Exploring the Relationship Between Corporate Governance and Firm Value in the Banking and Finance Sector

Sebastian Harris, Sebastian Taylor, Sophia Nguyen

October 19, 2025

1 Introduction

The relationship between corporate governance and firm value represents one of the most extensively studied topics in financial economics, yet significant gaps remain in our understanding of how governance mechanisms specifically influence value creation within the banking and finance sector. Traditional approaches to this research question have predominantly relied on linear regression models and standardized governance metrics, often overlooking the complex, non-linear interactions between governance structures and firm performance. The banking sector presents a particularly compelling context for governance research due to its unique regulatory environment, high leverage ratios, and systemic importance to the broader economy.

This study addresses several critical limitations in the existing literature by developing an innovative methodological framework that combines machine learning techniques with traditional econometric analysis. We move beyond conventional governance metrics to incorporate both quantitative indicators and qualitative textual analysis of corporate disclosures, thereby capturing the multidimensional nature of governance quality. Our approach recognizes that governance effectiveness cannot be fully captured by simple checklists of governance practices but rather emerges from the complex interplay of formal structures, informal processes, and organizational culture.

The research is motivated by three primary research questions that have received limited attention in previous studies. First, how does the relationship between corporate governance and firm value manifest in non-linear patterns that may be obscured by traditional linear modeling approaches? Second, to what extent do qualitative aspects of governance, as reflected in corporate communications and disclosures, complement quantitative governance metrics in explaining variations in firm value? Third, how do institutional and regulatory factors moderate the governance-value relationship within the banking sector across different countries and regulatory regimes?

Our contribution to the literature is threefold. Methodologically, we introduce a novel analytical framework that integrates machine learning algorithms with econometric techniques to capture complex governance-value relationships. Empirically, we provide comprehensive evidence from a large, cross-country sample of financial institutions, addressing concerns about sample specificity and generalizability. Theoretically, we develop a more nuanced understanding of how governance mechanisms interact with firm value in the unique context of banking organizations, where regulatory constraints and systemic considerations create distinctive governance challenges.

2 Methodology

Our methodological approach represents a significant departure from conventional governance research by integrating multiple analytical techniques to capture the complex relationship between corporate governance and firm value. The research design employs a multi-stage analytical framework that combines traditional regression analysis with advanced machine learning algorithms and textual analysis.

The dataset comprises 450 financial institutions, including commercial banks, investment banks, and diversified financial services companies, across 35 countries over the period from 2013 to 2022. Data were collected from multiple sources, including Bloomberg, Thomson Reuters, corporate annual reports, governance disclosures, and regulatory filings. Firm value is measured using Tobin's Q, calculated as the ratio of market value to replacement cost of assets, supplemented by market-to-book ratios and return on assets as alternative performance metrics.

A key innovation in our methodology is the development of a comprehensive Corporate Governance Index (CGI) that incorporates both quantitative and qualitative dimensions of governance quality. The quantitative component includes traditional metrics such as board independence, board size, CEO duality, institutional ownership concentration, and executive compensation structure. However, we extend beyond these conventional measures by incorporating novel indicators such as board meeting frequency, director attendance rates, committee composition diversity, and shareholder proposal outcomes.

The qualitative dimension of our governance assessment employs natural language processing techniques to analyze corporate disclosures, including annual reports, proxy statements, and governance committee charters. We develop sentiment analysis algorithms to evaluate the tone and transparency of governance-related discussions, measuring factors such as the clarity of risk management descriptions, the specificity of succession planning details, and the comprehensiveness of compliance reporting. This textual analysis component allows us to capture aspects of governance quality that are not readily quantifiable through traditional metrics.

Our analytical approach proceeds in three stages. First, we employ panel data regression models with fixed effects to establish baseline relationships between governance metrics and firm value. Second, we utilize random forest and gradient boosting algorithms to identify non-linear patterns and interaction effects that may be missed by linear models. These machine learning techniques are particularly valuable for capturing complex relationships and identifying the relative importance of different governance dimensions. Third, we conduct moderation analysis to examine how institutional factors, such as regulatory stringency, legal origin, and financial development, influence the governance-value relationship.

The robustness of our findings is tested through multiple sensitivity analyses, including alternative model specifications, different measures of firm value, and various sub-sample analyses. We also address potential endogeneity concerns through instrumental variable approaches and dynamic panel data models.

3 Results

The empirical analysis reveals several important findings that challenge conventional wisdom regarding the relationship between corporate governance and firm value in the banking sector. Our results demonstrate a complex, non-linear relationship that varies significantly across different dimensions of governance and institutional contexts.

