

Who Stays and Who Gains? Director Retention and Long-Term Value Creation After M&A

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Abstract:

Retaining a target firm director by the acquirer following an M&A transaction is often justified on the grounds of preserving firm-specific knowledge and maintaining operational continuity. Critics, however, suggest that it can introduce conflict in the boardroom if the retained directors are more adherent to legacy ties and less aligned with the acquirer's post-merger objectives. To test which theory dominates, this study constructs a sample of 757 mergers involving U.S.-based public companies announced between 2014 and 2024. Director retention is defined as cases where at least one target director joins the acquirer's board following the transaction. Post-acquisition performance is measured using Long-Term Investor Value Appropriation (LIVA), which is the discounted sum of excess shareholder returns. LIVA is evaluated over one-, two-, three-, and five-year horizons to provide a complete trajectory of post-merger value creation over the coming years. Empirically, the results indicate a consistently negative, but statistically weak, association between director retention and post-merger value creation across most time horizons. Importantly, the direction of the coefficients stays stable across specifications, including for the controls for director demographics, suggesting that these director characteristics do not meaningfully moderate the relationship. The results are consistent with agency theory, as board entrenchment and misaligned incentives can often dominate the positive effects of continuity, resulting in destroyed shareholder value for the acquiring company following the acquisition.

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1. Introduction:

Mergers and acquisitions rarely fail on spreadsheets. Financial models routinely justify synergies, cost savings, and strategic fit. Yet, despite M&A activity consistently exceeding \$2 trillion annually in the US alone, realized outcomes show that the strategic promise of these transactions is not corroborated by empirical research. Empirical evidence consistently shows that 70% to 90% of mergers fail to deliver the expected synergies (Christensen et al., 2011). A central reason is that integration is not purely financial; it is organizational. One of the most consequential decisions in this process is whether the acquiring firm replaces the target's governance leadership entirely or retains one or more members of its board.

The decision is often framed as a trade-off between continuity and control. Proponents of director retention, citing stewardship theory, argue that target directors possess idiosyncratic knowledge and social capital that are vital for maintaining stability and trust during the volatile integration phase (Davis et al., 1997). However, this study argues that such retention often functions as a double-edged sword. Using agency theory, the paper suggests that retained directors may become agents of inertia, protecting older practices and resisting the very changes required to realize merger synergies (Fama & Jensen, 1983). Furthermore, in the modern corporate landscape, these appointments are increasingly criticized as tokenistic or symbolic gestures intended to signal stability to the market or satisfy social mandates, rather than to contribute to governance quality (Westphal & Zajac, 1995).

The main objective of this study is to investigate how this retention affects Long-Term Investor Value Appropriation (LIVA). Traditional studies focus on short-term announcement returns, which merely reflect market expectations at the time of acquisition. However, this study utilizes LIVA to measure the realized abnormal cash flows over multiple horizons of up to five years. This distinction is crucial; it allows observing whether the perceived stability of retaining board members translates into tangible cash flow generation or if it only serves to mask integration failures. Moreover, this paper also investigates whether the demographics of the retained director affect the relationship between director retention and acquiror LIVA. By analyzing a comprehensive sample of 757 mergers between public U.S. firms from 2014 to 2024, this paper provides an updated look at governance dynamics in an era where transparency and board diversity are increasingly becoming relevant.

To address the inherent selection bias that arises from the fact that directors are not retained at random, the study employs a two-stage treatment effects framework that models the likelihood of director retention as a function of observable deal and firm characteristics. This approach allows the analysis to account for systematic differences between transactions with and without retained directors, including factors such as firm size, industry-relatedness, and governance structure. The analysis supports previous research that director retention is significantly and negatively associated with long-term value creation. These findings suggest that the costs of governance friction, loyalty bias, and the potential for boardroom silos outweigh the benefits of firm-specific knowledge, leading to value destruction for the acquiring firm's shareholders.

The study is structured to provide a comprehensive examination of this phenomenon. Section 2 provides a deep dive into the competing theoretical frameworks of stewardship and agency theory, alongside the mediating factors that can affect these relationships. Section 3 formalizes the hypothesis, and Section 4 describes the data collection process, spanning SDC Platinum, CRSP, Compustat, and BoardEx. Section 5 details the empirical strategy and Section 6 presents the empirical findings. Section 7 uses these results to provide practical insights for companies engaging in mergers and acquisitions. Finally, Section 7 concludes with a summary of the research.

2. Literature Review:

In mergers and acquisitions, the retention of target firm directors has attracted increasing attention due to its potential implications for post-merger integration and value creation. Some scholars emphasize the value-creating potential of retained directors due to their firm-specific knowledge and social capital that can be difficult to replicate otherwise. In contrast, other studies highlight the risks of board entrenchment and governance conflicts, as retained directors may remain loyal to legacy practices that are inconsistent with the acquiring firm's strategic objectives. As a result, the existing literature presents competing arguments regarding the effects of director retention, which can broadly be classified into three broad categories: positive, negative, and context-dependent perspectives.

2.1. Director Retention – Competing Theoretical Arguments

2.1.1. Positive

Retaining target firm directors can preserve firm-specific knowledge, which can help in maintaining continuity in corporate operations and help in post-merger integration. This perspective is grounded in stewardship theory, which states that managers, when given autonomy and responsibility, will act in the best interests of the organization and its stakeholders rather than prioritizing their own self-serving goals (Donaldson & Davis, 1991). Retained directors may provide strategic and operational continuity through their understanding of the firm's business operations, customer base, and organizational culture, which otherwise would not be possible.

Similarly, Hambrick and Cannella (1993) utilized a sample of 96 large M&A transactions to conclude that executive departure after merger was associated with negative effects on profitability, with the effect increasing as the seniority of the executive leaving the organization increased. One of the primary reasons behind this effect is the loss of firm-specific skills, knowledge, and experience that the top management team (TMT) possesses, which are often difficult to imitate or replace (Castanias and Helfat 1991; Kotter, 1982). Hambrick and Cannella (1993) also explored the alternative scenario according to which providing the top management team status to one or more past directors in the new entity leads to better post-acquisition performance.

Meyer & Pfeffer (1983) try to provide another explanation for the negative effect of executive departure after deal closure. According to the paper, executive departure leads to negative symbolic effects on the organization, resulting in a loss of employee morale all the way down to the organization's workforce. This idea is further explored in Schleifer and Summers (1987), who explain that the loss of senior executives can result in a breach of trust among stakeholders. This perceived violation of an implicit contract leads to increased uncertainty, performance declines, and loss of loyalty among employees.

Furthermore, employees may also experience threat-rigidity, which is the tendency of organizations to become more rigid and less flexible in their behavior and display resistance to change when facing threats or disruptions such as the loss of key executives (Staw et al., 1981). As stability and adaptability are both crucial in times of dynamic changes such as M&A,

the loss of either one can result in poor integration and value realization post-acquisition (Virany et al., 1992). The primary inference that is drawn from these arguments is that the retention of key executives can provide an element of stability that is critical post-merger.

Several other pieces of literature propose that post-acquisition retention preserves routines and social capital, which are difficult to replicate without insider knowledge (Krug et al., 2014). From a practical viewpoint, retaining directors can ensure smooth continuity in day-to-day business activities, ensuring that the workforce does not directly feel the effects of large-scale strategic initiatives such as M&A. Furthermore, it can be expected that the presence of familiar leadership can enhance employee morale and maintain stakeholder confidence during restructuring. Thus, from the stewardship angle, director retention is not only a continuity measure but a key resource facilitating post-merger integration and value creation.

2.1.2. Negative

Despite its potential benefits, director retention is also criticized for reinforcing legacy inefficiencies, resisting reform, and introducing governance conflicts in the boardroom. This view is supported by a contrasting theory named agency theory, which claims that directors are self-interested actors whose objectives may diverge from those of the organization and its stakeholders (Jensen & Meckling, 1976). According to this perspective, director retention post-acquisition can entrench them in the organization, which can preserve outdated business practices and dilute the acquiring firm's control over the integration process.

Directors who have long ties with the acquired firm may be emotionally or politically invested in its older culture, business practices, or personnel. This can lead to resistance toward necessary restructuring, reallocation of resources, or initiatives for integration. Zaman et al. (2021) show that directors with long tenure tend to exhibit loyalty bias and defend underperforming practices simply because they were part of their strategic track record. This may lead to such directors prioritizing the defense of their prior decisions or networks over the economic logic of the new combined entity. Additionally, retention may misalign incentives between legacy directors and new shareholders. If the performance of the retained individuals is not linked to post-merger outcomes, they may lack motivation to aggressively pursue synergies.

