The Business Case for Boardroom Heterogeneity

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Since 2008, nine countries have enacted laws that require publicly traded firms to meet certain levels of gender balance in their boardrooms by requiring a minimum number of female directors ("female director quotas"). In September 2018, California became the first U.S. state to do the same. Interestingly, the stated purpose of any female director quota is neither a social case nor a moral case, but a business case: to increase shareholder value by increasing boardroom heterogeneity. Accordingly, it is of increasing importance that we generally understand the relationship between boardroom heterogeneity and firm performance, and, particularly, whether gender is an appropriate proxy for the type of heterogeneity that benefits firm performance.

This Article reviews evidence from behavioral sciences on the relative performances of homogeneous and heterogeneous work groups in tasks analogous to the two main board functions—monitoring and managing—and contends heterogeneous boards make better decisions than homogeneous boards, due to "diversity of perspectives," which increases the knowledge and skills that a board needs to effectively monitor and manage.

This Article then applies that framework to determine if a female director quota increases a board's diversity of perspectives. Unfortunately, the findings show that a board's compliance with a female director quota does not always increase its diversity of perspectives—meaning that, all things considered, a company's cost of compliance may outweigh the quota's benefit.

This Article concludes by proposing an alternative for regulating boardroom heterogeneity: a "diversity index." The diversity index is comprised of six areas of heterogeneity that positively impact board decision-making, including gender, and sets a minimum aggregate heterogeneity score that a board must meet across those categories. This Article explains why each category is an appropriate proxy for diversity of perspectives, why this specific combination of categories produces an optimal level of diversity of perspectives on a board (unlike a solely gender-based quota), and the potential costs

of instituting such a measure (such as whether it is administrable, given that directors are elected by shareholders).

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I. INTRODUCTION

The advent of the corporation is famous for solidifying and expanding the separation of a company's ownership from its control.[1] This development expanded the economy because the idea of a truly passive equity investor does not exist when ownership and control go hand-in-hand.[2] In a market without passive equity investment, purchasing equity requires more resources from an investor, and selling equity requires more resources from a company. The additional cost for an investor is the time required to manage any company in which the investor invests (or the money required to hire someone to do so on the investor's behalf).[3] The additional cost for a company is the accommodation of an additional manager when accepting a new investor's investment.[4] Thus, by enabling passive equity investment, the separation of ownership from control eliminates these costs, which increases both the supply of, and the demand for, investment in business enterprises.[5]

However, the separation of ownership from control comes with a cost of its own, inherent in the notion that the owner and manager are not the same entity.[6] A manager's best interest is always to maximize the return on being a manager, and an investor's best interest is to maximize the return on

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[1] *See* Herbert Hovenkamp, *Neoclassicism and the Separation of Ownership and Control*, 4 VA. L. & BUS. REV. 373, 374 (2009) (citing ADOLF A. BERLE, JR. & GARDINER C. MEANS, THE MODERN CORPORATION AND PRIVATE PROPERTY (1932)).

[2] *Cf.* Stephen M. Bainbridge, *Why a Board? Group Decisionmaking in Corporate Governance*, 55 VAND. L. REV. 1, 4 (2002) ("[S]hareholders have essentially no power to initiate corporate action and, moreover, are entitled to approve or disapprove only a very few board actions. . . . [T]he board acts and shareholders, at most, react." (footnote omitted)).

[3] *Compare* Stephen M. Bainbridge, *Director Primacy* 1 (UCLA Sch. of Law Law-Econs. Research Paper Series, Working Paper No. 10–06, 2010), https://ssrn.com/abstract=1615838 ("Ownership and control rights typically go hand in hand. A homeowner may eject trespassers, for example, even using force in appropriate cases. A principal is entitled to control his agent. Each partner is entitled to equal rights in the management of the partnership business." (citations omitted)), *with* Bainbridge, *supra* note 2, at 4 ("Shareholders, who are said to 'own' the firm, have virtually no power to control either its day-to-day operation or its long-term policies." (footnote omitted)).

[4] *Cf.* Bainbridge, *supra* note 2, at 4–5 ("Given the collective action problems inherent in any large organization, it is difficult to imagine a corporation of any substantial size making effective use of consensus as a mode for organizational decisionmaking." (citation omitted)).

[5] *See, e.g.*, Hovenkamp, *supra* note 1, at 375 ("Neoclassicists embraced the separation of ownership and control as a fundamental principle of efficient firm behavior. . . . Indeed, in the neoclassical model of markets, separation of ownership and control has become a virtual prerequisite to productive management and risk taking." (citation omitted)); Bainbridge, *supra* note 2, at 4 ("This separation of ownership and control has a strong efficiency justification.").

[6] *Cf.* Harold Demsetz, *The Structure of Ownership and the Theory of the Firm*, 26 J.L. & ECON. 375, 375 (1983) ("[M]anagement and ownership interests do not naturally coincide when not housed in the same person . . . ."); Bainbridge, *supra* note 2, at 5 ("Although separation of ownership and control is a necessary precondition for efficient corporate decisionmaking, it is not a sufficient one.").

investment.[7] When one individual serves as both a manager and an investor, the individual's best interest is the common interest of managers and investors. In contrast, when an individual is hired to perform on behalf of another, sometimes it is in the hired person's best interest to shirk.[8] Thus, corporate governance was borne,[9] which is the body of law that purports to maximize shareholder value[10] by balancing a board's authority to manage the business and affairs of the corporation[11] with its accountability to shareholder interests.[12]

Corporate governance uses two major mechanisms to create and enforce such board accountability: director election procedures and director fiduciary

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[7] *Cf.* BERLE &MEANS, *supra* note 1, at 6 ("The separation of ownership from control produces a condition where the interests of owner and of ultimate manager may, and often do, diverge, and where many of the checks which formerly operated to limit the use of power disappear.").

[8] *See* ADOLF A. BERLE, JR. & GARDINER C. MEANS, THE MODERN CORPORATION AND PRIVATE PROPERTY; WITH A NEW INTRODUCTION BY MURRAY L. WEIDENBAUM AND MARK JENSEN (2D ED. 1991), at 301 ("[I]f all profits are earmarked for the security holder, where is the inducement for those in control to manage the enterprise efficiently? When none of the profits are to be received by them, why should they exert themselves beyond the amount necessary to maintain a reasonably satisfied group of stockholders?"); Murray L. Weidenbaum & Mark Jensen, *Introduction*, in *id.*, at xiv–xv ("Berle and Means view corporate responsibility to shareholders in the sense of 'equitable control' where managers, having obtained power from the dispersed group of stockholders, act in the best interest of the owners of the firm. The authors then question this by analyzing the profit incentive to the executives. According to the authors, executives have such an 'insignificant' fraction of traditional property rights that the incentive of profits is not strong enough to insure that they will make effective use of corporate property."); Edward S. Adams, *Bridging the Gap Between Ownership and Control*, 34 J. CORP. L. 409, 411 (2009) ("[B]ecause management often has little, if any, of its own capital invested in the corporation, an incentive exists to exploit the shareholder wealth in the form of higher management salaries, bonuses, and perquisites." (citation omitted)).

[9] Lawrence E. Mitchell, *The Trouble with Boards*, PERSPECTIVES ON CORPORATE GOVERNANCE 17, 23 (F. Scott Kieff & Troy A. Paredes eds., 2010) ("It was only with the widespread ownership of common stock by the American public that developed in the 1920s that a focus on what the board of directors was doing and should do with respect to the corporation and its stockholders began to matter." (footnote omitted).

[10] *See* Harwell Wells, *The Birth of Corporate Governance*, 33 SEATTLE U. L. REV. 1247, 1252 (2010). *Cf. eBay Domestic Holdings, Inc. v. Newmark*, 16 A.3d 1, 34 (Del. Ch. 2010) ("Having chosen a for-profit corporate form, the craigslist directors are bound by the fiduciary duties and standards that accompany that form. Those standards include acting to promote the value of the corporation for the benefit of its stockholders."); Weidenbaum & Jensen, *supra* note 8, at xiv ("For whose benefit does the corporation operate? . . . The traditional legal answer is that the corporation is conducted for the benefit of the owners."). This Article will not discuss the current academic and public debates of whether corporate governance should steer away from its shareholder primacy model. *See infra* note 27.

[11] *See, e.g.*, DEL. CODE ANN. tit. 8, § 141(a) (2020) (providing that a corporation's "business and affairs . . . shall be managed by or under the direction of a board of directors").

[12] Renee M. Jones, *Corporate Governance and Accountability*, in CORPORATE GOVERNANCE – SYNTHESIS OF THEORY, RESEARCH, AND PRACTICE 559 (Ronald Anderson & H. Kent Baker eds., 2010) ("The principal challenge for corporate governance is to create a system that holds decision makers accountable while according proper respect to their authority over the corporation.").

duties.[13] Election procedures address board behavior generally, enabling shareholders to appoint initial directors, and then replace them annually with directors who better represent their interests.[14] Fiduciary duties address board behavior in each instance, holding a board accountable for each decision it makes in managing the corporation.[15] Being subject to a duty of care and a duty of loyalty,[16] directors must "effectively serve as 'trustees'" for the shareholders, with respect to the shareholders' interests in the corporation.[17] If a director fails to honor either duty when making business decisions, then a shareholder may sue derivatively on behalf of the corporation and potentially hold the director personally liable for the resulting damages to the corporation.[18]

As a source of personal liability, fiduciary duties serve as an important backstop for director decision-making by incentivizing directors to not make

[13] *See* Aronson v. Lewis, 473 A.2d 805, 811 (Del. 1984) ("The machinery of corporate democracy and the derivative suit are potent tools to redress the conduct of a torpid or unfaithful management.").

[14] *See, e.g.*, DEL. CODE ANN. tit. 8, § 141(b) (2020) ("Each director shall hold office until such director's successor is elected and qualified or until such director's earlier resignation or removal."); tit. 8, § 141(k) ("Any director or the entire board of directors may be removed, with or without cause, by the holders of a majority of the shares then entitled to vote at an election of directors . . . [subject to a limitation on removal without cause for corporations with staggered board and a limitation on removal without cause for corporations with cumulative voting]."); tit. 8, § 211(b) ("Unless directors are elected by written consent [of the shareholders] in lieu of an annual meeting as permitted by this subsection, an annual meeting of stockholders shall be held for the election of directors on a date and at a time designated by or in the manner provided in the bylaws.").

[15] *See* Guth v. Loft, Inc., 5 A.2d 503, 510 (Del. 1939) ("Corporate officers and directors are not permitted to use their position of trust and confidence to further their private interests. While technically not trustees, they stand in a fiduciary relation to the corporation and its stockholders."); Cede & Co. v. Technicolor, Inc., 634 A.2d 345, 360 (Del. 1993) ("In exercising these powers, directors are charged with an unyielding fiduciary duty to protect the interests of the corporation and to act in the best interests of its shareholders.").

[16] *Aronson*, 473 A.2d at 812 (explaining that to satisfy the duty of care, directors must inform themselves "prior to making a business decision[] of all material information reasonably available to them"); *Cede & Co.*, 634 A.2d at 361 (describing that to satisfy the duty of loyalty, directors must put shareholders' interests ahead of their own to the extent they are inconsistent therewith).

[17] William M. Lafferty et al., *A Brief Introduction to the Fiduciary Duties of Directors Under Delaware Law*, 116 PENN ST. L. REV. 837, 841 (2012).

[18] *See* Aronson v. Lewis, 473 A.2d 805, 811 (Del. 1984) ("[A] stockholder is not powerless to challenge director action which results in harm to the corporation. . . . The derivative action developed in equity to enable shareholders to sue in the corporation's name where those in control of the company refused to assert a claim belonging to it.").

bad decisions.[19] With respect to encouraging directors to make *good* decisions, however, corporate governance has room to grow.[20] This Article argues that regulating board composition—specifically, mandating diversity of perspectives[21] among directors on the boards of publicly traded corporations (hereinafter, "boardroom heterogeneity")—is the next frontier of director accountability to shareholders in corporate governance.[22]

Parts II and III of this Article provide some necessary background to this overall claim. Part II briefly outlines the role of a board of directors, as much of the analysis of how to make a board do a *better* job relies on a shared understanding of what a board's job is at all. Part III describes the existing regulations that mandate boardroom heterogeneity and our current empirical understanding of boardroom heterogeneity's impact on a company's performance. Since empirical results are inconclusive,[23] scholars increasingly are

[19] Fiduciary duties are merely a backstop for director behavior in the sense that only a fairly egregious failure will constitute a breach thereof. *See* Claudia A. Restrepo, *The Need for Increased Possibility of Director Liability: Refusal to Dismiss In re* Wells Fargo & Co. Shareholder Derivative Litigation, *a Step in the Right Direction*, 60 B.C. L. REV. 1689, 1693 (2019) ("The reality is that directors are rarely held personally liable for their actions (or inactions). Liability is usually only triggered in extreme circumstances." (citations omitted)); CHARLES R.T. O'KELLEY & ROBERT B. THOMPSON, CORPORATIONS AND OTHER BUSINESS ASSOCIATIONS: CASES AND MATERIALS 371 (2017) ("In reality, liability for breach of the duty of care has always been rare, and has occurred in circumstances where the director's conduct was egregious. Courts universally recognize that directors are presumptively not liable for breach of duty of care by applying the business judgment rule."). Though some even question whether fiduciary duties even have teeth as a backstop. *See, e.g.*, Lawrence E. Mitchell, *On the Direct Election of CEOs*, 32 OHIO N.U. L. REV. 261, 269 (2006) ("If the *Disney* board's conduct was sufficient to shield it from liability, then certainly we are entitled to (and ought to) ask the question as to why we have boards at all.").

[20] *See Cede & Co.*, 634 A.2d at 360 (showing that, for instance, shareholders seeking to hold directors liable for breach of fiduciary duty must, at the outset, produce enough evidence to rebut a presumption that the directors acted in accordance with their fiduciary duties).

[21] *See infra* note 26.

