
- Robustness checks with alternative specifications of information quality.

Expected output

An empirical paper linking governance processes and information quality, targeting journals such as *Journal of Accounting and Public Policy* or *Corporate Governance: An International Review*.

5.3 Project 3 – Deliberative Robustness, Uncertainty and Value Creation

Aim

To analyze whether BCTC moderates the impact of uncertainty and predicts long-term value creation following major strategic decisions.

Data

- Event database of major strategic announcements (M&A deals, restructurings, divestitures).
- Daily stock prices around event windows.
- Governance and BCTC proxies from Project 2.

Methodology

- Event study methodology (MacKinlay, 1997) to compute abnormal returns around announcement dates.
- Analysis of long-term buy-and-hold abnormal returns.
- Interaction models including measures of economic policy uncertainty (Baker, Bloom, & Davis, 2016) and BCTC proxies to test whether deliberative robustness reduces downside risk in turbulent periods.

Expected output

An empirical paper aimed at journals such as *Strategic Management Journal* or *Long Range Planning*, showing that deliberative quality has strategic and financial consequences.

6. Expected Contributions

Theoretical contributions

- To elevate critical thinking from an individual-level competence to an organizational governance capability.
- To propose and formalize the concept of **Deliberative Architecture** as a micro-foundation of governance.
- To integrate behavioral decision-making into empirical models connecting governance, information quality, and performance.

Empirical contributions

- To develop and test proxies for BCTC using observable governance characteristics and textual analytics.
- To provide large-sample evidence on the link between deliberation, information quality, and performance volatility.
- To explore the moderating role of BCTC under conditions of high uncertainty.

Practical contributions

- To offer boards and institutional investors a conceptual and empirical basis for evaluating governance not only by structure but also by **how the board thinks**.
- To inform the design of board evaluation, training and composition policies that enhance critical thinking capacity.
- To contribute to the refinement of ESG governance indicators by incorporating elements of deliberative quality.

7. Work Plan (November 2024 – January 2027)

- **Q4 2024**
 - Systematic literature review (Project 1).
 - Initial conceptual framework and working paper outline.
- **Q1–Q2 2025**
 - Refinement of BCTC dimensions and proxies.
 - Completion and submission of the conceptual paper (Project 1).
- **Q3–Q4 2025**
 - Data collection and cleaning for Project 2 (governance and financial databases).
 - First descriptive analyses and variable construction.
- **Q1–Q2 2026**
 - Econometric modeling and robustness checks (Project 2).
 - Conference submissions and revisions.
- **Q3–Q4 2026**
 - Event study design and implementation (Project 3).
 - Integration of uncertainty measures and BCTC interactions.
- **January 2027**
 - Submission of the Project 3 paper.
 - Synthesis of the overall findings in a final report connecting governance, deliberative architecture, and corporate information robustness.

8. References

Adams, R. B., Hermalin, B. E., & Weisbach, M. S. (2010). The role of boards of directors in corporate governance: A conceptual framework and survey. *Journal of Economic Literature*, 48(1), 58–107.

Amason, A. C. (1996). Distinguishing the effects of functional and dysfunctional conflict on strategic decision making: Resolving a paradox for top management teams. *Academy of Management Journal*, 39(1), 123–148.

Arellano, M., & Bond, S. (1991). Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. *Review of Economic Studies*, 58(2), 277–297.

Baker, S. R., Bloom, N., & Davis, S. J. (2016). Measuring economic policy uncertainty. *Quarterly Journal of Economics*, 131(4), 1593–1636.

Bebchuk, L. A., Cohen, A., & Ferrell, A. (2009). What matters in corporate governance? *Review of Financial Studies*, 22(2), 783–827.

- Bushman, R. M., & Smith, A. J. (2001). Financial accounting information and corporate governance. *Journal of Accounting and Economics*, 32(1–3), 237–333.
- Davis, J. H., Schoorman, F. D., & Donaldson, L. (1997). Toward a stewardship theory of management. *Academy of Management Review*, 22(1), 20–47.
- Dechow, P. M., & Dichev, I. D. (2002). The quality of accruals and earnings: The role of accrual estimation errors. *Accounting Review*, 77(Supplement), 35–59.
- Eisenhardt, K. M. (1989). Agency theory: An assessment and review. *Academy of Management Review*, 14(1), 57–74.
- Eisenhardt, K. M., & Zbaracki, M. J. (1992). Strategic decision making. *Strategic Management Journal*, 13(Special Issue), 17–37.
- Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *Journal of Law and Economics*, 26(2), 301–325.
- Forbes, D. P., & Milliken, F. J. (1999). Cognition and corporate governance: Understanding boards of directors as strategic decision-making groups. *Academy of Management Review*, 24(3), 489–505.
- Gompers, P., Ishii, J., & Metrick, A. (2003). Corporate governance and equity prices. *Quarterly Journal of Economics*, 118(1), 107–155.
- Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review*, 9(2), 193–206.
- Healy, P. M., & Wahlen, J. M. (1999). A review of the earnings management literature and its implications for standard setting. *Accounting Horizons*, 13(4), 365–383.
- Janis, I. L. (1972). *Victims of groupthink*. Houghton Mifflin.
- Jensen, M. C. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *Journal of Finance*, 48(3), 831–880.
- Kahneman, D. (2011). *Thinking, fast and slow*. Farrar, Straus and Giroux.
- Kothari, S. P., Leone, A. J., & Wasley, C. E. (2005). Performance matched discretionary accrual measures. *Journal of Accounting and Economics*, 39(1), 163–197.
- Lovullo, D., & Sibony, O. (2010). The case for behavioral strategy. *McKinsey Quarterly*, 2, 30–43.
- MacKinlay, A. C. (1997). Event studies in economics and finance. *Journal of Economic Literature*, 35(1), 13–39.
- Pfeffer, J., & Salancik, G. R. (1978). *The external control of organizations: A resource dependence perspective*. Harper & Row.

Posen, H. E., Leiblein, M. J., & Chen, J. S. (2018). Toward a behavioral theory of real options. *Strategic Management Journal*, 39(4), 1112–1138.

Powell, T. C., Lovallo, D., & Fox, C. R. (2011). Behavioral strategy. *Strategic Management Journal*, 32(13), 1369–1386.

Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *Journal of Finance*, 52(2), 737–783.

Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. *Science*, 185(4157), 1124–1131.

Westphal, J. D., & Bednar, M. K. (2005). Pluralistic ignorance in corporate boards and firms' strategic persistence in response to low firm performance. *Administrative Science Quarterly*, 50(2), 262–298.