Power dynamics can also have a significant effect on the outcomes of the merger. Hayward & Hambrick (1997) highlight that acquirers frequently overestimate their control over their

organization, and tend to be overly aggressive and less cautious in their approach towards M&As. In this case, for example, acquirors can overestimate their control over post-merger integration, while underestimating the power held by the retained directors. These retained directors can form internal coalitions that subtly resist initiatives, especially when they still hold influence over middle managers, key decision-making units, and other stakeholders in the organization. In such cases, retention creates a dual-power center within the boardroom, reducing timely decisiveness and increasing the risk of delays and negligence towards important strategic actions.

Moreover, not all retention is based on merit. Symbolic appointments, such as hiring a director to appease stakeholders, regulators, or employees and to fulfil DEI quotas, are increasingly prevalent in the corporate environment. Such practice can extend to director retention with the intent to signal stability at the time of large structural changes. However, as these appointments are purely for symbolic purposes, they can create a false sense of stability while introducing real coordination problems. If such retention lacks a strong economic logic, it can weaken accountability mechanisms and undermine the acquirer's governance framework. The situation is especially problematic when retention occurs without a proper reassessment of the director's fit in the post-merger organization structure.

In summary, while retention can be considered an effective continuity strategy in some cases, in others, it introduces risks of entrenchment, inertia, and misalignment, all of which can slow down decision-making when it is critical, leading to loss of value and longer, inadequate integration for the newly formed entity.

2.1.3. Context-Based Result

A growing body of literature is developing a mixed perspective, suggesting that the effects of retention are not always positive or negative but are dependent on the specific context. This perspective is rooted in contingency theory, which states that the effectiveness of the board's governance policies is determined by the specific situation, and the retained directors can either enable or obstruct value creation depending on the surrounding dynamics. In this case, the key question is to determine and classify the context-specific variables that influence the effectiveness of director retention, which can be individual or collective board characteristics.

Shimizu et al. (2004) explore cross-border M&A deals to highlight that cultural differences between acquirer and target firms significantly affect post-acquisition outcomes. In cross-border

deals, retaining directors who are familiar with the local business environment and culture can help with integration and bridge the gap between the two entities that have undergone a merger. In fact, the paper claims that laying off the directors erodes the very resource the acquirer paid for, directly diminishing the value-creating potential of the merger. However, when cultural misalignment is too deep, this type of retention may have limited benefits unless it is supported by formal integration mechanisms.

Similarly, Kim et al. (2024) explore the business case study of Chegg, Inc. to conclude that CEO retention post-acquisition can be an important contributing factor towards the integration success of the merger. The paper identifies that the success of PMI (post-merger integration) is correlated with the number of years that the CEO has been retained in their position in the new entity. This effect is pronounced in innovative industries such as technology, where the executive's technical knowledge and understanding of business is crucial and non-transferable. However, the benefit is context dependent, as CEO retention only leads to positive outcomes when strategic alignment and mutual vision with the acquiring firm are present. In other cases, misalignment of objectives between older teams and the acquirers overshadows the potential benefits of retained business knowledge and technical understanding.

Further complicating the picture, Nakajima et al. (2024) suggest that governance choices such as director retention can be symbolic rather than substantive. This view is prevalent in tokenism literature, with earlier mentions in Kanter (1987), which explores the hiring of employees for purely symbolic purposes to enhance the image of the organization in front of its stakeholders. It is also evident that such a strategy is myopic as it seeks to enhance the reputation of the organization in the short term while ignoring the long-term feasibility of the retained directors in the merged entity. Directors may be retained to convey stability or appease stakeholders, without meaningful authority or integration roles.

2.2 Moderating and Mediating Factors

As mentioned earlier, the effect of directors' retention on post-merger performance is not completely uniform, as it is often shaped by several moderating and mediating factors that influence the direction or strength of the effect.

2.2.1. Individual Level

Personal characteristics of the retained directors can significantly influence the integration dynamics. Tenure is one of the key factors, as directors with longer tenure may bring valuable institutional knowledge but can also be more traditional and conservative in their business approach, leading to resistance to large-scale changes (Vafeas, 2003). Equity ownership by retained directors acts as a similar factor that determines the business outlook of the director and their ability to control the organization. On one hand, it aligns their interests with shareholders and supports long-term value creation, but on the other hand, large equity ownership can lead to director entrenchment that could strip the executives of their control over the integration and long-term strategic efforts.

Directors' personal demographic characteristics, such as age, gender, and ethnicity, add further nuance to this relationship. In general, younger and less experienced directors could be more open to innovation and change, while older and more experienced individuals may adhere to legacy processes that have stood the test of time (Kunze & Bruch, 2010). Furthermore, gender and ethnic background can also influence group dynamics and decision-making approaches. Boards that incorporate DEI tend to bring diverse viewpoints and better governance quality. Although the actual impact may depend on whether their presence has a substance or remains a symbolic effort (Richard et al., 2007).

Some other factors may include the status of the retained director within the board. For example, retaining a lead independent director versus a regular board member could have a significantly different effect on decision-making. Similarly, if the retained director previously held a CEO or executive role at the target firm, they may possess internal operational knowledge, informal authority, and strong alliances, all of which, if employed inappropriately, may complicate integration. Lastly, the area of expertise of directors, such as financial, legal, or operational backgrounds, may also moderate how they shape post-merger decisions. These individual-level traits collectively determine whether retention enhances strategic continuity or perpetuates friction during post-acquisition restructuring.

2.2.2. Board Level

Several characteristics of the overall board can define how director retention impacts post-merger performance. A higher proportion of independent directors usually strengthens governance

by providing objective oversight of business operations. Such a board of directors can counterbalance any potential entrenchment by retained personnel. CEO duality, the combining of the CEO and board chair roles, affects power distribution within the board and can either amplify or diminish the influence of retained directors. For example, in the case of any power struggle between an alliance of retained directors, CEO duality might be effective for the acquiring company to maintain control over the merged entity.

Additionally, board composition regarding homogeneity or diversity also plays a crucial role. Homogeneous boards tend to share similar backgrounds and perspectives, which can lead to groupthink and resistance to change, while diverse boards bring a broad range of insights and problem-solving approaches that may facilitate smoother integration. However, diversity can sometimes complicate decision-making processes due to conflicting viewpoints of the directors, which can lead to failure in quick and effective decision-making. In short, in nearly all of the cases, the success of M&A integration depends on several contextual factors.

2.3 Board Diversity and Tokenism Literature

Financial literature generally suggests that board diversity is associated with cognitive variety, broader stakeholder perspectives, and a reduction in excessive risk-taking. However, the tokenism hypothesis raises an important counterpoint. Kanter (1987) suggests that diversity appointments, especially when limited in number, may be symbolic gestures intended to signal compliance with social expectations rather than genuine inclusivity. This phenomenon is getting increasingly more relevant as the importance of DEI rises in modern corporate culture. In such cases, underrepresented directors may hold little real influence on board decision-making or outcomes, with negligible contribution to post-merger governance.

In the M&A context, the symbolic versus substantive dynamic becomes very relevant. High-profile acquisitions are often subject to scrutiny from investors, regulators, and the public and are often considered risky. Firms may retain minority or female directors from the target firm to signal stability, cultural sensitivity, or progressive governance, even if such appointments are not tied to decision-making power and even if the organizational culture does not demonstrate these values. These individuals often lack influence over governance, and their presence serves only cosmetic purposes, with limited effect on post-merger performance. By examining whether retained

directors from underrepresented groups impact post-merger performance, research can test the boundary between symbolic and substantive governance.

2.4. Literature Gap

2.4.1. Integration of Diversity, Culture, and Retention

While the existing literature studies director retention in the context of M&A, it keeps it as a control variable along with other board-related variables instead of primary variables. Also, studies have rarely integrated diversity and cultural fit into a single governance framework. Most research isolates factors such as tenure, ownership, or homogeneity without examining how these factors interact with diversity and cultural fit to influence post-acquisition performance. This leaves a gap in understanding whether director retention is universally detrimental or conditional upon board composition and cultural alignment.

2.4.2. Symbolic versus Substantive Retention

Another important gap lies in the limited examination of the symbolic versus substantive nature of retention. Although tokenism has been addressed in governance literature, it remains underexplored in the M&A context. Prior research does not clearly distinguish between retention that provides genuine strategic influence and retention that serves as a symbolic gesture to stakeholders. This distinction is crucial for understanding the real impact of retained directors on value creation.