[22] As used herein, "heterogeneous boards" refers to boards with diversity of perspectives, and "homogeneous boards" refers to boards without diversity of perspectives.

[23] Deborah L. Rhode & Amanda K. Packel, *Diversity on Corporate Boards: How Much Difference Does Difference Make?*, 39 DEL. J. CORP. L. 377, 390 (2014) "("[T]he empirical research on the effect of board diversity on firm performance is inconclusive, and the results are highly dependent on methodology"."). *See also* Kim Krawiec, *Board Diversity In The News Again*, FACULTY LOUNGE (Sept. 1, 2018, 3:17 PM), [https://perma.cc/7UZN-B9GB] ("As an empirical matter, although some peer-reviewed studies do show improved corporate performance (or other benefits, e.g. better compliance with legal mandates) from having more women on boards, others show no effect or even a negative effect."); *infra* Part III (explaining the factors which muddle the processes and results of any empirical study of board composition's impact on firm performance).

relying on "group decision-making theory"[24] to evaluate whether there is a business case for regulating boardroom heterogeneity.[25]

Parts IV, V and VI of this Article then propound this Article's overall claim. Part IV argues that group decision-making theory applied to the boardroom demonstrates that a heterogeneous board makes better decisions because "diversity of perspectives" increases the amount of knowledge and skills present on, as well as utilized by, the board in performing its monitoring and managing functions.[26] Part V applies this claim to evaluate the current regulatory trend relating to boardroom heterogeneity: female director quotas. A board's compliance with a female director quota may increase its diversity of perspectives, but the increase is not a definite outcome because gender balance is an imprecise proxy for diversity of perspectives.

Given the benefits of boardroom heterogeneity described in Part IV, however, Part VI proposes a new proxy for diversity of perspectives in regulating boardroom heterogeneity: compliance with a "diversity index." The proposed diversity index defines six areas of heterogeneity that positively impact board decision-making, including gender, and sets a minimum aggregate heterogeneity score that a board must meet across those categories. This Part explains why each category is an appropriate proxy for diversity of perspectives and why such categories collectively will produce an optimal level of diversity of perspectives on a board, unlike a solely gender-based quota. This Part also presents potential costs of instituting such a measure, including uncertainty as to administrability given that a corporation's shareholders fundamentally have the right to elect its directors. On balance, and with flexibility inherent in the proposed model, the benefits of a diversity index-based quota outweigh its costs.

This Article will not discuss whether a quota is the appropriate mechanism for regulating board composition, nor whether corporate governance

[24] I use "group decision-making theory" herein as a blanket term for the aspects of behavioral economics, cognitive psychology, and work group performance that bear upon the conditions under which boards, or groups like boards, make good and bad decisions. *See infra* note 72.

[25] *See infra* note 72.

[26] *See infra* Part IV. Generally, "diversity of perspectives" is the presence of "a voice that may have had a different path to get to the board table than some of the others *at* the board table." Lissa L. Broome et al., *Dangerous Categories: Narratives of Corporate Board Diversity*, 89 N.C. L. REV. 759, 777–78 (2011) (citation omitted) (discussing the results of a conversation-analysis study of corporate directors and the prevalence of "the contention that demographic diversity yields a diversity of perspectives, which in turn leads to more productive boardroom discussion. . . . 'It means different experiences, different perspectives. That you can bring something to the table that they hadn't thought of before.'") (citation omitted)).

should steer away from shareholder primacy.[27] Assuming the quota model will continue to be pursued by governments as it has been, this Article recommends that we tailor it away from male-female heterogeneity to heterogeneity across various characteristics that collectively are a better proxy for diversity of perspectives.[28] In this way, corporate law can make its separation of ownership and control more efficient, thereby increasing shareholder value.[29]

II. THE BOARD'S ROLE

A corporation is a creature of state law, and as such, state law provides rules for its management. Some rules are mandatory and others are defaults that may be augmented. In general, states vest the sole authority to manage the business and affairs of a corporation in its board of directors, except for a few matters reserved to its shareholders (such as the election of directors).[30] The board performs this management responsibility itself or, more often, by appointing officers (for example, a CEO, CFO, and COO), to whom the board may delegate all except certain significant approvals and its fiduciary duties.[31] The extent to which the board delegates its responsibilities determines how active it is in managing the corporation; for some, the nondelegable aspects are the extent of the board's managing role.

Even if a board delegates all delegable responsibilities, it must still monitor the officers' performance thereof.[32] This monitoring responsibility is not precisely defined, but it is clear that directors' fiduciary duties require them

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[27] Shareholder value "has become the 'standard (and almost exclusive) measure for the performance of firms, and thus of boards.'" AARON A. DHIR, CHALLENGING BOARDROOM HOMOGENEITY 60 (2015) (quoting James A. Fanto et al., *Justifying Board Diversity*, 89 N.C. L. REV. 901, 902 (2011)). However, some reformers are challenging this from a normative perspective, and are gaining some ground. For example, since October 1, 2010, thirty-six U.S. states have enacted legislation that creates a new form of corporation that does abandon shareholder primacy, called the "Benefit Corporation." *See State by State Status of Legislation*, Post to *Benefit Corporation*, B LAB, [https://perma.cc/Y9J6-H8NU] (last visited Apr. 30, 2020).

[28] *See infra* Part VI.

[29] *Cf.* Lisa M. Fairfax, *The Bottom Line on Board Diversity: A Cost-Benefit Analysis of the Business Rationales for Diversity on Corporate Boards*, 2005 WIS. L. REV. 795, 841 (2005) ("When carrying out their responsibilities, board members have a fiduciary duty to take actions that are in the best interest of the corporation, and their failure to do so represents a breach of that duty. Many interpret this duty as an obligation to maximize shareholder profit. On one hand, economic rationales appear consistent with that kind of obligation because they suggest that increasing diversity on the board will result in enhanced profitability and corporate effectiveness.") (citations omitted) [hereinafter Fairfax, *The Bottom Line on Board Diversity*].

[30] *See, e.g.*, DEL. CODE ANN. tit. 8, § 141(a) (2020) (providing that a corporation's "business and affairs . . . shall be managed by or under the direction of a board of directors").

[31] *See* Andrew Verstein, *Upstream Liability, Entities as Boards, and the Theory of the Firm*, HARV. L. SCH. F. CORP. GOVERNANCE (June 24, 2019), [https://perma.cc/UJ8Y-WSBL].

[32] *See* E. Norman Veasey & Julie M.S. Seitz, *The Business Judgment Rule in the Revised Model Act, the* Trans Union *Case, and the ALI Project—A Strange Porridge*, 63 TEX. L. REV. 1483, 1501 (1985).

to ensure affairs are properly managed.[33] The duty of care requires directors to be adequately informed when acting for the corporation,[34] and the duty of loyalty requires them to act in the corporation's best interest.[35] Included therein (or, in some states, analyzed separately) is a duty to act in good faith, which directors can violate by acting in a way that demonstrates a conscious disregard for their responsibilities, "adopting a 'we don't care about the risks' attitude concerning a material corporate decision."[36] Though entitled to rely in good faith on reports from officers when making decisions for the corporation,[37] directors must not merely "rubber stamp" officers' proposals.[38] In other words, courts may impose liability on directors who fail to research, investigate, and ask challenging questions.[39]

The relative prominence of the monitoring and managing functions varies from corporation to corporation. Some scholars argue that the monitoring role is practically the only function for most modern public corporation boards.[40] However, even if a board delegates its powers to officers to the extent permitted, the board still must decide whether key transactions are

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[33] *Id.*

[34] Smith v. Van Gorkom, 488 A.2d 858, 872 (Del. 1985) (describing the duty of care determination as "whether the directors have informed themselves 'prior to making a business decision, of all material information reasonably available to them'") (quoting Aronson v. Lewis, 473 A.2d 805, 812 (Del. 1984)).

[35] Guth v. Loft, Inc., 5 A.2d 503, 510 (Del. 1939) (describing the duty of loyalty as "a rule that demands of a corporate officer or director, peremptorily and inexorably, the most scrupulous observance of his duty, not only affirmatively to protect the interests of the corporation committed to his charge, but also to refrain from doing anything that would work injury to the corporation, or to deprive it of profit or advantage which his skill and ability might properly bring to it, or to enable it to make in the reasonable and lawful exercise of its powers" and "[t]he rule that requires an undivided and unselfish loyalty to the corporation").

[36] *In re* Walt Disney Co. Derivative Litig., 906 A.2d 27, 62 (Del. 2006) (quoting *In re* Walt Disney Co. Derivative Litig., 825 A.2d 275, 289 (Del. Ch. 2003)).

[37] *See, e.g.*, DEL. CODE ANN. tit. 8, § 141(e) (2020).

[38] Jill E. Fisch, *Taking Boards Seriously*, 19 CARDOZO L. REV. 265, 266–67 (1997) (citing *In re* Caremark Int'l, Inc. Derivative Litig., 698 A.2d 959 (Del. Ch. 1996)) ("No longer can independent directors rubber-stamp management recommendations without mastering the financial details of proposed transactions.").

[39] *Id.*

[40] *See, e.g.*, Mitchell, *supra* note 9, at 33 ("[H]aving correctly eliminated all other possible functions of the board, Eisenberg was left with the monitoring model. Eisenberg was making an empirical claim about what boards actually did and a commonsense normative claim about the limits of what boards were capable of doing. He notes that the board is the only corporate organ that can perform the monitoring function . . . He also saw a decided virtue in the monitoring board as a means of controlling managerial power. Thus, there is a strong normative component to the monitoring model as well. Monitoring might be all the board could do, but if it was a necessary corporate function and the board was uniquely equipped to perform it, then the board ought to do it.").

good for business.[41] Accordingly, the claims in Parts IV through VI of this Article rest on the premise that all boards perform both monitoring and managing functions to some extent.

III. CURRENT REGULATIONS OF BOARDROOM HETEROGENEITY

Boardroom heterogeneity falls within the larger conversation on whether corporate governance should regulate board composition to enhance firm performance. Though concern with the divergence of the interests of shareholders and managers began to spread in the 1930s with the publication of *The Modern Corporation and Private Property*,[42] there was no significant interest in a board's impact on firm performance until the collapse of major corporations in the late 1960s and early 1970s exposed the inadequacy of then-current corporate governance laws for curtailing managerial opportunism.[43] This prompted reform efforts and reformers pointed fingers at "board capture," or the idea that directors who are employed by the corporation ("inside directors") may be unwilling to challenge senior executives for fear of repercussions in their employee capacities.[44]

Consequently, reform targeted board composition, seeking to replace inside directors with directors who are not directly employed by the corporation ("outside directors"). Reformers understood, however, that inside directors' ties to a corporation are a double-edged sword—simultaneously an invaluable source of insight into operations and an inherent impediment to a board's ability to disagree with senior executives. Thus, these reforms sought to balance inside directors with outside directors, explicitly focusing for the

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[41] Bainbridge, *supra* note 2, at 8 ("[W]hile boards rarely are involved in day-to-dy operational decisionmaking, most boards have at least some managerial functions.").

[42] *See* Mitchell, *supra* note 9, at 24 ("Corporate governance reform in the modern sense traditionally is traced from the publication in 1932 of what is widely considered its *ur*-text, Berle and Means's *The Modern Corporation and Private Property*. … The authors' principal concern was the economic, social, and political power the separation of ownership from control gave corporate directors." (footnotes omitted)).

[43] Mitchell, *supra* note 9, at 28, 30 ("The middle of the twentieth century was a time when U.S. industry unquestionably ruled the world. By the early 1970s, the conglomeration movement was rapidly bringing that development to a crisis point, and the stock market was faltering. The new conglomerates themselves presented problems for directors, including conflicts of interest among various conglomerate boards and an overwhelming complexity of worldwide business. The Watergate investigation's revelation of illegal corporate campaign contributions followed by the SEC's questionable payments investigations, with its discovery of corporate domestic and foreign bribery, often unknown to directors, also diminished confidence in corporate America and brought forth calls for reform." (footnotes omitted)).

[44] *Id.* at 31.

first time on a board's ability to hire, fire, and review performance of these executives (or a board's "monitoring role").[45]

The corporate scandals in the early 2000s further emphasized the need for a board designed to monitor and oversee senior executives. Scandals like Enron and WorldCom demonstrated the severity of the consequences of board passivity,[46] and thus regulating board composition for accountability's sake became a norm.[47] For example, the Sarbanes-Oxley Act of 2002 required corporations to have a certain number of "independent directors"—directors that are not employed by the corporation (like outside directors) nor have any other material financial (e.g., investment) or familial relationship to the corporation.[48] By 2007, the average board of a Fortune 1000 company was eighty percent outside directors and seventy-five percent independent directors.[49]

However, the independent director movement has not proved to be the end of history for board composition and accountability. Independent directors have continued to fail as monitors, at times seemingly as unwilling or

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[45] James D. Cox, *Managing and Monitoring Conflicts of Interest: Empowering the Outside Directors with Independent Counsel*, 48 VILL. L. REV. 1077, 1082 (2003) (noting that the "central task" of outside directors "is to monitor the performance of senior management, most particularly the chief executive officer"). For a brief discussion of this monitoring role, see *infra* Part II.

[46] U.S. SENATE, PERMANENT SUBCOMMITTEE ON INVESTIGATIONS OF THE COMMITTEE ON GOVERNMENTAL AFF., THE ROLE OF THE BOARD OF DIRECTORS IN ENRON'S COLLAPSE 3, 52 (2002), https://www.govinfo.gov/content/pkg/CPRT-107SPRT80393/pdf/CPRT-107SPRT80393.pdf ("The independence of the Enron Board of Directors was compromised by financial ties between the company and certain Board members. . . . A number of corporate governance experts contacted by the Subcommittee staff identified these financial ties as contributing to the Enron Board's lack of independence and reluctance to challenge Enron management.").

[47] *See, e.g.*, Nicola Faith Sharpe, *The Cosmetic Independence of Corporate Boards*, 34 SEATTLE U. L. REV. 1435, 1445–46 (2011).