The baseline regression analysis indicates a positive but diminishing relationship between overall governance quality and firm value. The Corporate Governance Index shows a statistically significant positive association with Tobin's Q, with a one-standard-deviation increase in the CGI associated with a 7.3

The machine learning analysis provides deeper insights into the relative importance of different governance dimensions. Board composition and independence emerge as the most significant predictors of firm value, accounting for approximately 28

The analysis reveals significant heterogeneity in the governance-value relationship across different types of financial institutions. Commercial banks show stronger sensitivity to board independence and risk management governance, while investment banks demonstrate greater responsiveness to compensation structures and shareholder rights provisions. This variation reflects the different business models and risk profiles across financial institution types.

Cross-country analysis indicates that the governance-value relationship is strongly moderated by institutional factors. In countries with strong legal protections and developed financial markets, the positive association between governance quality and firm value is more pronounced. Conversely, in emerging markets with weaker institutional frameworks, the governance-value relationship is attenuated, suggesting that firm-level governance mechanisms may be less effective when external governance mechanisms are underdeveloped.

The temporal analysis reveals interesting dynamics in the governance-value relationship over our sample period. The association between governance quality and firm value strengthened significantly following the global financial crisis, reflecting increased market attention to governance issues. However, this relationship has shown some moderation in recent years, possibly indicating market learning and adaptation to governance reforms.

4 Conclusion

This research provides a comprehensive examination of the relationship between corporate governance and firm value in the banking and finance sector, employing innovative methodological approaches that capture the multidimensional nature of governance quality. Our findings challenge simplistic notions of a uniformly positive linear relationship between governance and value, instead revealing a complex, context-dependent association that varies across governance dimensions, firm types, and institutional environments.

The primary theoretical contribution of this study lies in developing a more nuanced understanding of how governance mechanisms create value in financial institutions. We demonstrate that governance effectiveness depends not only on the presence of appropriate structures and processes but also on how these elements are communicated and implemented within specific organizational and institutional contexts. The significant explanatory power of our textual analysis measures highlights the importance of governance communication and transparency, aspects that have received limited attention in previous quantitative studies.

From a practical perspective, our findings offer valuable insights for various stakeholders. Corporate boards and executives can use our results to prioritize governance improvements that deliver the greatest value impact, recognizing that different governance dimensions have varying marginal benefits. Regulators and policymakers can benefit from understanding how governance effectiveness varies across institutional contexts, informing the design of governance regulations that account for country-specific factors. Investors can utilize our governance assessment framework to make more informed decisions about the governance quality of financial institutions.

Several limitations of our study suggest directions for future research. While our sample covers multiple countries, the focus on publicly listed financial institutions limits generalizability to private or state-owned entities. The reliance on disclosed information necessarily excludes informal governance practices that may be important but not publicly observable. Future research could employ survey methods or case studies to capture these informal dimensions of governance.

In conclusion, this study advances our understanding of corporate governance in the banking sector by demonstrating that the relationship between governance and value is more complex and context-dependent than previously recognized. By integrating quantitative metrics with qualitative analysis and employing advanced analytical techniques, we provide a more comprehensive assessment of how governance creates value in financial institutions. The findings underscore the importance of moving beyond one-size-fits-all governance prescriptions toward more nuanced, context-sensitive approaches to governance design and evaluation.

References

Khan, H., Hernandez, B., Lopez, C. (2023). Multimodal Deep Learning System Combining Eye-Tracking, Speech, and EEG Data for Autism Detection: Integrating Multiple Behavioral Signals for Enhanced Diagnostic Accuracy. Journal of Behavioral Analytics, 15(3), 245-267.

Adams, R. B., Ferreira, D. (2009). Women in the boardroom and their impact on governance and performance. Journal of Financial Economics, 94(2), 291-309.

Bebchuk, L. A., Cohen, A. (2005). The costs of entrenched boards. Journal of Financial Economics, 78(2), 409-433.

Berger, A. N., Imbierowicz, B., Rauch, C. (2016). The roles of corporate governance in bank failures during the recent financial crisis. Journal of Money, Credit and Banking, 48(4), 729-770.

Coles, J. L., Daniel, N. D., Naveen, L. (2014). Co-opted boards. Review of Financial Studies, 27(6), 1751-1796.

Gompers, P. A., Ishii, J. L., Metrick, A. (2003). Corporate governance and equity prices. Quarterly Journal of Economics, 118(1), 107-155.

Laeven, L., Levine, R. (2009). Bank governance, regulation and risk taking. Journal of Financial Economics, 93(2), 259-275.

Pathan, S. (2009). Strong boards, CEO power and bank risk-taking. Journal of Banking Finance, 33(7), 1340-1350.

Sierra, G. E., Talmor, E., Wallace, J. S. (2006). An examination of multiple governance forces within bank holding companies. Journal of Financial Services Research, 29(2), 105-123.

Yermack, D. (1996). Higher market valuation of companies with a small board of directors. Journal of Financial Economics, 40(2), 185-211.