2.4.3. Long-Term and Multi-Dimensional Outcomes

Most empirical studies focus on short-term post-acquisition effects, such as announcement returns of profitability in the first few years. There is little research exploring the long-term implications of director retention on firm performance and integration success. Furthermore, studies often prioritize either market-based or accounting-based outcomes without integrating both perspectives to assess sustainable value creation.

2.4.4. Cultural Fit as a Governance Variable

Although cultural distance is recognized as an important factor in cross-border mergers, it has rarely been linked explicitly to director retention. This omission leaves open questions about whether retained directors act as cultural bridges, facilitators of integration, or obstacles to change

when organizational cultures differ significantly. The lack of empirical work combining cultural fit with governance variables limits the field's ability to explain when retention is effective.

2.4.5. Updating Evidence for Modern Governance

Much of the foundational work on director retention relies on older datasets, often predating shifts in governance priorities such as ESG considerations, board diversity mandates, and evolving regulatory standards. There is a need for updated empirical research that uses recent data, modern metrics for culture and diversity, and considers both symbolic and substantive governance dimensions.

3. Hypothesis Development:

The literature review highlights the effects of director retention after M&A, with competing arguments grounded in stewardship and agency theory. While stewardship theory views retained directors as a source of firm-specific knowledge that aids post-merger continuity, agency theory posits that such retention can introduce governance frictions due to loyalty bias toward the legacy organization, misaligned incentives, or resistance to strategic changes initiated by the acquiring firm. These dynamics may reduce the acquirer's ability to fully capture long-term value from the transaction.

Empirical evidence also suggests that retaining target directors does not always translate into value creation and may instead reflect political or symbolic considerations rather than genuine governance benefits. When retained directors preserve legacy practices or maintain influence over strategic decisions, the acquiring firm may face constraints in implementing new strategies that maximize shareholder value. Consistent with recent studies such as Campbell (2022), this study expects director retention to weaken post-acquisition investor outcomes.

H1₀: Director retention has no significant association with Long-Term Investor Value Appropriation (LIVA) following mergers and acquisitions.

H1₁: Director retention is negatively associated with Long-Term Investor Value Appropriation (LIVA) following mergers and acquisitions.

In this empirical specification, this hypothesis corresponds to testing whether the coefficient on director retention in the LIVA regression is statistically different from zero and negative.

Beyond the baseline effect of director retention, this study further examines whether the demographic characteristics of the retained director condition the relationship between director retention and post-acquisition performance. For this purpose, the study considers the effects of retaining an occupational minority director after the merger, specifically a female or non-white director. Prior governance research has recognized the role of board diversity in shaping firm outcomes, but there has been less focus on examining the effect of a retained director, not the total board, in determining post-merger success. If the value destruction associated with director retention is driven primarily by structural misalignment rather than individual director characteristics, the demographic profile of the retained director should not significantly alter LIVA outcomes.

H2₀: *The gender or racial minority status of a retained director has no significant association with Long-Term Investor Value Appropriation (LIVA) following mergers and acquisitions.*

H2₁: *Retaining a female or non-white director is associated with systematically different Long-Term Investor Value Appropriation (LIVA) outcomes compared to retaining a non-minority director following mergers and acquisitions.*

In this empirical specification, H2 corresponds to testing whether the interaction terms between director retention and minority status, Retained*Female and Retained*Nonwhite, are statistically different from zero in the second-stage LIVA regressions.

4. Data

The sample comprises mergers between publicly traded U.S. firms occurring between January 2014 and December 2024. The analysis is restricted to U.S.-based public acquiring and target companies to ensure the availability and reliability of transaction details, board-level information, post-acquisition performance measures, and financial and market control variables.

Data on mergers and acquisitions is obtained from the Thomson Reuters SDC Platinum database, which contains details about announcement date, effective merger date, and deal value, among other transaction measures. For simplicity, only those transactions have been considered where the acquiring company bought a 100% stake in the target company.

This dataset is supplemented with firm-level financial data from Compustat and stock market data from CRSP. Compustat provides data from financial statements on an annual basis, while CRSP provides monthly stock market data. Lastly, BoardEx provides board and director information, including the independent variable, i.e., director-retention.

Information on director retention is constructed using director-level data from BoardEx, supplemented by manual examination of relevant SEC filings to verify post-acquisition board appointments. Data on long-term integration value added (LIVA) are obtained from WRDS.

After accounting for missing data across the relevant variables, the final sample consists of 757 mergers completed in the 11-year period between 2014 and 2024, of which 310 involve the retention of one or more target firm directors. Out of the 310 mergers, 96 deals involved at least one retained director who was a female, and 46 involved at least one non-white director.

4.1 Variables

4.1.1 Dependent Variable

Post-acquisition performance in this study is measured using Long-Term Investor Value Appropriation (LIVA) provided by WRDS. LIVA captures the cumulative value created or destroyed following a major strategic event by aggregating discounted abnormal cash flows over an extended period. Unlike short-horizon market reactions or accounting-based measures, LIVA reflects realized value creation by incorporating both cash inflows and outflows over extended post-acquisition periods, discounted using firm-specific rates. As such, LIVA is conceptually grounded in net present value (NPV), a standard financial economics approach for evaluating investment value (Barber & Lyon, 1997).

LIVA is particularly well-suited to the study of mergers because it directly measures the extent to which acquisitions translate into sustained shareholder value rather than transitory market responses. Conceptually, LIVA measures realized shareholder value rather than expected value. While announcement-period cumulative abnormal returns reflect market expectations at the time of the deal, LIVA evaluates whether those expectations materialize in subsequent operating performance (King et al., 2003). Similarly, accounting-based measures such as ROA or ROIC are subject to integration accounting adjustments, goodwill distortions, and managerial discretion.

LIVA mitigates these limitations by focusing on abnormal cash flow generation relative to an expected performance benchmark (Gubler et al., 2018).

In this study, we use LIVA over multiple post-acquisition horizons, one, two, three, and five years following the completion date, to assess both short- and long-term integration outcomes. Longer horizons incorporate the cumulative value created in earlier periods as well as additional cash flows realized in subsequent years, allowing us to examine both short- and long-term performance implications. Given the absence of consensus regarding the appropriate window for assessing post-acquisition performance, analyzing multiple LIVA horizons provides a more comprehensive view of how mergers affect shareholder value over time.

4.1.2 Independent Variable

Director retention is constructed using director-level data from BoardEx, supplemented by manual verification through SEC proxy statements (DEF 14A) and Form 8-K filings to confirm post-acquisition board appointments. It is coded as a binary indicator equal to one if at least one pre-acquisition target director becomes a member of the acquiring firm's board following the transaction, and zero otherwise.

This approach is grounded in conceptual emphasis on the existence of governance continuity rather than its intensity, as the retention of even a single target director can facilitate the transfer of firm-specific knowledge, preserve informational links to the target, and influence post-acquisition decision making. Accordingly, this measure captures whether the acquiring firm establishes a direct governance connection to the target at the board level following the transaction.

Using a binary variable here also solves skewness concerns that can arise from including the number of retained directors, considering that most transactions involve zero or one retained director. This approach is also consistent with previous studies examining governance continuity in merger settings.

4.1.3 Control Variables

The control variables used in the paper can be divided into four major groups: deal characteristics, acquirer characteristics, target characteristics, and time and clustering.

Deal characteristics

The study controls for related acquisition, relative acquisition size, and acquisition value. Related acquisition is defined as an indicator equal to one when the acquirer and the target operate within the same SIC industry, and zero otherwise. Acquisition value is the total transaction value in U.S. dollars. Lastly, relative acquisition size is measured as the total transaction value divided by the acquirer's total assets.

Acquirer characteristics

For acquirers, the financial variables included in the analysis are the acquirer's size, measured by its total assets, return on assets (ROA), return on invested capital (ROIC), and research and development intensity, measured as R&D expenses divided by total revenue. To account for market expectations, analyst recommendation consensus is included, which proxies for external assessments of the firm's prospects. The study controls for governance characteristics that can influence post-acquisition outcomes, including CEO duality, board homogeneity, and board size change following the acquisition. These variables help in capturing factors such as strength, leadership concentration, and board diversity, which can significantly affect the merger outcomes.

Target characteristics

For the target, the control variables are the market-to-book ratio, debt intensity measured as a ratio of total debt to total assets, and the number of total directors at the time of acquisition.

Time & clustering

We include fiscal year fixed effects to control for macroeconomic conditions, regulatory shifts, and market-wide trends affecting all firms each year. Standard errors are clustered at the industry level to account for correlated shocks across transactions within the same industry.