> Many of the SEC's and SROs' reforms formalized the assumption that board independence would reduce executive mismanagement, and that proper oversight from an independent board would decrease the likelihood of future corporate failure. Subsequently, the New York Stock Exchange (NYSE) and National Association of Securities Dealers Automated Quotations (NASDAQ) enacted rules that were, in significant part, 'aimed to ensure the independence of directors of listed companies.

(internal citations omitted).

[48] Susan E. Reed, *Corporate Boards are Diversifying. The C-Suite Isn't.*, WASH. POST (Jan. 4, 2019, 3:06 PM), [https://perma.cc/898F-UX26]. *See* Sharpe, *supra* note 47, at 1446–47.

[49] Sharpe, *supra* note 47, at 1447 (citing KORN/FERRY INST., 34TH ANNUAL BOARD OF DIRECTORS STUDY, app. A (2008)); Jeffrey N. Gordon, *The Rise of Independent Directors in the United States, 1950-2005: Of Shareholder Value and Stock Market Prices*, 59 STAN. L. REV. 1465, 1473 (2007).

unable to challenge senior executives as inside directors.[50] Some attribute this failure to the cosmetic independence of the independent director, meaning that a director who qualifies as "independent" under corporate governance laws may still be quite beholden to senior executives.[51] Others argue that, even if independent directors are truly independent as intended, the benefit therefrom is outweighed by independent directors being occupied in demanding, full-time jobs elsewhere, which limits the time, information, and knowledge they can contribute to the board.[52] Regardless, it is clear independent directors are often captured by management or otherwise fail to effectively safeguard the company's assets for shareholder wealth maximization.[53]

To supplement the independence reforms, governments have started to regulate board composition by focusing on board diversity, defined as the incidence of women and people of color on a board.[54] For example, the U.S. Securities and Exchange Commission (SEC) adopted a disclosure rule relating to board diversity effective February 2010, citing "a meaningful relationship between diverse boards and improved corporate financial performance" as one of the reasons it adopted such a measure.[55] Under this rule, a public corporation must describe in its proxy statements "whether, and if so how, the nominating committee (or the board) considers diversity in identifying

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[50] James D. Westphal & Michael K. Bednar, *Pluralistic Ignorance in Corporate Boards and Firms' Strategic Persistence in Response to Low Firm Performance*, 50 ADMIN. SCI. Q. 262, 263 (2005) ("Yet there is considerable qualitative and anecdotal evidence that boards often fail to check executives' tendencies to persist with failing strategies, regardless of the number of outside directors on the board.").

[51] *See generally* Sharpe, *supra* note 47, at 1448–50 (discussing research of the psychological limitations on independent directors' ability to monitor).

[52] *See generally id.* at 1448, 1450–52 (discussing research of the practical limitations on independent directors' ability to monitor).

[53] *Cf. id.* at 1452 (arguing that, with respect to the independent director board reforms, "it is clear that there is something missing between the regulatory inputs and their desired outcomes");

> The conventional model operates on an assumption that if a particular input is added (i.e., more independent directors), a specific output will follow (i.e., firms that are less likely to fail and have better market performance). In light of the attributes of effective teams, adding more independent directors and committees composed of independent directors is not likely to improve firm performance. At best, cosmetic independence is an inadequate criterion for board membership. At worst, it impedes the board's ability to perform the actual work of monitoring.

Id. at 1456.

[54] Lisa M. Fairfax, *Board Diversity Revisited: New Rationale, Same Old Story?*, 89 N.C. L. REV. 855, 856 (2011) [hereinafter Fairfax, *Board Diversity Revisited*].

[55] Proxy Disclosure Enhancements, 74 Fed. Reg. 68, 343 (Dec. 23, 2009).

nominees for director."[56] However, this has not resulted in an increase in board diversity.[57] In fact,

> in direct response to the SEC rule, one company (which previously had made no disclosure with respect to diversity) stated that it *does not* consider diversity in evaluating potential directors because the company does not believe that diversity "is relevant to a person's qualifications to serve on the Board," nor does the company believe that the diversity of a person's background "significantly affect[s] a person's ability to contribute to [the] Board."[58]

Recently, some governments have begun to require board diversity by instituting quotas for female directors in the boardrooms of publicly traded firms.[59] In 2008, Norway instituted the first such quota, requiring its publicly traded firms' boards to consist of at least forty percent female directors, with dissolution as the sanction.[60] Over the following eight years, Belgium, France, Germany, Iceland, India, Israel, Italy, and Spain followed suit and imposed gender-based quotas on their publicly traded firms.[61] And in September 2018, California became the first U.S. state to do the same.[62]

With these requirements on the rise, the question of whether there is indeed a business case for boardroom heterogeneity is brought front and center.[63] Empirical examination therefor has produced inconclusive results.[64] "Quantitative studies typically test for a relationship between board diversity and various measures of corporate performance."[65] Some identify positive connections between heterogeneous boards and lower share return volatility,

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[56] Fairfax, *Board Diversity Revisited*, *supra* note 54, at 858–59.

[57] Fairfax, *Board Diversity Revisited*, *supra* note 54, at 858–59.

[58] *Id.* at 875 (citing *Corporate Board Diversity Scorecard*, CALVERT INVS. (Mar. 23, 2010)).

[59] DHIR, *supra* note 27, at 3.

[60] *Ten Years on from Norway's Quota for Women on Corporate* Boards, ECONOMIST (Feb. 17, 2018), https://www.economist.com/business/2018/02/17/ten-years-on-from-norways-quota-for-women-on-corporate-boards.

[61] WORLD BANK GROUP, WOMEN, BUSINESS AND THE LAW 2016: GETTING TO EQUAL 11 (2015).

[62] Vanessa Fuhrmans, *California Becomes First State to Mandate Female Board Directors*, WALL ST. J. (Sept. 30, 2018, 6:13 PM), https://www.wsj.com/articles/california-becomes-first-state-to-mandate-female-board-directors-1538341932.

[63] *See generally* Fairfax, *Board Diversity Revisited*, *supra* note 54, at 860–66.

[64] Rhode & Packel, *supra* note 23, at 390. *See also* Krawiec, *supra* note 20.

[65] Broome et al., *supra* note 26, at 765.

generation of surplus profits and higher share appraisal;[66] others identify negative connections or conclude that no such connections exist.[67] Overall, the consensus is that the direction of causation with respect to any correlation between boardroom heterogeneity and firm value cannot be empirically determined.[68]

The lack of empirical consensus is unsurprising. In general, when "examining directly the correlation between board composition and overall firm performance[,] . . . [f]irm performance must be measured over a long period of time, which leads to noisy data."[69] And when comparing data among firms, "[t]easing out the effects of board composition from the many other factors that affect performance is economically and econometrically difficult []" itself.[70] Further, a board's effectiveness cannot be empirically studied on a task-by-task basis like simple work groups, because unlike making widgets, a board's output is entirely cognitive in nature.[71] Thus, empirical data is a poor indicator of whether any relationship between board composition and firm performance in fact exists.

Instead, many scholars have taken to the application of group decision-making theory, examining the attributes of successful teams and analyzing

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[66] *See* DHIR, *supra* note 27, at 63 (reviewing the literature with respect to analyses of Fortune 500 companies that finds positive relationship between diversity and performance); *see, e.g.*, Niclas L. Erhardt et al., *Board of Director Diversity and Firm Financial Performance*, 11 CORP. GOVERNANCE 102, 106–07 (2003) (finding a direct correlation between the percentage of Caucasian females plus ethnic minority directors and both the "Return on Equity" and the "Return on Assets" of a corporation).

[67] Broome et al., *supra* note 26, at 766–67.

[68] *Id.* at 765–66 (citing Sanjai Bhagat & Bernard Black, *The Non-Correlation Between Board Independence and Long-Term Firm Performance,* 27 J. CORP. L. 231, 237 (2002)) ("Board composition could affect firm performance, but firm performance can also cause the firm to change its board composition."); Renée B. Adams & Daniel Ferreira, *Women in the Boardroom and Their Impact on Governance,* 94 J. FIN. ECON. 291, 306 (2009) (referencing studies finding a positive relationship between board diversity and corporate performance, but concluding that they do not fully address problems of endogeneity and reverse causation, rendering causal interpretations difficult)).

[69] Sanjai Bhagat & Bernard Black, *The Uncertain Relationship Between Board Composition and Firm Performance*, 54 BUS. LAW. 921, 923–24 (1999). *But see* Fairfax, *Board Diversity Revisited*, *supra* note 54, at 863 ("Regardless of the mixed nature of the evidence, the empirical record is likely a net positive for diversity advocates and the business case. To be sure, there is considerably more work to be done in this area.").

[70] Gordon, *supra* note 49, at 1500.

[71] Daniel P. Forbes & Frances J. Milliken, *Cognition and Corporate Governance: Understanding Boards of Directors as Strategic Decision-Making Groups*, 24 ACAD. MGMT. REV. 489, 492 (1999) ("Because of the strictly confidential and highly interpretive nature of board activity, it is likely to be extremely difficult for researchers to measure the task performance of boards in ways that are both reliable and comprehensive.").

boards' effectiveness through these lenses.[72] Such scholars consider how board composition and structuring affect agency costs and a board's effectiveness in its two main functions, monitoring and management. After all, a board is fundamentally a social group,[73] and agency costs may be exacerbated or limited by internal team governance structures.[74] So, the more effective a board is *on the group level*, the more effective it is at achieving the group's charge.[75]

IV. EFFECTIVE GROUP DECISION-MAKING AND HETEROGENEITY

As regulations mandating boardroom heterogeneity become more common, the business case therefor is under increasing scrutiny. As discussed in Part III, there is reason to analyze the business case for boardroom heterogeneity using findings from the behavioral sciences. Thus, this Part IV applies group decision-making theory to the boardroom to examine whether a board's monitoring and managing functions are better performed by a heterogeneous group or a homogeneous group. If better performed by a heterogeneous group, regulations requiring boardroom heterogeneity will increase firm performance, and, if properly drafted, are the structural change for which corporate governance reformers have been searching to reduce agency costs and improve board decision-making for the benefit of shareholders.

Monitoring and managing both require directors to solve abstract problems that do not have a single correct solution.[76] Accordingly, the relevant aspects of group decision-making are those of a group's performance in

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[72] *See, e.g.*, Bainbridge, *supra* note 2, at 2–3; Sharpe, *supra* note 47, at 1451–56 (applying organizational behavior theory to evaluate the board reform with respect to independent directors); Ronald C. Anderson et al., *The Economics of Director Heterogeneity*, 40 FIN. MGMT. 5, 6 (2011); Forbes & Milliken, *supra* note 71, at 489–490 ("[I]n order to understand fully the performance implications of board characteristics[,] . . . we propose a model of strategic decision-making effectiveness in U.S.-based boards that bridges some of the gaps that currently characterize much theorizing about boards. We begin by considering the factors that characterize boards as decision-making groups and by discussing some criteria that distinguish effective boards from ineffective ones. Then, drawing on the literature on small-group decision making, we define and develop three critical board processes and two board-level outcomes that we believe serve as mediators of the relationships between commonly studied aspects of board demography and firm performance."); James D. Cox & Harry L. Munsinger, *Bias in the Boardroom: Psychological Foundations and Legal Implications of Corporate Cohesion*, 48 L. CONTEMP. PROBS. 83, 84–85 (1985).

[73] DHIR, *supra* note 27, at 11.

[74] *See* Bainbridge, *supra* note 2, at 10.

[75] *See* Forbes & Milliken, *supra* note 71, at 492 ("[T]he effectiveness of boards is likely to depend heavily on social-psychological processes, particularly those pertaining to group participation and interaction, the exchange of information, and critical discussion.").

[76] *See* Bainbridge, *supra* note 2, at 17 ("Most board decisionmaking does not involve problems with a single correct solution, let alone a self-confirming one. Instead, relevant experiments are those requiring the creative exercise of evaluative judgment with respect to complex problems having a range of solutions."); Forbes & Milliken, *supra* note 71 at 491–92 ("[B]oards face complex, multifaceted tasks that involve strategic-issue processing.").

complex problem-solving. It is well-settled that the more knowledge and skills available to, and utilized by, a group, the better it performs complex tasks, especially tasks without a self-confirming solution.[77] It is important to underscore that this premise of group performance of a complex task is two-fold, in that (1) the sheer amount of resources (relevant knowledge and skills) available to the group and (2) the percentage of such resources utilized by the group are independent inquiries and equally affect group performance.

For illustrative purposes, imagine two groups, A and B. Group A has fifty percent of the relevant knowledge and skills at its disposal, and it utilizes one hundred percent of such knowledge and skills in its performance of the task at hand. Group B has one hundred percent of the relevant knowledge and skills at its disposal, but it only utilizes fifty percent of them. Groups A and B thus perform the task equally, albeit for different reasons. Thus, this Part IV compares heterogeneous boards and homogeneous boards in two respects: first, whether one or the other has more of the knowledge and skills relevant to board performance available to it in Part IV(A), and second, whether one or the other is able to utilize more of its knowledge and skills in Part IV(B). Parts V and VI further examine the cause of diversity of perspectives and various proxies therefor that a regulation may use to foster it on boards, but in general, diversity of perspectives exists when directors on a board come from different backgrounds.

A. Presence of Knowledge and Skills

An analysis of whether heterogeneous boards or homogeneous boards have more of the knowledge and skills relevant to its performance requires us to define the skills that are relevant to board performance. The knowledge and skills relevant to board performance are those that pertain to its tasks. As discussed in Part II, a board's essential tasks are managing the corporation and monitoring its senior executives.[78] Thus, the relevant inquiry here is whether heterogeneous boards have a greater volume of management and monitoring information at their disposal than homogeneous boards.