4.1.4 Supplementary Variables

To examine whether the demographic characteristics of retained directors affect the relationship between director retention and post-acquisition performance, two additional binary variables are constructed. The first, Female Director, is coded as one if the retained director is female and zero otherwise. The second, Non-White Director, is coded as one if the retained director is non-white and zero otherwise. Both variables are set to zero for all transactions in which no director is retained, reflecting the fact that these characteristics are only observed and relevant in the context of an actual retention event. These variables are interacted with the Director Retained

indicator in the second-stage regression to produce the interaction terms Retained*Female and Retained*Nonwhite, which capture the marginal effect on LIVA of retaining a director from a demographic minority group over and above the baseline effect of retention itself.

Table 1: Descriptive Statistics

	Obs	Mean	SD	Min	Max
Director Retained	757	0.41	0.49	0.00	1.00
LIVA 1Y	680	0.62	5.85	-11.07	19.07
LIVA 2Y	595	0.46	6.55	-13.46	22.07
LIVA 3Y	502	0.22	5.63	-14.13	15.55
LIVA 5Y	366	1.32	6.26	-8.61	23.35
Related Acquisition	757	0.54	0.50	0.00	1.00
Relative Acquisition Size	723	0.19	0.49	0.00	12.18
Acquisition Value	757	4.22	9.78	0.00	84.20
Acquirer ROA	563	0.01	0.21	-2.28	0.37
Acquirer Research Intensity	348	0.11	0.11	0.00	0.40
Acquirer ROIC	563	0.05	0.21	-2.76	0.44
Acquirer Assets	757	27.25	73.45	0.00	856.24
Acquirer Analyst Recommendation	610	2.34	0.44	1.00	3.93
Acquirer CEO Duality	757	0.54	0.50	0.00	1.00
Acquirer Board Homogeneity	714	0.04	0.40	-1.67	1.12
Acquirer Board Size Change	672	-0.05	1.68	-8.00	7.00
Target Market to Book	623	2.45	2.62	0.00	10.15
Target Debt Intensity	619	0.19	0.23	0.00	1.30
Target Total Directors	496	7.61	2.22	3.00	15.00
Female Director	757	0.13	0.33	0.00	1.00
Non-White Director	757	0.06	0.24	0.00	1.00

Table 1 provides an overview of the distribution of key variables in the sample. Director retention occurs in 41% of transactions (310 out of 757), indicating it is a common but dominant outcome in an M&A scenario. The distribution is balanced as it allows a meaningful comparison between deals that involve retention and those that do not.

The distribution of LIVA highlights substantial dispersion in post-acquisition outcomes across all horizons. While mean LIVA remains close to zero across, the standard deviation ranges between 5 and 6, with values spanning from significant value destruction (as low as -14) to substantial value creation (above +20). The widespread indicates that M&A outcomes in the sample are very heterogeneous, with a small number of extreme outcomes generating much of the variation.

The distribution of firm and deal characteristics also highlights the heterogeneity of the sample. High variance in relative acquisition size and acquisition value indicates that the sample includes both routine acquisitions and transformational deals. Firm-level financial performance metrics such as ROA and ROIC also have substantial variability, suggesting that the sample contains both high-performing and financially distressed firms. Governance variables, such as CEO duality and board homogeneity, also exhibit variation, suggesting meaningful differences in managerial structure across firms.

The number of observations declines across longer horizons, with the sample size falling from 680 observations at the one-year horizon to 366 at the five-year horizon. This reduction reflects data availability constraints and survivorship effects.

Table 2: M&A Deals by Industry Distribution

Industry	N	% of Sample	Retained	% Director Retained
Finance	252	33.3	169	67.1
Healthcare	157	20.7	35	22.3
Business Equipment (Tech)	99	13.1	21	21.2
Energy & Chemicals	68	9.0	34	50.0
Manufacturing	48	6.3	13	27.1
Utilities & Telecom	46	6.1	19	41.3
Wholesale & Retail	25	3.3	5	20.0
Other	18	2.4	3	16.7
Consumer non-durables	18	2.4	2	11.1
Transportation	17	2.2	6	35.3
Consumer Durables	9	1.2	3	33.3
Total	757	100	310	41.0

Table 2 shows the distribution of transactions across industries. The sample is concentrated in a few key sectors such as finance (33%) and healthcare (21%), with a smaller representation in other sectors, including manufacturing, energy, and consumer industries.

Director retention rates vary significantly across industries. For example, 67% of financial sector transactions involve director retention, compared to substantially lower rates in consumer-oriented industries such as consumer non-durables (11%) and wholesale and retail (20%). This variation suggests that retention decisions are influenced by industry-specific governance practices and integration requirements, supporting the need to cluster standard errors at the industry level.

Table 3 M&A Deals by Fiscal Year of Announcement

Year	N	% of Sample	Retained	% Director Retained
2014	71	9.4	28	39.4
2015	96	12.7	34	35.4
2016	83	11.0	32	38.6
2017	73	9.6	33	45.2
2018	84	11.1	36	42.9
2019	64	8.5	32	50.0
2020	45	5.9	20	44.4
2021	74	9.8	31	41.9
2022	57	7.5	20	35.1
2023	63	8.3	23	36.5
2024	47	6.2	21	44.7
Total	757	100	310	41.0

Table 3 reports the distribution of transactions over time. The sample is relatively evenly distributed across the 2014–2024 period, with annual deal counts ranging from 45 to 96. This distribution ensures that the analysis is not driven by a single period or market cycle. Director retention rates remain stable over time, generally ranging between 35% and 50% of transactions, indicating that the retention practice is a persistent governance and integration strategy.

The time dimension of the dataset spans largely different economic environments, including pre-pandemic expansion, the disruption caused by COVID-19, and the subsequent recovery period. The variation introduces macroeconomic heterogeneity into the sample as deal motivations, financing conditions, and integration challenges are likely to differ across these periods. At the same time, the presence of different macroeconomic regimes justifies the inclusion of year fixed effects to control for common shocks affecting all firms within a given period.

5. Methodology

5.1. Empirical Strategy

To empirically examine the relationship between director retention and post-acquisition long-term value creation, a two-stage treatment effects model is used. Treatment effects models are ideal for settings in which the treatment variable is binary and can be endogenous.

This approach is appropriate for two primary reasons. First, the key independent variable, Director Retention, is binary. Standard OLS estimation can result in biased and inconsistent estimates when the treatment decision is non-random. Second, director retention likely reflects unobserved managerial decisions and deal characteristics that simultaneously influence post-acquisition performance (Hillman & Dalziel, 2003). For example, acquirers may selectively retain directors when targets possess valuable firm-specific knowledge or high-quality governance structures. If these factors also affect LIVA but are unobserved, simple regression models can encounter omitted variable bias (Heckman, 1979; Christopeit, 2003).

To solve this problem, we implement a two-stage treatment effects model that jointly estimates:

- A first-stage selection equation modeling the probability of director retention
- A second-stage outcome equation modeling post-acquisition LIVA

Formally, the first-stage model estimates:

$$Retention_i = \alpha_0 + \alpha Z_i + \delta_{year} + u_i \text{ (estimated using a probit model)}$$

The second-stage model estimates:

$$LIVA_i = \beta_0 + \beta_1 Retention_i + \gamma X_i + \delta_{year} + \lambda IMR_i + \epsilon_i$$

Where:

$LIVA_i$ represents long-term integration value added measured over the horizon h (1, 2, 3, or 5 years) following acquisition completion.

$Retention_i$ is a binary indicator equal to one if at least one target director joins the acquiring firm's board post-acquisition.

X_i is a vector of control variables capturing deal, acquirer, and target characteristics.

Z_i is a vector of variables determining the likelihood of director retention, including X_i .

δ_{year} represents fiscal year fixed effects.

IMR_i is the inverse Mills ratio derived from the first-stage probit model, capturing selection effects.

Standard errors are clustered at the industry level using SIC classifications to consider the correlation across acquisitions happening in the same industry. The coefficient of interest is β_1 , which captures the average effect of director retention on post-acquisition long-term value creation, holding observable deal and firm characteristics constant. The treatment effects framework accounts for the correlation between u_i and ϵ_i , which helps in correcting for selection bias arising from unobserved heterogeneity. Separate models are estimated for different LIVA time frames measured over one-, two-, three-, and five-year horizons following acquisition completion.