Managing and monitoring require two types of information. One is "functional-area knowledge," which spans the traditional domains of business and the firm's industry, including accounting, finance, marketing and

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[77] Groups outperform even their best member at abstract problem-solving, and the extent of such outperforming increases with the complexity of the problem. *See* Gayle W. Hill, *Group Versus Individual Performance: Are* N + *1 Heads Better than One?*, 91 PSYCHOL. BULL. 517, 520–22 (1982) (literature review). *See also* Forbes & Milliken, *supra* note 71, at 495–96 ("If boards are to perform their control task effectively, they must integrate their knowledge of the firm's internal affairs with their expertise in the areas of law and strategy. In addition, if boards are to perform their service task effectively, they must be able to combine their knowledge of various functional areas and apply that knowledge properly to firm-specific issues. In both cases board members must elicit and respect each others' expertise, build upon each others' contributions, and seek to combine their insights in creative, synergistic ways.").

[78] *See supra* Part II.

law.[79] The other is "firm-specific knowledge," which refers to detailed information about the firm and an intimate understanding of its operations and internal management issues.[80] It is clear that any board is *capable* of possessing each type of information, regardless of its heterogeneity, or lack thereof.[81] Rather, the question is whether a heterogeneous board inherently has more such information than a homogeneous board (or vice versa); if so, a regulation that encourages boards to adopt that composition is a positive development for corporate governance.[82]

With respect to functional area knowledge, homogeneous boards are homogeneous in part because "qualified to hold a board seat" is narrowly defined as "has prior executive-level experience"[83]—an area where white males are vastly overrepresented.[84] Indeed, one of the most common explanations of the lack of diversity on corporate boards is the lack of diverse persons with prior executive-level experience (often referred to as the "pool problem").[85] By forcing corporations to recruit more directors outside of the C-suite, the

[79] Forbes & Milliken, *supra* note 71, at 495.

[80] *Id.*

[81] In other words, logically speaking, it is possible for a group of ten persons to be homogeneous and also possess firm-specific and functional-area knowledge, and it is possible for a group of ten persons to be heterogeneous and also possess firm-specific and functional-area knowledge.

[82] *Cf. The Nature of Law*, STANFORD ENCYCLOPEDIA OF PHILOSOPHY (Aug. 22, 2019), https://plato.stanford.edu/entries/lawphil-nature ("Law, however, is also a normative social practice: it purports to guide human behavior, giving rise to reasons for action.").

[83] *See* Fairfax, *The Bottom Line on Board Diversity*, *supra* note 29, at 817 ("Traditionally, . . . [nominating] committees have drawn from a very elite pool—tending to select people who are CEOs or former CEOs of major corporations."); DHIR, *supra* note 27, at 40 ("CEO experience has become 'a quick litmus test for qualified board candidates' and 'common wisdom now holds that CEO experience is a minimum qualification for a board seat'. . . .") (quoting *The "Think Director, Think CEO" Myth: Fortune 500 Companies*, CATALYST (Sept. 27, 2012), https://www.catalyst.org/research/the-think-director-think-ceo-myth-fortune-500-companies/).

[84] For example, a study by the Alliance for Board Diversity and Deloitte found that, of 1,033 new board appointments at Fortune 500 companies last year, more than 80% of the appointees were white, and about 60% of that group were men. *See* Elizabeth Olson, *Slow Gains for Women and Minorities on Boards of Big U.S. Firms, Study Says*, N.Y. TIMES (Jan. 15, 2019), https://www.nytimes.com/2019/01/15/business/women-minorities-corporate-boards.html. *See also* Fairfax, *The Bottom Line on Board Diversity*, *supra* note 29, at 816 ("[R]etired executives represent the most prevalent type of director: 95% of corporations have such a director. Not many people of color fit this profile. In fact, there are only three black people serving as a CEO of a *Fortune* 500 company, and there have been only eight in total."); DHIR, *supra* note 27, at 37–39 (noting, for example, "In the United States, . . . [w]omen, who make up a slim majority of the population, occupy slightly less than 17 percent of spots in Fortune 500 boardrooms and just 3.1% of board chair positions.").

[85] *See* DHIR, *supra* note 27, at 38 ("A 2012 study by executive search firm Heidrick & Struggles surveyed 1,000 board members from 58 countries. It found that . . . [m]en tend to attribute the gender imbalance to a pool problem—the dearth of women in executive-level positions.").

functional areas over which a board is spread will broaden.[86] Thus, heterogeneous boards are inherently structured to have more functional-area knowledge than homogeneous boards.

With respect to firm-specific knowledge, it is undisputed that an inside director is inherently a more valuable source thereof than an outside director. And, if firms are forced to broaden their definition of who is qualified to hold a board seat, one of the easiest ways for a firm to identify qualified, diverse candidates may be from within its own workforce. Thus, regulating boardroom heterogeneity might increase the incidence of insiders on a board, thereby directly increasing the amount of firm-specific knowledge available to it as well.

Though insiders directly bring firm-specific knowledge to the table, a board can increase its firm-specific knowledge through outside directors by increasing the number of lenses through which it, on the group level, perceives information. In other words, diversity of perspectives can multiply a board's existing firm-specific knowledge by drawing connections and reaching conclusions that it would not otherwise have drawn and reached. For example, Cheryl Wade argues that corporate directors and managers, who are overwhelmingly white and male, fail to pay appropriate attention to compliance with antidiscrimination law, which can be incredibly costly to the corporation.[87] Or, compare the assessment of a firm's sexual harassment reporting mechanisms by a male inside director and a female outside director: the male insider may bring more knowledge about the reporting mechanics themselves, but the female outsider brings crucial insight as to whether such mechanisms are working.[88] Overall, by increasing the lenses through which raw information is processed, increased diversity of perspectives thus reduces the normal information processing redundancies that homogeneous boards experience.

Though the idea that every person sees the world in his or her own way may speak for itself as common sense, the research of biosemiologist Jakob

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[86] *Cf.* STEPHEN M. BAINBRIDGE, CORPORATE GOVERNANCE AFTER THE FINANCIAL CRISIS 87 (2012) ("As applied to the corporate context, more diverse boards with strong outsider representation likely contain more specialists, and therefore should get greater benefits from specialization.").

[87] Cheryl L. Wade, *Corporate Governance as Corporate Social Responsibility: Empathy and Race Discrimination*, 76 TUL. L. REV. 1461, 1461–62 (2001), *reprinted in* CORPORATE GOVERNANCE: LAW, THEORY, AND POLICY 443, 443–44 (Thomas W. Joo ed., 2d ed. 2010).

[88] *Cf.* Eliza G.C. Collins & Timothy B. Blodgett, *Sexual Harassment…Some See It…Some Won't*, HARV. BUS. REV. (Mar. 1981), https://hbr.org/1981/03/sexual-harassmentsome-see-itsome-wont ("Men and women generally agree in theory on what sexual harassment is but disagree on how often it occurs. Nearly two-thirds of the men, compared with less than one-third of the women, agree (or partly agree) with the statement, 'The amount of sexual harassment at work is greatly exaggerated.'").

von Uexküll ties the idea to science.[89] He theorized that every species (and within the human species, every human) has a unique biology from nature and nurture, which creates a unique lens through which the species (or human) perceives the world.[90] In other words, each species or human subjectively perceives its surroundings and the information available therefrom.

Von Uexküll's research relies on the properties of sensors and feedback loops, but, following in the footsteps of other recent work premised thereon, this Article will briefly explain by analogy.[91] For example, a frog's biology only allows it to perceive things in its environment that move—thus, "a frog surrounded by dead flies will starve to death."[92] However, pet frogs eat dead flies, because the pet owner moves the dead flies in feeding the frog. This cooperation, so to speak, is symbiotic—combining the frog's lens with the frog owner's lens to enable the frog to identify a dead fly as a food source. Though crude, this example demonstrates a crucial point: when two people working together have different backgrounds, the mosaic of information available to them as a team is necessarily broader than if their backgrounds are the same.

Of course, information breadth is not always helpful to a board if it comes at the expense of information depth. For example, consider a team

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[89] Jakob von Uexküll, *A Stroll Through the Worlds of Animals and Men: A Picture Book of Invisible Worlds*, INSTINCTIVE BEHAVIOR: THE DEVELOPMENT OF A MODERN CONCEPT (Claire H. Schiller ed., trans., 1957), *reprinted in* 89 SEMIOTICA 319 (1992). *See generally* ROBERT BURTON, M.D., ON BEING CERTAIN: BELIEVING YOU ARE RIGHT EVEN WHEN YOU'RE NOT (2008) (discussing a more modern take on the biological constraints on perception).

[90] In von Uexküll's work, his shorthand for this concept is "Umwelt." Uexküll, *supra* note 89, at 320 ("[A]ll that a subject perceives becomes his *perceptual world* and all that he does, his *effector world*. Perceptual and effector worlds together form a closed unit, the *Umwelt*.").

[91] *See, e.g.*, Robert Burton, *Robert Burton on Being Certain*, THE LIBRARY OF ECONOMICS AND LIBERTY (May 13, 2019), http://www.econtalk.org/robert-burton-on-being-certain/ ("And, if you think about it in the very simplest of terms, let's say you and your wife are standing side by side watching a car accident. And your inputs are *exactly* the same. You have the same angle, as if your eyes are superimposed upon hers. And, once it gets into your brain, all bets are off as to how it's perceived. What you see at the retinal level is not what your brain interprets at the conscious level. It goes through various layers, hierarchical layers, in the visual cortex and then throughout connecting neural networks. And so, your perception is not my perception. It's why your 'red' isn't my 'red.' Even if we see the same angstrom length, incoming light, it isn't the same.").

[92] Graydon Wetzler, *Wayfinding* re/dicto, *in* SURVEILLANCE, ARCHITECTURE AND CONTROL: DISCOURSES ON SPATIAL CULTURE 295, 315 (Susan Flynn & Antonia Mackay eds., 2019) ("A frog hunts on land by vision. He escapes his enemies mainly by seeing them. His eyes do not move, as do ours, to follow prey, attend suspicious events, or search for things of interest. . . . The frog is also free from care about whatever in its surround does not move. The frog's eye only tells the frog's brain either to escape enemies (universally large moving things), to snap at flies (universally small moving things), or do nothing. Consequently, when confronted with a sufficiently small moving stimulus, the frog snaps regardless of what it is. Not conducting itself to what doesn't move, a frog surrounded by dead flies will starve to death.") (internal quotations omitted) (quoting J. Y. Lettvin et al., *What the Frog's Eye Tells the Frog's Brain*, 47 Proceedings of the IRE 1940, 1940–51 (1959)).

tasked with building a jet aircraft in a commercially reasonable amount of time. No matter how heterogeneous the team's background is, it will surely fail without at least one aerospace engineer. And the more aerospace engineers added to the team, the more effective the team will be—but only to a certain point. Studies have found that a source of divergent thinking (in other words, a dissenter) is beneficial to group performance, even when the dissenting ideas are objectively inaccurate.[93] This is because the dissent is contagious, causing the other persons to critically consider their positions and thereby increasing the group's overall accuracy, despite the one source of inaccuracy.[94] Therefore, diversity of perspectives on a board, in addition to the individual knowledge of each director as discussed above, is itself the presence of a relevant skill at the group level to a certain extent.

To be sure, these arguments presume there are enough qualified, diverse director candidates so boards avoid sacrificing necessary functional-area and firm-specific knowledge. For many commentators, this is a concern.[95] However, in recent years, the supermajority of new board appointees are predominately white,[96] while the majority of master's and professional-practice degrees in the fields of business and management are conferred to persons of color.[97] Granted, the average freshly-minted MBA is likely not immediately qualified to serve as a Fortune 500 director. But U.S. MBA programs have conferred more than eighty percent of degrees to white persons for about twenty years.[98] Thus, there is reason to believe that the incidence of diverse persons on boards is not commensurate with the incidence of diverse persons

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[93] CHARLAN NEMETH, IN DEFENSE OF TROUBLEMAKERS: THE POWER OF DISSENT IN LIFE AND BUSINESS 63 (2018).

[94] *Id.*

[95] They argue that the pool of qualified minority directors is small; thus, a regulation requiring heterogeneity wouldn't increase the knowledge and skills present on many boards because many boards wouldn't be able to find qualified candidates (i.e., may need to take a hit to knowledge and skills to meet any such requirement). *Cf.* BAINBRIDGE, *supra* note 86, at 104 ("[T]he need to find independent directors put an emphasis on avoiding conflicted interests at the expense of competence. In other words, the problem was not just that the new definition of independence excluded many candidates with industry expertise, it was also that the emphasis on objective indicia of conflicts dominated the selection process to the exclusion of indicia of basic competence and good judgment.").

[96] More than eighty percent of new board appointees in 2018 at Fortune 500 companies were white. Olson, *supra* note 84.

[97] From 1995 to 2015, fifty-two percent of master's and professional degrees in the fields of business and management were conferred to persons of color. *Racial/Ethnic Distribution of Advanced Degrees in the Humanities,* AM. ACAD. OF ARTS & SCI., https://www.humanitiesindicators.org/content/indicatordoc.aspx?i=46 (last visited May 1, 2020).

[98] Nat'l Ctr. for Educ. Statistics, *Table 323.20. Master's Degrees Conferred by Postsecondary Institutions, by Race/Ethnicity and Sex of Student: Selected Years, 1976-77 Through 2016-17*, INST. EDUC. SCI., [https://perma.cc/TB95-5G3E] (last visited May 1, 2020). Cornell University's MBA program, for example, reported that racial minorities comprised 19% of its 2002 graduating class. Melissa Korn, *Business Schools Short on Diversity*, WALL ST. J. (July 4, 2012, 7:14 PM), https://www.wsj.com/articles/SB10001424052702304830704577496901585090874.

who are qualified to serve. It appears that the pool problem is not a problem of diverse, qualified individuals, but rather a problem on the demand side only.[99]

In addition, these arguments ignore the inherent costs imposed on a company to identify candidates from a new pool. The cost concern may not be manageable for small companies, and for that reason, this Article proposes we limit any regulation of boardroom heterogeneity to publicly traded corporations. Public corporations (even relatively small ones) are generally employing professional search firms to seek director nominees for board elections, according to recent studies.[100] Thus, if we limit the application of boardroom heterogeneity regulations to public companies, the director recruitment process would change solely with respect to for whom the outsourced search firms are told to search.