For supplementary analysis, regarding the questions posed in Hypothesis H2, two interaction terms named Retained*Female and Retained*Nonwhite are introduced which are added to the second-stage outcome equation alongside the baseline Director Retained indicator. The first-stage probit specification remains unchanged, as the selection correction is based solely on the likelihood of director retention and is common to both the primary and supplementary analyses. The interaction coefficients capture the marginal effect on LIVA of retaining a director from a demographic minority group over and above the baseline retention effect. A finding of statistical insignificance for interaction terms would indicate that the effect of director retention on post-merger LIVA is not affected by the demographic profile of the retained director.

Mathematically, the second-stage model becomes:

$$LIVA_i = \beta_0 + \beta_1 Retention_i + \beta_2 Female_i + \beta_3 NonWhite_i + \beta_4 (Retention \times Female)_i + \beta_5 (Retention \times NonWhite)_i + \gamma X_i + \delta_{year} + \lambda IMR_i + \epsilon_i$$

Where:

β_1 captures the baseline effect of director retention on LIVA when the retained director is non-minority.

β_4 captures the additional effect on LIVA when the retained director is female, over and above β_1 .

β_5 captures the additional effect on LIVA when the retained director is non-white, over and above β_1 .

$Female_i$ is a binary indicator equal to 1 if the director is female, 0 otherwise.

$Nonwhite_i$ is a binary indicator equal to 1 if the director is non-white, 0 otherwise.

$Retained * Female_i$ is the product of Director Retained and the Female Director indicator, equal to one only when a female director is retained

$Retained * Nonwhite_i$ is the product of Director Retained and the Non-White Director indicator, equal to one only when a non-white director is retained

All other terms retain their definitions from the primary specification.

5.2. Instrumentation in Regression

A central identification challenge in this study is the potential endogeneity of director retention. The decision to retain target firm directors is unlikely to be random and may be correlated with unobserved deal characteristics or managerial preferences that also influence post-acquisition performance. As a result, directly estimating the effect of retention on LIVA using standard regression techniques can produce biased estimates.

In principle, this concern can be addressed using instrumental variables, where an external instrument predicts director retention but does not directly affect post-acquisition value creation. However, identifying such an instrument in the context of corporate governance is notoriously difficult. Most observable deal and firm characteristics that influence retention decisions, such as deal size, governance quality, or strategic fit, are also likely to directly affect post-merger performance, making it difficult to justify a valid exclusion restriction within a conventional IV framework (Hamilton & Nickerson, 2003).

Given these constraints, this study employs a two-stage treatment effects model following Heckman (1979), which is the same approach used by Campbell et al. (2021) in the study this paper is primarily inspired by. The key idea is to explicitly model the retention decision in a first-stage probit framework and account for its correlation with the outcome equation through the inclusion of the Inverse Mills Ratio. Rather than relying on a traditional exclusion restriction, identification in this framework is achieved through the non-linearity of the probit specification, which generates variation in the IMR that is mathematically distinct from the linear controls included in the second stage. This functional form identification is a standard and accepted practice in treatment effects models applied to M&A governance research, and its validity depends on the

correct specification of the first-stage probit rather than on the availability of an external instrument.

This approach does not rely on external instruments and instead adjusts for selection based on observables and distributional assumptions in the model. Identification is primarily driven by model structure and the non-linear nature of first-stage regression. While this method helps mitigate bias arising from non-random selection, it does not fully eliminate endogeneity concerns. Despite these limitations, the treatment effects framework provides a structured approach to accounting for selection into director retention and offers more reliable estimates than a simple regression that ignores the issue.

6. Results

Table 4 Variable Correlation Matrix

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Director Retained	0.41	0.49																				
LIVA 1Y	0.62	5.85	-0.03																			
LIVA 2Y	0.46	6.55	-0.11	0.09																		
LIVA 3Y	0.22	5.63	-0.09	-0.02	0.04																	
LIVA 5Y	1.32	6.26	-0.12	0.05	0.50	0.00																
Related Acquisition	0.54	0.50	0.10	0.04	0.07	-0.02	0.09															
Relative Acquisition Size	0.19	0.49	0.10	0.00	-0.08	0.01	-0.03	0.00														
Acquisition Value	4.22	9.78	0.04	0.12	-0.03	-0.01	0.08	0.02	0.09													
Acquirer ROA	0.01	0.21	-0.11	0.01	0.04	-0.04	0.05	0.01	-0.42	0.09												
Acquirer Research Intensity	0.11	0.11	-0.04	0.06	0.07	0.07	0.17	0.11	0.22	-0.01	-0.47											
Acquirer ROIC	0.04	0.21	-0.15	0.02	0.04	-0.03	0.07	-0.01	-0.39	0.10	0.95	-0.48										
Acquirer Assets	27.25	73.45	-0.11	0.06	0.15	-0.03	0.16	-0.07	-0.08	0.33	0.12	-0.09	0.10									
Acquirer Analyst Recommendation	2.34	0.44	0.11	0.05	-0.01	0.01	-0.08	0.02	-0.18	-0.03	-0.13	-0.11	-0.16	0.02								
Acquirer CEO Duality	0.54	0.50	-0.10	0.08	-0.01	-0.04	0.07	0.05	0.01	0.12	0.12	0.04	0.10	0.18	0.05							
Acquirer Board Homogeneity	0.04	0.40	0.10	-0.07	-0.12	-0.01	-0.20	-0.02	0.03	-0.08	-0.14	-0.09	-0.15	-0.15	-0.13	-0.17						
Acquirer Board Size Change	-0.05	1.68	-0.04	-0.02	-0.01	0.08	-0.07	-0.03	0.03	0.00	-0.07	0.05	-0.06	-0.01	-0.05	0.06	-0.07					
Target Market to Book	2.45	2.62	-0.16	0.03	0.11	0.02	0.30	-0.01	0.23	0.20	0.06	0.17	0.09	0.02	-0.11	0.06	-0.07	0.03				
Target Debt Intensity	0.19	0.23	0.00	0.03	-0.06	-0.05	-0.06	-0.04	0.13	0.12	-0.07	-0.35	-0.06	0.03	-0.05	-0.04	0.06	0.00	-0.06			
Target Total Directors	7.60	2.22	0.22	0.07	-0.09	0.05	-0.04	0.14	-0.03	0.27	0.01	-0.11	0.02	0.17	0.13	0.04	-0.15	-0.09	-0.04	-0.07		
Female Director	0.13	0.33	0.46	-0.03	-0.08	-0.02	-0.06	0.08	0.04	0.03	-0.02	0.02	-0.03	-0.01	0.04	-0.03	0.05	-0.05	-0.07	-0.08	0.17	
Non-White Director	0.06	0.24	0.31	-0.02	-0.02	-0.02	-0.03	0.07	0.03	0.07	-0.06	0.02	-0.11	-0.01	0.01	-0.01	0.00	0.00	-0.03	-0.03	0.17	0.40

Table 4 depicts the descriptive statistics and correlations for all variables included in the study. The mean value of Director Retained is .40, indicating that approximately 40% of acquisitions in the sample resulted in the retention of at least one target firm director, with the remaining 60% involving no retention. The distribution provides a reasonable split for treatment effects estimation. The mean values across all four LIVA intervals are positive, ranging from .24 at the 3-year horizon to 1.42 at the 5-year horizon, which indicates modest positive long-term investor value post-acquisition, albeit with substantially large standard deviations, ranging from 5.74 to 6.88, indicating considerable heterogeneity in post-acquisition performance outcomes in the sample.

In control variables, the average acquisition value in the sample is \$4.53 billion with a standard deviation of \$10.07 billion, reflecting the presence of both small and very large transactions. Approximately 28% of acquisitions are related, meaning the acquirer and target operate in the same industry. The average acquirer has a return on assets of 0.02 and a research intensity of 0.11, suggesting a sample broadly representative of moderately profitable firms with moderate innovation activity. At the target level, the average market-to-book ratio is 2.49, the average debt intensity is 0.21, and the average target board has approximately 8 directors, all of which are consistent with prior M&A research.

Several patterns in the correlation matrix are worth noting. First, and most directly relevant to the hypothesis, the correlation between Director Retained and all four LIVA intervals is negative ($r = -0.02, -0.13, -0.08$, and -0.12 for the 1-, 2-, 3-, and 5-year intervals, respectively), which provides preliminary evidence of a negative association between director retention and post-acquisition value creation. While the correlations are modest in magnitude, their consistent negative direction across all time horizons lends early support to the theoretical expectations prior to any regression analysis.

The correlations between Director Retained and the deal characteristics are also noteworthy. Relative acquisition size ($r = 0.11$) and acquisition value ($r = 0.04$) are both positively correlated with director retention. This is consistent with the idea that target firms in larger and more valuable transactions possess greater bargaining power to negotiate favorable board representation. Similarly, target total directors also exhibit the strongest positive correlation with director retention in the entire matrix ($r = 0.22$), which is intuitive as the larger the target board, the higher the

probability that at least one director will be retained after the merger. These patterns foreshadow the significant first-stage probit results reported in Table 2.

The correlations between covariates are generally sufficiently low to alleviate concerns about multicollinearity, with one notable exception. Acquirer ROA and Acquirer ROIC are correlated at $r = 0.84$, reflecting the conceptual overlap between these two profitability measures. All remaining inter-covariate correlations fall well below the threshold commonly associated with problematic multicollinearity (Cohen et al., 2014). Furthermore, variance inflation factors across all LIVA intervals confirm that multicollinearity does not materially bias the estimates. Finally, the LIVA intervals exhibit moderate intercorrelations with one another, with the strongest association observed between the 2-year and 5-year measures ($r = 0.52$), while the 3-year interval is largely uncorrelated with the remaining LIVA measures, consistent with the relatively weaker estimates we observe at this horizon in the second-stage models.

Table 5 Treatment Effects Model: First Stage

<i>Treatment</i> Director Retained	Estimate	p-Value
Constant	-1.71	0.26
Related Acquisition	0.10	0.75
Relative Acquisition Size	4.33	0.00
Acquisition Value	0.03	0.01
Acquirer ROA	5.56	0.11
Acquirer Research Intensity	-6.20	0.01
Acquirer ROIC	-3.68	0.25
Log Acquirer Assets	0.00	0.97
Acquirer Analyst Recommendation	0.11	0.80
Acquirer CEO Duality	0.08	0.82
Acquirer Board Homogeneity	0.56	0.16
Acquirer Board Size Change	-0.05	0.61
Target Market to Book	0.06	0.31
Target Debt Intensity	1.47	0.06
Target Total Directors	-0.22	0.03

Table 5 depicts the first-stage probit estimates predicting the likelihood of director retention following an acquisition. Relative acquisition size is positively and significantly associated with director retention ($\beta = 4.33$; $p < .01$), which suggests that deals involving targets that are larger relative to the acquirer are more likely to result in director retention. This is consistent with a

bargaining interpretation, which assumes that when a target firm represents a more substantial counterpart in the transaction, it often uses its greater negotiating leverage to secure favorable post-acquisition board representation for its directors. Acquisition value similarly shows a positive and significant association with director retention ($\beta = 0.03$; $p < .01$), reinforcing the idea that more valuable transactions are more conducive to director retention.

On the other hand, acquirer research intensity is negative and significantly associated with director retention ($\beta = -6.20$; $p < .01$), indicating that acquirers operating in more knowledge-intensive environments are less likely to retain target directors. This suggests that firms with high research intensity may be particularly sensitive to the risks of introducing directors whose expertise is rooted in a different organizational context and may therefore be more deliberate in protecting the cognitive coherence of their boards. The remaining control variables do not achieve statistical significance in the first stage, though the overall model fit is satisfactory with a pseudo-R-squared of 0.35, suggesting that the controls collectively capture a meaningful portion of the variation in director retention decisions.

Table 6 Treatment Effects Model: Second Stage (For each LIVA Interval)

Variable	Liva 1 Yr		Liva 2 Yr		Liva 3 Yr		Liva 5 Yr	
	Estimate	p-Value	Estimate	p-Value	Estimate	p-Value	Estimate	p-Value
Constant	0.35	0.96	10.18	0.28	-9.84	0.35	-4.02	0.55
Director Retained	0.42	0.95	-2.30	0.80	-4.59	0.61	-6.11	0.61
Related Acquisition	-0.49	0.77	3.36	0.07	1.32	0.45	2.43	0.24
Relative Acquisition Size	2.75	0.75	-4.91	0.64	0.47	0.96	3.72	0.79
Acquisition Value	0.10	0.39	-0.09	0.42	0.03	0.88	-0.06	0.61
Acquirer ROA	-6.35	0.64	0.99	0.96	-7.86	0.67	6.65	0.75
Acquirer Research Intensity	-6.06	0.62	6.08	0.73	10.91	0.58	-5.72	0.79
Acquirer ROIC	0.04	1.00	3.35	0.87	22.81	0.28	-6.37	0.80
Log Acquirer Assets	0.33	0.63	0.54	0.48	0.71	0.38	0.88	0.32
Acquirer Analyst Recommendation	1.76	0.36	0.21	0.93	-4.98	0.03	0.00	1.00
Acquirer CEO Duality	-0.33	0.81	-0.93	0.64	-3.48	0.03	-0.91	0.67
Acquirer Board Homogeneity	-0.11	0.94	0.20	0.92	3.24	0.06	-0.94	0.62
Acquirer Board Size Change	-0.28	0.64	0.71	0.29	0.32	0.62	-0.26	0.71
Target Market to Book	-0.25	0.42	0.64	0.10	-0.06	0.89	1.11	0.02
Target Leverage (Debt Intensity)	-1.30	0.79	-3.82	0.50	-3.91	0.51	-6.05	0.34
Target Total Directors	-0.30	0.54	-0.58	0.35	0.52	0.43	-0.39	0.62

Table 6 presents the second-stage OLS results examining the relationship between director retention and LIVA across four time horizons. The coefficient on Director Retained is negative for three of the four LIVA intervals, namely for the 2-year ($\beta = -2.30$; $p = .80$), 3-year ($\beta = -4.59$; $p = .61$), and 5-year ($\beta = -6.11$; $p = .61$) horizons, with the magnitude of the negative effect growing consistently as the time horizon extends. The 1-year estimate is marginally positive ($\beta = 0.42$; $p = .95$), though effectively indistinguishable from zero.

While none of these estimates achieve conventional levels of statistical significance, the consistent negative direction and the monotonically increasing magnitude of the coefficients from the 2-year through 5-year horizons are theoretically meaningful and directionally consistent with the previous literature. The progressive strengthening of the negative relationship over time suggests that the governance costs of director retention may compound as the post-acquisition period extends. It is to be noted that the precision of the estimates is influenced by data availability across governance variables, which is a common constraint in board-level M&A research given the historically limited disclosure requirements around post-acquisition board composition changes (Campbell et al., 2021).

Table 7: Estimated LIVA outcomes from the two-stage treatment effects model

Outcome	Group	Value (\$B)	95% CI Lower	95% CI Upper
LIVA (1-year)	No director retained	1.08	-0.81	2.96
LIVA (1-year)	Director retained	1.63	-2.79	6.05
LIVA (1-year)	Value difference	0.55	-1.99	3.09
LIVA (2-year)	No director retained	1.81	-0.49	4.11
LIVA (2-year)	Director retained	-1.53	-6.66	3.60
LIVA (2-year)	Value difference	-3.34	-6.16	-0.51
LIVA (3-year)	No director retained	1.72	-0.89	4.34
LIVA (3-year)	Director retained	0.02	-5.53	5.56
LIVA (3-year)	Value difference	-1.71	-4.64	1.22
LIVA (5-year)	No director retained	2.68	-0.07	5.42
LIVA (5-year)	Director retained	0.14	-7.52	7.80
LIVA (5-year)	Value difference	-2.54	-7.45	2.38