B. Utilization of Knowledge and Skills

As discussed in the preamble to Part IV, a board's ability to take advantage of the resources available to it impacts its performance. Building upon the example with hypothetical groups A and B, imagine each group is given the same, singular task: buying an apple. The apple costs two dollars.[101] Group A is given three dollars and group B is given five dollars; thus, group A has 150% of the resources relevant to the task and group B has 250% of the resources relevant to the task. When it comes time to perform (buy the apple), group A can only find two dollars and group B can only find one dollar. In other words, Group A can utilize 66.66% of its resources (two out of three dollars) and Group B can utilize 20% of its resources (one out of five dollars). The product of Group A's resource level (150%) and utilization rate (66.66%) yields performance of 100% of the task. The product of Group B's resource level (250%) and utilization rate (20%) yields performance of 50% of the task (ignoring that buying an apple for two dollars is binary—it either is or is not done). Even though group B had the upper hand in resource availability, group A outperformed group B. In the same way, no matter how well-equipped a board is with functional-area knowledge and firm-specific knowledge, a low utilization rate will cause it to perform poorly.

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[99] *Cf.* Fairfax, *Board Diversity Revisited*, *supra* note 54, at 881 ("[T]he fact that corporations gravitate toward board members with particular backgrounds and experience is a function of custom rather than any legal rules. From this perspective, because the pool problem stems from custom rather than legal regimes, one may question the legitimacy of the problem.").

[100] A 2019 study of corporate board practices in the Russell 3000 and S&P 500 reported that the "engagement of outside professionals in board searches has become a widely common practice, including among smaller companies" and "the majority of companies [on both indexes] disclose using a professional search firm to seek director nominees for board elections." Matteo Tonello, Corporate Board Practices in the Russell 3000 and S&P 500, at 32 (2019), [https://perma.cc/CX9Y-ZQFB].

[101] It's organic.

An analysis of a board's utilization rate is, at its core, a question of whether there is anything impeding the board from fully employing its resources. For example, with respect to groups A and B buying an apple, if group A never had access to any money, group B would always perform at least equally as well as group A despite its lower utilization rate. In other words, to avoid commingling the analysis here with that in Part IV(A), the question in this Part IV(B) is framed as a weighing of impediments: do heterogeneous boards or homogeneous boards face more impediments to information utilization?

The analysis in this Part IV(B) by explaining the most substantial impediments to a board's information utilization (groupthink and cognitive biases) and analyzing the relative susceptibilities thereto of homogeneous and heterogeneous boards.[102] As described in Part IV(B)(1), truly heterogeneous boards are generally less susceptible to these impediments than homogeneous boards because heterogeneity's diversity of perspectives causes cognitive conflict in the boardroom.[103] Part IV(B)(2) considers the potential attendant costs of cognitive conflict (reduced decision-making speed and trust), weighs them against the benefit to be gained from cognitive conflict, and finds that a board under cognitive conflict conditions is generally better-equipped to utilize its knowledge and skills than a board which is not.[104] And because cognitive conflict is generally present on heterogeneous boards and absent from homogeneous boards,[105] homogeneous boards face more impediments to information utilization than heterogeneous boards.

1. Groupthink and Cognitive Biases

Groupthink is the most serious impediment to a board's resource utilization rate.[106] Generally, groupthink is the condition in which a group subconsciously prioritizes group consensus and cohesion at the expense of more legitimate goals.[107] Applied to corporate governance, groupthink is an issue on a board when directors strive for consensus and cohesion at the expense

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[102] *See infra* Part IV(B)(1).

[103] *See id.*

[104] *See infra* Part IV(B)(1).

[105] *See infra* Part IV(B)(2). *Cf.* Langevoort, *infra* note 111, at 439 ("One reason for having a sizable number of independent directors on the board is to create a critical mass of mutual support for resisting the centripetal pressures of cognitive conformity.").

[106] *Cf.* Bainbridge, *supra* note 2, at 32 ("The most significant group bias for our purposes, however, is the 'groupthink' phenomenon.").

[107] IRVING L. JANIS, GROUPTHINK: PSYCHOLOGICAL STUDIES OF POLICY DECISIONS AND FIASCOES 9 (2d ed. 1983) ("A mode of thinking that people engage in when they are deeply involved in a cohesive in-group, when the members' strivings for unanimity override their motivation to realistically appraise alternative courses of action.").

of shareholder wealth maximization.[108] This impedes a board's information utilization because directors suffering from groupthink will limit information gathering (in amount and/or viewpoint) to avoid bringing to light information that would lead to a divisive conclusion.[109] In a sense, groupthink conditions on a board create a conflict of interest between directors and shareholders—the best interest of the board is cohesion, while the best interest of shareholders is return on investment.[110]

Groupthink may occur on both heterogeneous and homogeneous boards.[111] This is because board cohesion is the major antecedent condition of groupthink,[112] and board cohesion arises from emotional ties among directors, which emotional ties can occur on both heterogeneous and homogeneous boards.[113] However, these emotional ties are more likely to occur when directors come from similar backgrounds,[114] feel beholden to other directors for their respective nominations to the board,[115] and/or believe

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[108] *Compare id.*, *with* DHIR, *supra* note 27, at 60 (explaining that shareholder wealth maximization has become the standard measure for the performance of boards).

[109] *See* JANIS, *supra* note 107, at 9; Bainbridge, *supra* note 2, at 32 ("The desire to maintain group cohesion trumps the exercise of critical judgment. Adverse consequences of groupthink thus include failing to examine alternatives, failing to be either self-critical or evaluative of others, and being selective in gathering information."). For example, Warren Buffet, in his 2003 letter to Berkshire Hathaway shareholders in the wake of the Enron and WorldCom scandals, wrote, "[t]oo often I was silent when management made proposals that I judged to be counter to the interests of shareholders,"' noting that "'collegiality trumped independence."' Deborah Adamson, *Buffett Chides Corporate Boards*, MARKETWATCH (Mar. 8, 2003, 3:59 PM), [https://perma.cc/9AGZ-HXK6].

[110] *See supra* Part V(B)(1) (explaining the conflict of interest inherent in the separation of ownership of control).

[111] *See* Bainbridge, *supra* note 2, at 32 ("Boardroom culture encourages groupthink. Boards emphasize politeness and courtesy at the expense of oversight."); Donald C. Langevoort, *The Human Nature of Corporate Boards: Law, Norms, and the Unintended Consequences of Independence and Accountability*, *in* CORPORATE GOVERNANCE: LAW, THEORY, AND POLICY 433, 433 (Thomas W. Joo ed., 2d ed. 2010) ("The work of the board prizes consensus, not conflict.").

[112] *See* Paul't Hart, *Irving L. Janis' Victims of Groupthink*, 12 POL. PSYCH. 247, 251 (1991) ("Groupthink can be considered an anomalous branch on the broad tree of research on group cohesiveness and group performance that constitutes a substantive body of knowledge within group dynamics. The cohesiveness of decision-making groups is the crucial linchpin in Janis's own depiction of the dynamics of groupthink. In fact, it is the sole group-level factor that he singles out as a substantive, independent cause of groupthink.").

[113] Akshaya Kamalnath, *Gender Diversity as the Antidote to 'Groupthink' on Corporate Boards*, 22 DEAKIN L. REV. 85, 96–97 (2017).

[114] They arise when a director feels personally similar to another director. *See, e.g.*, BAINBRIDGE, *supra* note 86, at 84–85 ("When their fellow directors get into trouble, the reaction of these nominally independent directors may be one of leniency, motivated by a 'there but for the grace of God go I' empathy.") (quoting Zapata Corp. v. Maldonado, 430 A.2d 779, 787 (Del. 1981)).

[115] *See* Kamalnath, *supra* note 113, at 97 ("This cohesion is a result of both the selection process for board members and the motives of directors in serving on the board. . . . [B]oard members (including outside directors) often feel beholden to the CEO for being appointed.").

nominations to the board are based on matters like compatibility and fit.[116] Because each of the foregoing is more likely on a homogeneous board than a heterogeneous board, a homogeneous board is more likely to suffer from groupthink than a heterogeneous board.[117] That said, not every cohesive board is doomed to suffer from groupthink.[118] Though homogeneous directors are more prone to cohesion,[119] they certainly may still harbor animosity for one another[120] or temper the risks posed by their cohesion with "operating procedures that facilitate critical inquiry."[121]

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[116] Langevoort, *supra* note 111, at 433 ("Studies of corporate boards of directors often observe team-like traits. Invitations to the board are based heavily on matters like compatibility and 'fit.'").

[117] *Compare* Kamalnath, *supra* note 113, at 104 (citing Henri Tajfel & John Turner, *The Social Identity of Inter-Group Behavior*, *in* PSYCHOLOGY AND INTERGROUP RELATIONS (S. Worchel & W. Austin eds., 2nd ed. 1986); Katherine Williams & Charles O'Reilly, *Forty Years of Diversity Research: A Review*, *in* RESEARCH IN ORGANISATIONAL BEHAVIOR (B.M. Staw & L.L. Cummings eds., 1998)) ("Studies have also found that homogenous boards are more cooperative and experience fewer emotional conflicts."), *with* F. Scott Kieff & Troy A. Paredes, *The CEO and the Board: On CEO Overconfidence and Institutionalizing Dissent in Firms*, *in* PERSPECTIVES ON CORPORATE GOVERNANCE 96 (F. Scott Kieff & Troy A. Paredes eds., 2010) ("Unless one has considered alternatives, one has a closed mind. This, above all, explains why effective decision makers deliberately disregard the second major command of the textbooks on decision making and create dissension and disagreement, rather than consensus. Decisions of the kind the executive has to make are not made well by acclamation. They are made well only if based on the clash of conflicting views, the dialogue between different points of view, the choice between different judgments. The first rule in decision-making is that one does not make a decision unless there is disagreement.") (quoting PETER F. DRUCKER, THE EFFECTIVE EXECUTIVE 148 (1985)).

[118] *See* JANIS, *supra* note 107, at 12 ("The concept of groupthink pinpoints an entirely different source of trouble, residing neither in the individual nor in the organizational setting. Over and beyond all the familiar sources of human error is a powerful source of defective judgment that arises in cohesive groups—the concurrence-seeking tendency, which fosters overoptimism, lack of vigilance, and sloganistic thinking about the weakness and immorality of out-groups. This tendency can take its toll even when the decision-makers are conscientious statesmen trying to make the best possible decisions for their country and for all mankind. I do not mean to imply that all cohesive groups suffer from groupthink, though all may display its symptoms from time to time. . . . On the contrary, a group whose members have properly defined roles, with traditions and standard operating procedures that facilitate critical inquiry, is probably capable of making better decisions than any individual in the group who works on the problem alone.").

[119] *Cf.* BAINBRIDGE, *supra* note 86, at 84–85 ("Directors tend to be white males, educated at top 20 schools, and share a host of other social ties. When their fellow directors get into trouble, the reaction of these nominally independent directors may be one of leniency, motivated by a 'there but for the grace of God go I' empathy.") (quoting Zapata Corp. v. Maldonado, 430 A.2d 779, 787 (Del. 1981)).

[120] *Cf.* Karen A. Jehn, *A Multimethod Examination of the Benefits and Detriments of Intragroup Conflict*, 40 ADMIN. SCI. Q. 256, 258 (1995) (differentiating between "[r]elationship conflict . . .. which typically includes tension, animosity, and annoyance" and "[t]ask conflict," which "exists when there are disagreements among group members about the content of tasks being performed, including differences in viewpoints, ideas, and opinions").

[121] JANIS, *supra* note 107, at 12.

Truly heterogeneous boards, however, are inherently structured to facilitate critical inquiry, because diversity of perspectives causes cognitive conflict in the boardroom.[122] Cognitive conflict is "disagreements about the content of tasks being performed, including differences in viewpoints, ideas and opinions,"[123] which prevents groupthink by fostering an environment "characterized by a task-oriented focus and a tolerance of multiple viewpoints and opinions."[124] In other words, cognitive conflict nurtures a healthy skepticism on boards, which in turn ensures proposals are thoroughly vetted.

The second major impediment to board information utilization is cognitive bias, which may impede information utilization even if a board is not susceptible to groupthink, though the effects of groupthink and cognitive biases are similar. Like groupthink, cognitive biases cause those who suffer therefrom to go on autopilot and fail to exercise critical judgment in certain situations.[125] Unlike groupthink, however, the autopilot from cognitive bias

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[122] *See* Kieff & Paredes, *supra* note 117, at 107–08 ("[S]ome degree of disagreement is important. . . . By considering arguments against some course of action—such as by asking probing questions and follow-ups, challenging key assumptions, focusing on counterfactuals, or developing other options—risk become more salient to a decision maker and she may realize that she exerts less control over outcomes than she thought. Relatedly, research shows that conflict in decision making can spawn creativity and open-mindedness and more expansive thinking."); *accord* Kamalnath, *supra* note 113, at 105.

[123] Forbes & Milliken, *supra* note 71, at 494 (quoting Jehn, *supra* note 120).

[124] Forbes & Milliken, *supra* note 71, at 497 (citing Paul R.P Bernthal & Chester A.C Insko, *Cohesiveness Without Groupthink: The Interactive Effects of Social and Task Cohesion*, 18 GROUP & ORG. MGMT. 66 (1993). *See also* JANIS, *supra* note 107; *cf.* Langevoort, *supra* note 111, at 439 ("One reason for having a sizable number of independent directors on the board is to create a critical mass of mutual support for resisting the centripetal pressures of cognitive conformity.").

[125] *See* Johan E. Korteling et al., *A Neural Network Framework for Cognitive Bias*, 9 FRONTIERS PSYCHOL. 1561, 1561 (2018) ("Human decision-making shows systematic simplifications and deviations from the tenets of rationality ('heuristics') that may lead to suboptimal decisional outcomes ('cognitive biases')."); Juliana Osami, *Heuristics and Cognitive Biases: Can the Group Decision-Making Avoid Them?*, 5 ACAD. J. INTERDISC. STUD. 225, 225 (2016) ("Due to bounded rationality, the decision-maker often uses [] heuristics. . . . [H]euristics comprise a set of norms and rules that make easier the decision-making process. In some situations they are useful, because [they] help the decision-maker to understand the complex and unclear information. However, the use of heuristics may also lead to systematic decision errors which are repeated unconsciously, called cognitive biases. . . . [C]ognitive biases are abstract prejudices, not based on real data and lead to bad decisions.").

is rooted in people's inherent trust of certain things, rather than cohesion.[126] Most relevant to the boardroom, these things are inherent trust of individuals with similar backgrounds and inherent trust of consensus simply because it is consensus.

The first type of cognitive bias, inherent trust of individuals with similar backgrounds, differs from groupthink because its antecedent condition is similarities among directors, as opposed to cohesion.[127] As discussed above, similarities may, but do not necessarily, cause the antecedent cohesion for groupthink.[128] However, when a director perceives himself or herself to be similar to another director, such first director is prone to trust such other director's judgment due to the perceived similarities between them.[129] For example, one study has found price bubbles are much more likely to occur in ethnically homogeneous (as opposed to heterogeneous) markets, because

[126] *See* Korteling et al., *supra* note 125, at 156 ("In daily life, we constantly make judgments and decisions (either conscious or unconscious) without knowing their outcome. We typically violate rules of logic and probability and resort to simple and near-optimal heuristic decision rules ('mental shortcuts') to optimize the likelihood of an acceptable outcome. This may be effective in conditions with time-constraints, lack or overload of relevant information, or when no optimal solution is evident. We are also inclined to use heuristics when problems appear familiar and when we do not feel the need to gather additional information. Heuristics can result in quite acceptable outcomes in everyday situations and when the time cost of reasoning are taken into account. However, people's decisions may also deviate from the tenets of logic, calculation, and probability in ways that are inadvisable, leading to suboptimal decisions in terms of invested time and effort (costs) given the available information and expected benefits.") (citations omitted).

[127] Specifically, similarities increase perceived familiarity, and there is a broader cognitive bias, "the exposure effect," causing people to prefer things that are familiar to them. *See* Richard L. Moreland & Scott R. Beach, *Exposure Effects in the Classroom: The Development of Affinity Among Students*, 28 J. EXPERIMENTAL SOC. PSYCHOL. 255, 257 (1992) ("When we discover that someone is similar to ourselves, we begin to feel attracted to him or her, and that attraction makes the person seem more familiar to us."); *id.* ("To test this hypothesis, subjects were shown a series of slides depicting several different persons. Each slide was shown the same number of times, so that the subjects became equally familiar with each person. Afterward, the subjects were given (false) information indicating that some of the people they had seen were more similar to them than others. They were then asked to evaluate those people on a variety of measures. . . . People who were more similar to the subjects were evaluated as more attractive *and* as more familiar."); Robert B. Zajonc, *Attitudinal Effects of Mere Exposure*, 9 J. PERSONALITY SOC. PSYCH. 1, 20 (1968) (finding "in the absence of reward or punishment, mere exposure will result in the enhancement of the organism's attitude toward the given stimulus object" from studies of the effects of "mere exposure").

[128] As a matter of common experience, persons who are extremely similar to one another may still harbor animosity for one another (for instance, if their similarities include a predisposition to belittle or berate others).

[129] *See* ALEXA REMPEL, THE INFLUENCE OF SIMILARITY AND SOCIAL RECIPROCITY ON DECISIONS TO TRUST 1 (2017) ("Decisions about whether to trust another person, and their subsequent effects on behaviour are critical elements of the social environment. . . . As with decisions in the cognitive domain, people rely on heuristics to make social decisions . . . [f]or example, . . . the degree to which they perceive themselves to be similar to an interaction partner . . . .") (citation omitted); *id.* at 2 ("In experimental contexts, . . . physical or appearance-related similarity increases trust behaviors. Research has also indicated that people with similar interests are more likely to trust one another.") (citations omitted).

"traders in a homogeneous market are less likely to scrutinize others' behavior."[130] In other words, traders in homogeneous markets are more likely to mindlessly agree, rather than ask questions and investigate. The study explains this result is consistent with "a persistent empirical finding across the social sciences: [p]eople tend to be more trusting of the perspectives, actions, and intentions of ethnically similar others."[131] This implies mindless agreement happens in homogeneous boardrooms.

Even if directors are neither cohesive nor similar, the second cognitive bias relevant to board performance, inherent trust of consensus because it is consensus, may impede their collective information utilization. Many studies have demonstrated that individuals are inclined to follow a majority view, even when the majority is incorrect, and even when the study participants know the correct answer when not in the presence of a majority view.[132] In other words, like our blind trust of the judgment of those who are similar to us, this cognitive bias impedes a board's information utilization by causing directors to blindly follow the majority. For example, consider a seven-person board with six directors who spent their respective careers as an accountant at a Big Four accounting firm. Having similar educational backgrounds and career paths, these six directors will inherently agree on certain things.[133] When the sole non-accountant director faces this consensus, he or she thus becomes inclined to believe it is correct simply because it is a consensus view.

Both homogeneous and heterogeneous boards can fall prey to the cognitive bias toward consensus, since consensus will (and often must)[134] occur on boards regardless of homogeneity or lack thereof. However, if

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[130] Sheen S. Levine et al., *Ethnic Diversity Deflates Price Bubbles*, 111 PROCEEDINGS NAT'L ACAD. SCI. 18524, 18525 (2014).

[131] *Id.*

[132] *See* NEMETH, *supra* note 93, at 24 ("[M]ajorities exert immense pressure on our thoughts and feelings, as well as our judgments and decisions . . . [M]ajorities are so powerful that they can trick us into believing things that aren't true. Ordinary people, when faced with a majority opinion that is clearly incorrect, will nonetheless side with that obvious falsehood over one-third of the time. When the judgment involves ambiguity—as, for example, questions of politics or business often do—the majority's power is even greater. My colleagues and I have found that people can follow the majority as much as 70 percent of the time, even when that majority is wrong."). *See generally id.* at 23–38 (reviewing studies on this point).

[133] For instance, if these directors were to decide whether to condemn a team of accountants employed by the company, these directors may inherently agree that the team should not be condemned, from a "there but the grace of god go I" mentality. *Cf.* Zapata Corp. v. Maldonado, 430 A.2d 779, 787 (Del. 1981) (reasoning that a board committee, though authorized under Delaware law, may not be able to make certain decisions in an unbiased manner; "notwithstanding our conviction that Delaware law entrusts the corporate power to a properly authorized committee, we must be mindful that directors are passing judgment on fellow directors in the same corporation . . . . The question naturally arises whether a 'there but for the grace of God go I' empathy might not play a role. And the further question arises whether inquiry as to independence, good faith and reasonable investigation is sufficient safeguard against abuse, perhaps subconscious abuse.").

[134] Generally, an action of the board requires the approval of at least a majority of directors.

homogeneous boards are more susceptible to groupthink and the cognitive bias toward similar persons, homogeneous boards are more likely to generate an irrational consensus. Thus, by compounding the effects of groupthink and the cognitive bias toward similarities, the cognitive bias toward consensus may affect homogeneous boards more than heterogeneous boards.

That said, this cognitive bias also highlights a weakness of boardroom heterogeneity. Steps away from homogeneity toward heterogeneity may not affect a board's information utilization rate when directors who are equipped to increase a board's diversity of perspectives face a consensus view.[135] For example, though the addition of one Native American female to an otherwise all-white, all-male board would increase its heterogeneity, regardless of the knowledge and skills she *can* contribute to the board by increasing its diversity of perspectives, if she conforms to the views of the existing directors, she does not. That said, studies have shown that a person is significantly more likely to challenge a consensus if he or she sees one other person challenge such consensus—even if he or she does not agree with such other challenger's views.[136] Thus, small steps toward heterogeneity should not be abandoned, but carefully calibrated to ensure at least some conflict will exist and thereby allow diversity of perspectives to come to light.[137]

2. Attendant Costs of Cognitive Conflict

As described in Part IV(B)(1), truly heterogeneous boards are generally less susceptible to groupthink and certain cognitive biases because the diversity of perspectives inherent in a heterogeneous boardroom causes cognitive conflict. However, some scholars argue that one or more costs of cognitive conflict outweigh the foregoing benefit. This Part addresses each such cost in turn and concludes that these costs do not outweigh those posed by groupthink and cognitive biases on a theoretical level.

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[135] *Cf.* Fairfax, *The Bottom Line on Board Diversity*, *supra* note 29, at 837 ("The literature on critical mass suggests that people of color may feel marginalized and thus fail to speak out unless they have others in the group who share their views and perspectives. . . . Without this critical mass, directors may internalize the need to build cohesion, or feel uncomfortable voicing views or positions different from the majority. Thus, corporations that do not seek to build a critical mass may not be able to take advantage of the governance rationale.").

[136] *See* NEMETH, *supra* note 93, at 43.

> What may be more surprising is that having an ally is liberating not because of their support but because the consensus is challenged. What if the dissenter is not your ally? What if she's wrong, even more wrong than the majority? You would probably think that she would be of no help. However, the evidence shows that, even here, we are liberated. We are more independent. With any break in unanimity, the power of the majority is seriously diminished.

See generally id. at 39–50 (reviewing studies on this point).

[137] *See* NEMETH, *supra* note 93, at 23–28; Kieff & Paredes, *supra* note 117, at 108 ("[R]esearch shows that conflict in decision making can spawn creativity and open-mindedness and more expansive thinking.").

Primarily, critics of cognitive conflict in the boardroom point out that a decision-making process with cognitive conflict is slower than one without cognitive conflict,[138] and from this premise, conclude that cognitive conflict makes board decision-making less efficient.[139] Heterogeneity undoubtedly slows down the decision-making process, but these critics fail to distinguish between efficiency and speed. "Efficient" means "capable of producing desired results with little or no waste (as of time or materials)."[140] Thus, quicker decision-making is only more efficient if the speed increase does not reduce decision quality. But as discussed above, decisions made under groupthink or cognitive-bias conditions are undesirable precisely *because* they are too fast; the chief concern is they cause boards to fail to consider key alternatives and potential outcomes.[141] Thus, identifying that cognitive conflict decreases decision speed is only a sound critique if this decrease impedes a board's utilization rate more than groupthink and cognitive biases do.

As discussed in the preamble to this Part IV, when monitoring and managing, directors are solving abstract problems that do not have a single correct solution.[142] In other words, boards are in the business of complex problem-solving. Studies of the effects of work-group heterogeneity have found that

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[138] *See, e.g.*, Fairfax, *The Bottom Line on Board Diversity*, *supra* note 29, at 833–34; *see* Frank Dobbin & Jiwook Jung, *Corporate Board Gender Diversity and Stock Performance: The Competence Gap or Institutional Investor Bias?*, 89 N.C. L. REV. 809, 810–11, 816–17 (2011).

[139] *See* Fairfax, *The Bottom Line on Board Diversity*, *supra* note 29, at 833–34 ("However, the diversity mandated by the governance rationale may undermine a board's effectiveness by decreasing the level of trust and comfort among directors. . . . To the extent that trust expedites the decision-making process, such a decline could have a negative impact on that process." (citation omitted)); Dobbin & Jung, *supra* note 138, at 810–11, 811 n.8, 815–16 ("[G]ender and racial diversity have been found to increase conflict in small groups, and this may inhibit their decision-making capacity. . . . [As] diversity 'typically has negative effects on social integration, communication and conflict.' . . . Mixed gender and racial groups may divide, and diversity may elicit group conflict that interferes with efficacy. Diversity in race, ethnicity, and, to a lesser extent, sex, tends to bring about group conflict, hinder communication, and interfere with cooperation, thereby lowering performance.").

[140] *Efficient*, MERRIAM-WEBSTER DICTIONARY, https://www.merriam-webster.com/dictionary/efficient (last visited May 1, 2020).

[141] To give an extreme example, imagine a beachgoer, standing on a cliff, looking down at a beach. There are two ways to the beach: jumping and 100 stairs. Jumping is clearly faster, and in that respect, it is superior to the stairs. But the cliff is 100-stairs high; if the beachgoer jumps, it is unlikely that the beachgoer will be in a condition to enjoy a day at the beach. Thus, though the stairs will consume more of the beachgoer's time, they are nonetheless more desirable in context.

[142] *See* Bainbridge, *supra* note 2, at 17 ("Most board decisionmaking does not involve problems with a single correct solution, let alone a self-confirming one. Instead, relevant experiments are those requiring the creative exercise of evaluative judgment with respect to complex problems having a range of solutions."); Forbes & Milliken, *supra* note 71 at 491–92 ("[B]oards face complex, multifaceted tasks that involve strategic-issue processing.").

heterogeneity increases the efficiency of complex tasks.[143] Thus, in theory, cognitive conflict increases a board's utilization of its knowledge and skills despite the attendant speed decrease.

The second major critique of cognitive conflict is that it decreases trust, which in turn decreases information sharing.[144] Heightened trust can increase information sharing by increasing a director's willingness to voice an opposing view. But heightened trust is a direct cause of cognitive bias, which subconsciously decreases information sharing.[145] Accordingly, identifying that cognitive conflict decreases trust is only a sound critique if directors' intentional information withholding due to decreased trust impedes a board's utilization rate more than directors' unintentional information withholding due to cognitive biases. Importantly, a director's conscious failure to disclose information—even if motivated by self-preservation, rather than a desire to harm the corporation—could constitute a breach of the fiduciary duty of good faith.[146] On the other hand, a subconscious failure to disclose

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[143] *See* Clint A. Bowers et al., *When Member Homogeneity is Needed in Work Teams: A Meta-Analysis*, 31 SMALL GROUP RES. 305, 321 (2000) ("[F]or low difficulty tasks, moderate gains in performance can be expected from teams in which individual team members are of like gender, attitude, ability, and personality. In high difficulty tasks, it appears that the opposite result may be true. Heterogeneous teams performed significantly better than homogenous teams . . . .").