Figure 1: Estimated LIVA outcomes from the two-stage treatment effects model

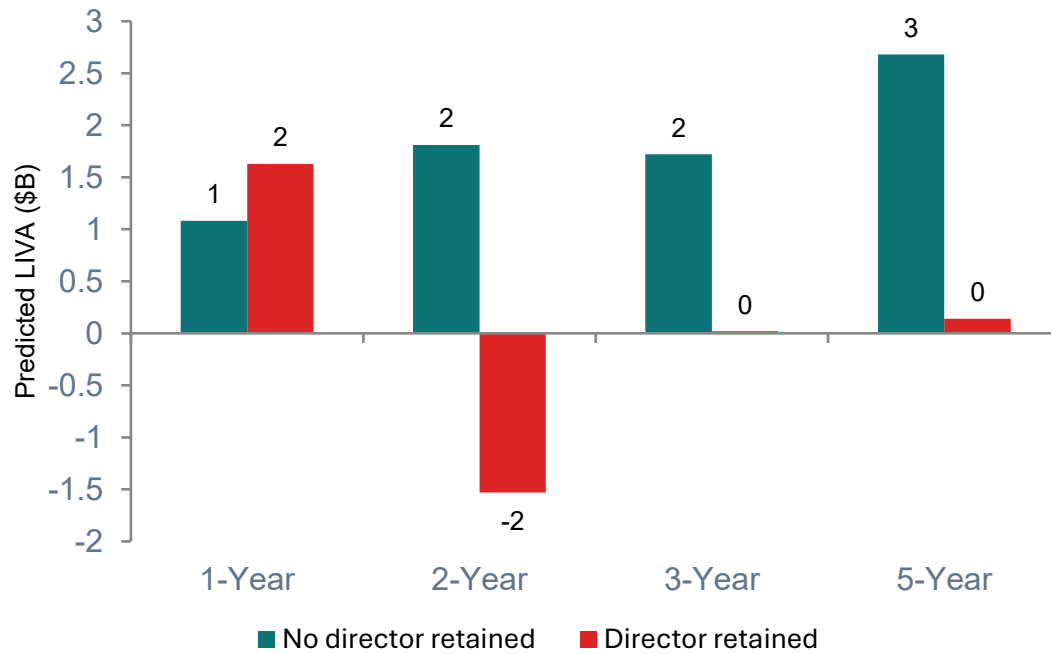


Table 7 and Figure 1 present the estimated LIVA outcomes from the two-stage treatment effects model. This helps in translating the regression coefficients into economically interpretable values to compare acquisitions with and without director retention across all four time horizons.

First, acquisitions without director retention are associated with positive predicted LIVA values across all four horizons, ranging from \$1.08 billion at the 1-year interval to \$2.68 billion at the 5-year interval. While the confidence intervals for this group, overall, are at 0 at the 1-, 2-, and 5-year horizons, the general positive trajectory suggests that acquisitions that do not involve director retention tend, on average, to generate modest value for acquiring firm shareholders over time.

Second, acquisitions involving director retention tell a totally different story. The predicted LIVA for the director retained group turns negative at the 2-year horizon (–\$1.53 billion) and remains near zero or negative at the 3- and 5-year horizons (\$0.02 billion and \$0.14 billion, respectively), suggesting that retaining a target director is associated with a meaningful deterioration in post-acquisition value relative to non-retaining acquirers. Apart from the 1-year horizon, where retention indicates a positive \$0.55 billion effect, all other horizons show a negative effect of retention, reaching the maximum value of \$–3.34 billion at the 2-year horizon.

Importantly, even accounting for the general tendency of acquisitions to reduce firm value, the model predicts that director retention destroys an additional \$01.71 to \$3.34 billion on average after the second-year post-merger. The 2-year value difference achieves a confidence interval that excludes zero (95% CI: −\$6.16B, −\$0.51B), providing the strongest evidence in the sample that director retention is associated with meaningful post-acquisition value destruction. The 3-year and 5-year estimates similarly suggest negative value differences of −\$1.71 billion and −\$2.54 billion, respectively, though their confidence intervals overlap with zero, consistent with the reduced statistical precision at longer horizons given the smaller available samples.

Table 8 Treatment Effects Model: Minority Director Moderating Effects

Variable	LIVA 1 Yr		LIVA 2 Yr		LIVA 3 Yr		LIVA 5 Yr	
	Estimate	p-Value	Estimate	p-Value	Estimate	p-Value	Estimate	p-Value
Constant	-2.88	0.63	-2.00	0.81	4.73	0.55	-2.51	0.78
Director Retained	2.93	0.72	-4.41	0.67	-2.27	0.80	-6.14	0.67
Retained*Female	-2.82	0.41	-0.45	0.88	0.31	0.92	1.90	0.52
Retained*Nonwhite	-1.52	0.60	-0.39	0.93	-0.74	0.79	-0.27	0.92
Related Acquisition	0.02	0.99	3.30	0.05	-0.03	0.99	1.42	0.50
Relative Acquisition Size	0.15	0.99	-0.08	0.99	-1.26	0.90	5.41	0.74
Acquisition Value	0.06	0.60	-0.09	0.40	0.05	0.77	-0.07	0.55
Acquirer ROA	-8.13	0.56	4.85	0.72	-0.02	1.00	14.16	0.35
Acquirer Research Intensity	-1.21	0.93	-0.56	0.98	14.92	0.45	-14.53	0.59
Acquirer ROIC	4.17	0.76	0.22	0.99	11.58	0.46	-18.47	0.36
Log Acquirer Assets	0.13	0.85	0.78	0.35	0.39	0.64	1.00	0.29
Acquirer Analyst Recommendation	1.28	0.49	0.19	0.94	-4.43	0.04	-0.37	0.90
Acquirer CEO Duality	-0.34	0.79	-1.42	0.42	-3.54	0.02	-1.23	0.57
Acquirer Board Homogeneity	0.23	0.88	0.97	0.62	2.28	0.17	-1.46	0.47
Acquirer Board Size Change	-0.14	0.81	0.46	0.49	0.54	0.41	-0.42	0.61
Target Market to Book	-0.25	0.41	0.73	0.08	-0.02	0.96	1.34	0.01
Target Leverage (Debt Intensity)	-1.54	0.73	-4.12	0.50	-1.89	0.74	-6.73	0.25
Target Total Directors	0.10	0.86	-0.76	0.25	0.44	0.47	-0.55	0.52

Table 8 presents the second-stage results examining whether the demographic characteristics of the retained director moderate the relationship between director retention and post-acquisition performance measured through LIVA. Two interaction terms are introduced, namely Retained*Female and Retained*Nonwhite, which capture the additional effect on LIVA when the retained director is an occupational minority in the form of female or non-white, respectively, over and above the baseline effect of retention itself.

The coefficient on director Retained remains negative at three of the four LIVA horizons (−4.41 at 2 years, −2.27 at 3 years, and −6.14 at 5 years), which is consistent with the primary analysis and reinforces the previous finding that director retention is generally associated with value destruction in the longer term. However, it is to be noted that neither interaction term achieves statistical significance at any horizon. Retained*Female ranges from −2.82 at the 1-year horizon to +1.90 at the 5-year horizon, while Retained*Nonwhite ranges from −1.52 to −0.27 across the same interval, with p-values uniformly exceeding .4 in every specification. This indicates that retaining a female or a non-white director does not produce systematically different LIVA outcomes compared to retaining a non-minority director.

Considering control variables, the results are broadly consistent with those reported in the primary analysis. Acquirer Analyst Recommendation and Acquirer CEO Duality remain negatively associated with LIVA at the 3-year horizon, while Target Market to Book is positively associated with LIVA at the 5-year horizon. This suggests that market sentiment toward the acquirer, its leadership structure, and the growth profile of the target firm carry persistent explanatory power for long-run value creation. The remaining controls do not achieve significance across the four horizons. It suggests that these governance and deal characteristics carry independent explanatory power for long-run value creation regardless of the demographic composition of the retained director.

These results are theoretically informative as they suggest that the governance costs of director retention are not driven by the demographics of the retained director, but rather by the retention itself. Whether the retained director is female, non-white, or neither, the misalignment of loyalties that retention introduces into the acquiring firm's board appears to be the primary mechanism through which value is affected. Demographic diversity, while important for other governance reasons, does not appear to insulate the acquiring firm from these costs nor to amplify them in any consistent way.