[144] *See*, *e.g.*, Bei Ye & Johnny Jermias, *The Effects of Effort and Trust on Board of Directors' Performance*, 16 PROC. FIRST INT'L CONF. ECON. BUS. MGMT., 498, 510 (Nov. 2016) ("[T]he research shows that trust has a significant positive effect on all of the board roles. Trust may facilitate the sharing of information between management and board, thus increase efficiency of board functioning."); STEPHEN M. BAINBRIDGE & M. TODD HENDERSON, OUTSOURCING THE BOARD 77 (2018) ("Cohesive groups share more information. They develop high levels of interpersonal trust, which promotes mutual support when taking risks or facing crises.").

[145] *See supra* Part IV(B). (explaining cognitive biases in the boardroom as the conditions in which directors are inclined to trust other directors' decisions rather than contribute to the conversation). Indeed, the reason amongst all cognitive biases is that when a group member trusts another group member, for whatever reason, and the group faces a difficult decision, the group member is likely to rely on trust rather than engage rationally with complex and unclear information. *See* Korteling et al., *supra* note 125, at 1561.

[146] *Cf.* Stephen Bainbridge, *Good Faith and Directors Fiduciary Duties Post-Disney*, PROFESSORBAINBRIDGE.COM (June 8, 2006, 7:33 AM), https://www.professorbainbridge.com/professorbainbridgecom/2006/06/good-faith-and-directors-fiduciary-duties-post-disney.html ("A corporate fiduciary acts in bad faith when he is motivated by an actual intent to do harm[,] … commits an 'intentional dereliction of duty' or acts with 'conscious disregard for [his] responsibilities.' … Negligence or even gross negligence on the part of a corporate fiduciary cannot constitute bad faith." (citations omitted)).

information due to cognitive bias conditions is not covered by fiduciary duties.[147] Because intentional information withholding is a potential source of personal liability and unintentional information withholding is not, high levels of interpersonal trust may impede information utilization more than low levels of interpersonal trust.

In conclusion, even if cognitive conflict slows decision speed and reduces trust, a lack of cognitive conflict on a board is more detrimental to information utilization. Thus, a board under cognitive conflict conditions is generally better-equipped to utilize its knowledge and skills than a board which is not.[148] And because cognitive conflict is generally present on heterogeneous boards and absent from homogeneous boards,[149] homogeneous boards face more impediments to information utilization than heterogeneous boards.

V. FEMALE DIRECTOR QUOTAS AND DIVERSITY OF PERSPECTIVES

This Part V will evaluate female director quotas based on their ability to produce diversity of perspectives on corporate boards. This analysis is two-fold. First, it considers the potential net benefit from a female director quota (i.e., is gender balance ever a proxy for diversity of perspectives?). Second, it considers the likelihood that such benefit will occur (i.e., if so, how often is it a proxy for diversity of perspectives?). Together, these analyses quantify the extent that a female director quota does indeed produce diversity of perspectives on corporate boards, which, as discussed in Part IV, is a positive development for corporate governance.

Gender balance can be an appropriate proxy for diversity of perspectives at times. For example, two interview-based studies of male and female directors who held directorships before and after the enactment of a female

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[147] Fiduciary duties are merely a backstop for director behavior in the sense that only a fairly egregious failure will constitute a breach thereof. *See* Claudia A. Restrepo, *The Need for Increased Possibility of Director Liability: Refusal to Dismiss In re* Wells Fargo & Co. Shareholder Derivative Litigation, *a Step in the Right Direction*, 60 B.C. L. REV. 1689, 1693 (2019) ("The reality is that directors are rarely held personally liable for their actions (or inactions). Liability is usually only triggered in extreme circumstances." (citations omitted)); CHARLES R.T. O'KELLEY & ROBERT B. THOMPSON, CORPORATIONS AND OTHER BUSINESS ASSOCIATIONS: CASES AND MATERIALS 371 (2017) ("In reality, liability for breach of the duty of care has always been rare, and has occurred in circumstances where the director's conduct was egregious. Courts universally recognize that directors are presumptively not liable for breach of duty of care by applying the business judgment rule."). Though some even question whether fiduciary duties even have teeth as a backstop. *See, e.g.*, Lawrence E. Mitchell, *On the Direct Election of CEOs*, 32 OHIO N.U. L. REV. 261, 269 (2006) ("If the *Disney* board's conduct was sufficient to shield it from liability, then certainly we are entitled to (and ought to) ask the question as to why we have boards at all.").

[148] *See infra* Part IV(B)(2).

[149] *See infra* Part IV(B)(1). *Cf.* Langevoort, *supra* note 111, at 439 ("One reason for having a sizable number of independent directors on the board is to create a critical mass of mutual support for resisting the centripetal pressures of cognitive conformity.").

director quota have reported that such quota changed the boardroom by increasing the number of directors with "outsider status" and/or a "female perspective."[150] These findings are consistent with the presence of diversity of perspectives. For one, "outsider status" (regardless of gender) brings diversity of perspectives to the boardroom to the extent such outsider status is due to a different background, not only as a necessary condition thereto by definition[151] but also because a board comprised of directors from similar backgrounds is susceptible to both groupthink and certain cognitive biases.[152] "Female perspective" brings diversity of perspectives under the same logic, to the extent that both of the following are true about the experience of being female: it is inherently different than the experience of being male[153] and it is underrepresented on boards. Therefore, a female director quota, by increasing the incidence of women on boards, can increase a board's diversity of perspectives.[154]

But even so, a board might comply with a requirement to bring women to the table *without* increasing its diversity of perspectives. For example, consider a hypothetical financial services corporation headquartered in New York City. The company recently went public, and the board is still wholly made up of its founders—seven white men from Greenwich, Connecticut. Four of the directors know each other from boarding school. One of those four knows the other three from undergrad at a small liberal arts school in Maine. All seven of the directors grew up in Greenwich, belong to the same tennis club, and have their kids attend the same elementary school. Their firm becomes subject to a female director quota requiring at least three women on the board. Three of the men step down, and the remaining directors recruit three women to take those spots, two of whom also attended the Maine

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[150] *See* DHIR, *supra* note 27, at 119 ("With respect to *why* female directors in particular bring intellectual and experiential diversity to the boardroom, most felt that there was something specifically related to gender at play. Women directors either have uniquely 'female perspectives' or have developed different perspectives from men due to different life experiences or different employment and experiential backgrounds."); Broome et al., *supra* note 26, at 777 ("Several major themes dominated the interviews. One was the subjects' nearly universal endorsement of the proposition that board diversity is an unmitigated good and a worthy goal. There was less consensus, however, on the reasons why this is true. Especially prominent was the contention that demographic diversity produces a diversity of experiences and sensibilities and thus promotes richer discussions, though examples were hard to come by.").

[151] *See* Broome et al., *supra* note 26 (defining the term "diversity of perspectives").

[152] *See supra* Part IV(B) (explaining that similarity among directors is a necessary condition for groupthink and both a necessary and sufficient condition for certain cognitive biases).

[153] *Cf. supra* Part IV(A) (discussing Jakob von Uexküll's theory that unique biology creates a unique lens through which each human perceives the world). Further analysis of this proposition is outside the scope of this Article.

[154] *See* Anderson et al., *supra* note 72, at 10 ("Cox, Lobel, and McLeod (1991) and Adams and Ferreira (2009) suggest that gender proxies for heterogeneity of perspectives that individuals bring to their work situations or environments. Hillman, Cannella, and Harris (2002) indicate that female directors often obtain their board seats after attaining success in their professional field bringing informational richness to board deliberations."); *supra* Part IV.

liberal arts school, and all of whom live in Greenwich, belong to the tennis club, and at one point worked on the same team as one of the remaining male directors at a different financial services firm. Despite the firm's compliance with the quota, as well as that each of these women is likely "independent" under state corporate law,[155] one can imagine that this did not significantly increase the diversity of perspectives present on the board. Therefore, with respect to the goal of diversity of perspectives, a female-only target is clearly under-inclusive.[156] This reduces its expected value as a mechanism to create diversity of perspectives.

This risk of lack of benefit is compounded by the critical mass requirement. Scholars recognize that critical mass is required for diversity of perspectives to change a group's functioning.[157] Otherwise, the views of "diverse" member(s) may be discounted by the other members as "tokens" or the diverse member(s) may not feel comfortable speaking up at all. So even if, say, it is more likely that one or two female directors, rather than all three, will not bring diversity of perspectives to the table, that may still have the same effect as if all had been homogeneous per the above example.

And even if critical mass is not an issue at the onset, it may become one over time. A director who is an outsider when appointed may not remain an outsider.[158] Thus, there may be diminishing returns over time to the benefit to be derived from a female director quota to the extent it is rooted in increased outsider perspective as opposed to the female experience.[159] Therefore, especially in industries like extraction that are traditionally male-

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[155] *See* Reed, *supra* note 48; Sharpe, *supra* note 47, at 1446–47.

[156] *Cf.* Broome et al., *supra* note 26, at 777 ("Sometimes, benefits attributed to [gender or racial] diversity were really benefits derived from the specific skill sets of particular female or minority directors.") (alteration in original).

[157] *See* Fairfax, *The Bottom Line on Board Diversity*, *supra* note 29, at 837 ("The literature on critical mass suggests that people of color may feel marginalized and thus fail to speak out unless they have others in the group who share their views and perspectives. . . . Without this critical mass, directors may internalize the need to build cohesion, or feel uncomfortable voicing views or positions different from the majority. Thus, corporations that do not seek to build a critical mass may not be able to take advantage of the governance rationale.").

[158] Cox & Munsinger, *supra* note 72, 84–85. For example, Cox and Munsinger studied independent directors' evaluating shareholder derivative demands, and found "several social-psychological mechanisms that can generate bias in the directors' assessment of the suit, including biases established by appointment of members to the board or a special litigation committee, control of pecuniary or nonpecuniary rewards made available to the independent directors by the defendant members of the board of directors, the independent directors' prior associations with the defendants, and their common cultural and social heritages." *Id.* The Delaware Supreme Court recognizes the potential impact of boardroom bonding on director independence in its acceptance of arguments based on "structural bias," which "presuppose[] that the professional and social relationships that *naturally develop among members of a board* impede independent decision making," to prove a lack thereof. *See, e.g.*, Beam v. Stewart, 845 A.2d 1040, 1050–51 (Del. 2004) (emphasis added).

[159] *See generally* Cox & Munsinger, *supra* note 72, at 84–85 (discussing this finding in the context of independent directors generally).

dominated, this may become an *ex-post* pool problem. In other words, even if there was not an initial pool problem, the number of females who have diverse perspectives and are qualified to serve on that firm's board may shrink to a level where it is impossible to achieve critical mass of diversity of perspectives. Thus, for some firms, this decrease in diverse perspectives fails to achieve the purpose of the quota in the first place.

In sum, it is entirely possible for a female director quota to increase diversity of perspectives across corporate boards, but there are real reasons why it might not actually do so. This conclusion does not mean that we should abandon boardroom heterogeneity overall. Rather, we should recognize that diversity of perspectives is the goal and tailor regulations accordingly.

VI. PROPOSAL TO REGULATE BOARDROOM HETEROGENEITY WITH A DIVERSITY INDEX

As discussed in Part IV, regulating board composition to increase diversity of perspectives would confer benefits to board decision-making. As discussed in Part V, however, the trending regulation of board composition, the female director quota, is an inefficient means of doing so, as gender balance is an imprecise proxy for diversity of perspectives. Instead, this Part recommends that we regulate board composition along a "diversity index"—a general term for a type of quantitative measure that calculates the diversity of a dataset (e.g., of the directors on a board or animals in an ecosystem) from both the number of different types of data therein and the distribution of the data among those types.[160]

For example, a diversity index measures the biodiversity of an ecosystem from both the number of species present therein and the number of animals per species.[161] Imagine three ecosystems (A, B and C), each with fifteen animals total. Ecosystem A has fifteen rhinos. Ecosystem B has eleven rhinos, one cheetah, one gazelle, one giraffe, and one meerkat. Ecosystem C has three rhinos, three cheetahs, three gazelles, three giraffes, and three meerkats. Many measures identify that each of ecosystems B and C is more diverse than

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[160] *See* Bikila Mengistu and Zebene Asfaw, *Woody Species Diversity and Structure of Agroforestry and Adjacent Land Uses in Dallo Mena District, South-East Ethiopia*, 7 NAT. RESOURCES 515, 519 (2016) ("A diversity index is a mathematical measure of species diversity in a community. Diversity indices provide more information about community composition than simply species richness (*i.e.*, the number of species present); they take the relative abundances of different species into account."). For more information, see generally Gerald Jurasinski et al., *Inventory, Differentiation, and Proportional Diversity: A Consistent Terminology for Quantifying Species Diversity* 159 OECOLOGIA 15 (2009).

[161] Generally, the former is called "richness," and the latter is called "abundance." *See, e.g.*, Mengistu & Asfaw, *supra* note 160, at 519.

ecosystem A; but, the benefit of a diversity index is its ability to identify that ecosystem C is more diverse than ecosystem B.[162]

Similarly, corporate governance can measure the diversity of a board by the number of different types of diversity present thereon (analogous to the five species in the previous example), further broken down into sub-types, and the number of directors per sub-type (analogous to the number of animals per species in such example). This Article identifies six initial types for this boardroom heterogeneity index (hereinafter, the "Index"):[163] (1) gender; (2) ethnicity; (3) main career function; (4) degree area; (5) education level; and (6) age. Boardroom heterogeneity in each of the first five types is assessed by the evenness of distribution among sub-types within the type. The more evenly board members are distributed among the sub-types, the higher the score the board receives in that type (reflecting greater heterogeneity in that type), on a scale of one to ten. In the sixth type (age), the boardroom heterogeneity is measured by the coefficient of variation of director age across the entire board.[164] The six scores will then be aggregated, and the board will comply with the regulation if it has a minimum aggregate heterogeneity score of thirty.[165]

By requiring an aggregate heterogeneity score instead of a certain level of heterogeneity per type, the Index allows for flexibility among firms in compliance with the law. A firm can pass so long as it has high heterogeneity in at least a few types, or moderate heterogeneity in many types. See Appendix A for examples of options that the hypothetical firm from Part V might have in its compliance with the Index. The types and subtypes are recapped in Figure 1 below.