Table 9 Estimated LIVA outcomes by Director Type

Outcome	Group	Value (\$B)	95% CI Lower	95% CI Upper	Diff vs No Retention
LIVA (1-year)	No director retained	0.75	-3.74	5.24	0.00
LIVA (1-year)	Retained — non-minority	3.68	-8.44	15.80	2.93
LIVA (1-year)	Retained — female director	0.86	-10.84	12.55	0.11
LIVA (1-year)	Retained — non-white director	2.17	-10.41	14.74	1.42
LIVA (2-year)	No director retained	2.13	-3.42	7.68	0.00
LIVA (2-year)	Retained — non-minority	-2.27	-17.65	13.10	-4.41
LIVA (2-year)	Retained — female director	-2.73	-19.75	14.29	-4.86
LIVA (2-year)	Retained — non-white director	-2.66	-19.38	14.07	-4.79
LIVA (3-year)	No director retained	1.88	-2.93	6.70	0.00
LIVA (3-year)	Retained — non-minority	-0.39	-13.66	12.88	-2.27
LIVA (3-year)	Retained — female director	-0.08	-16.01	15.85	-1.96
LIVA (3-year)	Retained — non-white director	-1.13	-13.94	11.68	-3.01
LIVA (5-year)	No director retained	3.45	-3.58	10.49	0.00
LIVA (5-year)	Retained — non-minority	-2.69	-24.16	18.78	-6.14
LIVA (5-year)	Retained — female director	-0.79	-23.55	21.97	-4.24
LIVA (5-year)	Retained — non-white director	-2.96	-23.93	18.02	-6.41

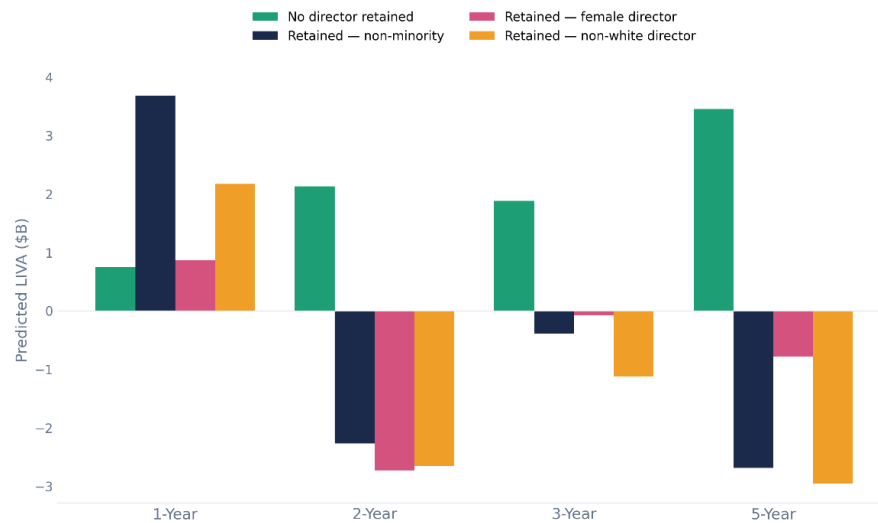
Figure 2 Estimated LIVA outcomes by director type

Table 9 and Figure 2 translate the regression estimates from Table 8 into economically interpretable predicted LIVA values across four director retention scenarios, namely no retention, retention of a non-minority director, retention of a female director, and retention of a non-white director for each of the four LIVA horizons.

Several patterns are immediately apparent. First, across all three retention scenarios and at every horizon beyond 1 year, predicted LIVA is lower than the no-retention baseline. At the 2-year horizon, for instance, no retention is associated with a predicted LIVA of +\$2.13 billion, while retaining a non-minority director produces −\$2.27 billion, retaining a female director produces −\$2.73 billion, and retaining a non-white director produces −\$2.66 billion. So, the value destruction due to retention is consistent among each of the three different scenarios, indicating that the specific demographics of the directors retained do not mediate the negative relationship between director retention and LIVA in a significant way.

Second, the convergence of predicted outcomes across the three retention scenarios is one of the most telling findings in Table 6. At the 3-year horizon, all three scenarios cluster tightly around zero to slightly negative values (−\$0.39B, −\$0.08B, and −\$1.13B), and at the 5-year horizon, all three are negative and of similar magnitude (−\$2.69B, −\$0.79B, and −\$2.96B). The differences between retention scenarios are small and, as established in Table 5, statistically indistinguishable from zero. This convergence strongly suggests that it is the act of retention, not the demographic profile of the retained director, that drives value destruction.

Third, the 1-year horizon presents a slightly different picture where all three retention scenarios are associated with positive predicted LIVA, ranging from +\$0.86 billion for female director retention to +\$3.68 billion for non-minority retention. This is consistent with the primary analysis, where the 1-year is an observable performance outcome.

Taken together, Tables 8 and 9 deliver a clear supplementary finding that the demographic identity of the retained director does not meaningfully condition the performance consequences of retention. Acquiring firms should not interpret the retention of a female or non-white director as a governance-neutral or governance-positive decision simply because it satisfies diversity mandates or signals inclusivity to external stakeholders. The evidence suggests that the structural misalignment introduced by retaining any target firm director, regardless of their background, is the primary mechanism through which value is destroyed in the post-acquisition period.

7. Practical Implications

The primary takeaway from this study is straightforward: retaining target firm directors after an acquisition tends to destroy value for the acquiring firm. This holds across most of the time

horizons this study examines. Director retention often gets packaged as a goodwill gesture and as a way to signal respect for the target, smooth the integration, or retain institutional knowledge (Wulf, 2004). On paper, these arguments are not unreasonable. But empirical evidence suggests that in practice, the costs consistently outweigh these perceived benefits. A director who built their career serving the interests of the target firm does not automatically become a constructive voice on the acquirer's board overnight. Their loyalties, relationships, and strategic instincts are shaped by a different organizational history, and that misalignment appears to show up in performance, perhaps not immediately, but over the years that follow (Westphal, 1999).

This has concrete implications for how deals get structured. The first-stage results show that director retention is more likely in larger, higher-value transactions, which are the exact deals that tend to attract the most scrutiny and carry the highest stakes. Yet these are also the deals where investment bankers, legal advisors, and deal teams are most focused on getting the price and terms right, often treating board composition as an afterthought or a bargaining chip to be handed over when other negotiations stall (Krishnan et al., 1997). This study's findings suggest that this is a mistake. Post-acquisition board's composition deserves the same deliberate attention as any other material term in the deal.

Beyond the boardroom, the findings are relevant to institutional investors and governance bodies who evaluate acquiring firms after deals close. Director retention is rarely flagged as a red flag in post-deal governance assessments, yet the evidence suggests it should be. Proxy advisors and activist investors who scrutinize board composition changes following acquisitions would be well served to treat retained target directors as a signal worth investigating rather than a routine administrative change.

Finally, there is a regulatory dimension worth raising. Director retention is sometimes negotiated explicitly as part of deal terms as a concession that benefits outgoing target directors but whose costs, as the study suggests, are ultimately borne by acquiring firm shareholders. Greater transparency in how these arrangements are disclosed and justified could allow market participants to price this governance risk more accurately at the time of deal announcement, rather than discovering its consequences years later in the performance data.

8. Conclusion

This study examined whether retaining target firm directors following an acquisition creates or destroys value for the acquiring firm. The research is primarily motivated by the theoretical tensions between stewardship theory, which suggests that retained directors may offer valuable target-specific human capital, and agency theory, which raises concerns about holdover loyalties, misaligned incentives, and disrupted board cohesion. The study seeks to investigate whether the purported benefits of director retention outweigh the potential drawbacks of this practice. The answer, based on empirical evidence, is that it destroys value consistently, and with growing magnitude over time.

Using a two-stage treatment effects framework applied to a sample of 757 US-based mergers and acquisitions involving public companies, the study finds that director retention is negatively associated with post-acquisition performance across most LIVA horizons, especially in the longer term. The effect itself is expected to take some time to appear, suggesting that director retention might result in short-term continuity benefits that are outweighed by the agency costs in the coming years, as indicated by the clearly evidenced LIVA values at the 2-year and higher time horizons. The practical magnitude of this value destruction, which has a maximum average value of \$3.34 in year 2, makes the results economically relevant. Therefore, director retention should be seen as a governance decision with real financial consequences. Supplementary analyses examining whether the demographic profile of retained directors, specifically gender or minority status, moderates the effect found no statistically significant differences, which indicates that the negative impact of director retention on post-acquisition value is broadly consistent across these characteristics.

These findings contribute to the previous and growing literature on post-acquisition integration and board governance in several ways. First, the study adds to the literature on the financial consequences of acquisitions by identifying director retention as a previously underexplored governance mechanism that helps explain the tendency of acquisitions to destroy value for acquiring firms. Second, it offers an explanation for why acquisitions are so disappointing through the lens of the boardroom instead of through operational integrity or deal structuring, which currently dominates the scholarly research. Also, the treatment effects approach that is employed here allows a better understanding of the endogeneity of director retention, acknowledging that

firms do not randomly decide to retain directors and that any credible estimate of the performance effect must account for this.

This study is not without limitations, which naturally point towards promising directions for future research. Most notably, while the full dataset comprises 757 acquisitions, the analytic sample contracts considerably once governance variables with limited historical disclosure are accounted for, which constrains the statistical precision of our second-stage estimates. Future research assembling larger samples, through extended time windows, international contexts, or improved board-level data infrastructure, would be better positioned to detect effects with greater confidence. Additionally, the framework establishes that director retention is costly on average, but it does not fully specify the boardroom mechanisms through which value is destroyed, leaving open questions. Unpacking these pathways can be a rich agenda for future governance research to further understand the effect of governance decisions of long-term shareholder value creation.

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