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[162] *See id.* at 518–33.

[163] However, the types are intended to be fluid and can adapt to new information and/or differing values, as discussed. *See infra* Part VI.

[164] Further research should be done on the realistic optimal coefficient of variation of director ages (likely ~0.5). The board will receive the number of points equal to the product of (i) a fraction, the numerator of which is its age coefficient of variation and the denominator of which is the realistic optimal coefficient of variation, and (ii) the number ten. *See also* Anderson et al., *supra* note 72, at 10 (using a coefficient of variation to measure director age heterogeneity across a board).

[165] *Cf. id.* ("Since our arguments do not provide an a priori reason to place greater weight on one input (i.e., professional experience) relative to another input (i.e., gender), we use an equal weighting approach in our primary analysis . . . .").

Figure 1: Measuring Boardroom Heterogeneity

Types	**Sub-Types**
Gender	Female; Male
Ethnicity	African American; Asian American; Hispanic; Native American; White; Other
Main Career Function	Accounting/Finance; Law; Technical; Other
Degree Type	Business; Law; Liberal Arts; Technical
Education Level	High School; Bachelor's; Master's or Higher
Age	N/A (coefficient of variation)

The initial types set forth in Figure 1 represent suggestions for appropriate proxies for diversity of perspectives. However, the proxies are intended to be fluid. So long as the Index contains multiple proxies for diversity of perspectives (as opposed to solely being female), it is an improvement from the gender-based quotas in the boardroom. Support for each of the initial types' connection to diversity of perspectives is as follows (other than in respect of gender, which support is addressed in Part V).[166]

1. Ethnicity. Ethnicity is a proxy for diversity of perspectives as directors of different ethnicities tend to come from "different social and cultural backgrounds."[167] Similar to gender-based heterogeneity, racial heterogeneity directly brings diversity of perspectives to the extent the experience of each race identified as a different type in the Index (a) is, in some way, inherently different than the experience of another race[168] and (b) is underrepresented on boards. A thorough analysis of the inherent difference in racial experiences (or lack thereof) is beyond the scope of this Article. However, assuming the existence of such differences (such as cultural differences), as racial heterogeneity is rarer than gender-based heterogeneity on boards, the potential

[166] *See supra* Part V, at p. 41.

[167] Anderson et al., *supra* note 72, at 10.

[168] *See supra* at notes 87–92. Other than the foregoing support, an analysis of this proposition is outside the scope of this Article.

direct benefit from a quota that increases racial heterogeneity is even greater than that which a female-only director quota can directly cause.

2. Main Career Function. Main career function considers a director's work experience. This experience can bear a strong relationship to diversity of perspectives because an individual director's main career function shapes his or her perception of corporate problems and solutions to these issues.[169] For instance, directors from accounting or banking backgrounds may be more sensitive to financial issues than, say, directors from marketing or product-development backgrounds. The respective expertise these directors bring to the table differ, and so do the incentive structures in which they have been evaluated for the duration of their careers. Thus, main career function heterogeneity is an appropriate proxy for diversity of perspectives.

Additionally, the greater the main career function heterogeneity on a board, the more likely the board is to have a broader and deeper perspective in monitoring and advising senior executives.[170] And a focus on main career function heterogeneity will incentivize the recruitment of directors who do not have prior executive experience, which, as discussed in Part IV.a, may be nothing more than a missed opportunity.[171] Of course, this is not to say that we should prize heterogeneity of main career function at the expense of the amount of resources available to the board.[172]

3. Degree Type. Like main career function, a director's degree type can bear a strong relationship to diversity of perspectives because "[h]eterogeneous educational backgrounds arguably provide directors with different perspectives and cognitive paradigms that affect career development and social contacts."[173] Additionally, this type will help pick up diversity that may not be capturable under the main career function type if a director has had multiple career functions (such as a lawyer-turned-business person). For example, if such person transitioned from law to business early in his or her career, the law degree would nonetheless be picked up by this type. Note that the

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[169] *See* Anderson et al., *supra* note 72, at 11.

[170] *Id.*

[171] *See* Fairfax, *Board Diversity Revisited*, *supra* note 54, at 881 ("[T]here are no studies indicating that enhanced board or corporate performance is linked to ensuring that a majority or a supermajority of board members have executive-level expertise."); *id.* (citing LUCIAN BEBCHUK & JESSE FRIED, PAY WITHOUT PERFORMANCE 33–34 (2004) (noting that directors who are executives or former executives may have biases in favor of management)). *See generally supra* Part IV(A) (explaining the connection between "prior executive experience" and redundancies in director functional-area knowledge).

[172] And if a director potentially fits in to multiple sub-types, the most important factor should be the relative time spent in each category until the time of determination. For example, a lawyer who has been practicing for fifteen years should fall in to the "law" category, even if she spent two years before law school working as an engineer.

[173] *See* Anderson et al., *supra* note 72, at 11.

technical sub-type should (in addition to degrees such as engineering, biology, and mathematics) include all degrees not in business, law or liberal arts.

4. Education Level. Education level is intended to help pick up socioeconomic diversity,[174] which, like the other types, indicates different ways of thinking about problems.[175] And education level is an appropriate proxy for socioeconomic diversity because, in general, the lifetime socioeconomic status of a person tends to directly correlate with his or her education level.[176] Though, for instance, the relative values of a bachelor's degree and high school degree may be debatable, the average net worth of a person's family during his or her upbringing, and personally during adulthood, tend to be higher for persons with bachelor's degrees than those without and persons with master's degrees than those without.[177]

5. Age. Age-based heterogeneity is a proxy for diversity of perspectives because "[o]lder directors may lend greater stability and experiential wisdom to deliberations while younger directors bring greater energy and less risk aversion to decision-making."[178] And, like the arguments for racial and gender-based heterogeneity, the average board is incredibly age-homogeneous, skewing older; for example, in 2018, only six percent of the board seats of the S&P 500 were held by directors younger than fifty years old.[179] Indeed, PwC, based on its annual studies of boards and corporate governance, urges corporations to consider age diversity as an imperative in pushing for greater diversity of thought in the boardroom.[180] Thus, because directors of different ages bring diverse perspectives to the boardroom and typically boards are not age-diverse, the inclusion of age in the Index will generally increase diversity of perspectives on corporate boards.

Compared to the female director quota, the Index is a more effective regulation because it is more narrowly tailored to affect board decision-

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[174] *Id.* (citation omitted) ("Social science studies suggest that different educational backgrounds are associated with different social status, networking, and professional development paths.").

[175] *See* Anderson et al., *supra* note 72, at 11.

[176] *See* SCOTT A. WOLLA & JESSICA SULLIVAN, PAGE ONE ECON., EDUCATION, INCOME, AND WEALTH 2–3 (2017), [https://perma.cc/D5VD-WEXK] ("The relationship between education and income is strong. Education is often referred to as an investment in human capital. People invest in human capital for similar reasons people invest in financial assets, including to make money. In general, those with more education earn higher incomes . . . .").

[177] For example, one study of the relationship between wealth and education compared persons with a high school diploma, a two- or four-year degree and an advanced degree, and found that the respective median incomes of such persons was $41,190, $76,293 and $116,265, and the respective incidence of such persons' being a "millionaire" with respect to family wealth was 1 in 18, 1 in 4.6 and 1 in 2.6. *Id.* (citation omitted).

[178] *See* Anderson et al., *supra* note 72, at 10.

[179] *Age Diversity in the Boardroom: PwC's Census of Board Directors 50 and Under*, PWC, [https://perma.cc/GYK4-N6RH] (last visited May 1, 2020).

[180] *Id.*

making. First, by requiring heterogeneity across multiple types (instead of within one), it is less likely a board can comply with the Index and still lack diversity of perspectives.[181] Second, by allowing firms the flexibility to choose which areas of heterogeneity are most relevant to their business, the Index has fewer costs of compliance.[182] As discussed above, including six types each worth ten points and setting a minimum aggregate score of thirty across them allows for compliance via: (a) moderate heterogeneity in six categories;[183] (b) complete heterogeneity in three categories (with complete homogeneity in three categories);[184] or (c) middle ground between the options set forth in clauses (a) and (b).[185] Though the Index is more complex than a simple female director quota, it is a better proxy for diversity of perspectives, making it a more efficient regulation.[186]

The Index also provides a framework for addressing the general concerns with regulating boardroom heterogeneity discussed in Part IV. The Index resolves questions of whether there will be enough qualified candidates, as the pool is effectively now an ocean on aggregate. Even if a board is looking to fill only one vacancy on an eight-seat board, there should be sufficient flexibility such that the board is not required to look in only one or two categories. In other words, a female director who resigns does not need to be replaced with another female director; rather, the vacancy can be filled by any person who will add sufficient points to the aggregate score such that the board does not fall below thirty points on aggregate. Additionally, a vacancy can be filled without the Index imposing any restrictions on potential candidates to the extent that the board is sufficiently heterogeneous without the leaving director.

Further, if the Index broadens the pool of candidates to recruit in compliance with a boardroom heterogeneity regulation, boards will have more flexibility to prioritize the minimum levels of interpersonal attraction that some scholars argue is necessary to board performance. Thus, the Index is better than a female director quota to help firms deal with the potential impediments to decision-making that may be brought with the introduction of cognitive conflict to the board. However, chairpersons and nominating committee members would still need to remain cognizant of the potential for

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[181] *See supra* Part V. For example, the argument therein regarding the ease of compliance with a female director quota without creating diversity of perspectives on a board does not apply to the Index.

[182] *See supra* Part V. For example, the arguments therein regarding the costs of compliance with a female director quota for firms in traditionally male-dominated industries does not apply to the Index.

[183] *See, e.g.*, Appendix A *infra*, at Example 3.

[184] *See, e.g.*, Appendix A *infra*, at Example 4.

[185] *See, e.g.*, Appendix A *infra*, at Example 5.

[186] *See supra* Part IV (arguing that effective board decision-making is the proper aim of a boardroom heterogeneity regulation within the shareholder primacy framework).

cognitive conflict to create inefficiencies and plan to tailor recruiting to occur in-network or out-of-network, or for certain personality types, as appropriate.

The Index certainly would add complexity, and thus cost, to the recruitment process. However, this complexity and associated cost would be mitigated by the trend of public company boards' outsourcing director recruiting to search firms, thus not draining corporate resources from a time perspective.[187] Furthermore, from a funds perspective, the Index should include an "emerging growth company" exception similar to that which the SEC has enacted with respect to the registration requirement for public offerings.[188]

Finally, the Index proposal assumes a certain level of board control over the election of directors. In the U.S., it is accepted that, while a director must receive the requisite shareholder vote to join the board, the incumbent board is in control of the directors nominated for a vote. Recently, however, there has been an uptick in shareholder nomination rights. If it truly does become a state of affairs where directors may be nominated by a large number of dispersed shareholders, and those directors actually stand a chance, then it may be very difficult for a corporation to prevent violation of the standards mandated by the Index. Therefore, unless the composition of the board remains somewhat controllable going into an election, compliance with the Index's standards may be difficult to enforce.

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[187] *See supra* note 100 and accompanying text.

[188] The emerging growth company exception relaxes certain SEC requirements for companies looking to IPO if their "total annual gross revenue" is less than a certain amount. *See* Securities Act of 1933, 15 U.S.C. § 77e(d) (20182020).

VII. APPENDIX A

Examples 1 and 2 demonstrate how the hypothetical firm from Part V might perform on the Index.[189] To demonstrate the flexibility inherent in, and requisite levels of diversity of perspectives required by, the Index model, Examples 3 through 5 provide three different ways the hypothetical firm might comply with the Index's minimum heterogeneity score.

A. Example 1: Before the hypothetical female director quota

Type	**All Sub-Types**	**Distribution of Sub-Types**	**Score**
Gender	Female; Male	0; 7	1
Ethnicity	African American; Asian American; Hispanic; Native American; White; Other	0; 0; 0; 0; 7; 0	1
Main Career Function	Accounting/ Finance; Law; Technical; Other	7; 0; 0; 0	1
Degree Type	Business; Law; Liberal Arts; Technical	3; 0; 4; 0	5
Education Level	High School; Bachelor's; Master's or Higher	0; 4; 3	5
Age	N/A	0.08 (coefficient of variation)[190]	2
Aggregate Heterogeneity Score:			**15**

[189] Additional assumptions regarding heterogeneity and homogeneity not set forth in the facts described in Part V are outlined in the table below.

[190] For example, if the seven directors' ages were as follows: 55, 59, 63, 64, 65, 68, and 71.

B. <u>*Example 2:*</u> *Complying with the hypothetical female director quota*

Type	All Sub-Types	Distribution of Sub-Types	Score
Gender	Female; Male	3; 4	10
Ethnicity	African American; Asian American; Hispanic; Native American; White; Other	0; 0; 0; 0; 7; 0	1
Main Career Function	Accounting/ Finance; Law; Technical; Other	7; 0; 0; 0	1
Degree Type	Business; Law; Liberal Arts; Technical	4; 0; 3; 0	5
Education Level	High School; Bachelor's; Master's or Higher	0; 3; 4	5
Age	N/A	0.08 (coefficient of variation)	2
Aggregate Heterogeneity Score:			**24**

C. <u>*Example 3:*</u> *Index compliance via moderate heterogeneity in six types*

Type	All Sub-Types	Distribution of Sub-Types	Score
Gender	Female; Male	2; 5	5
Ethnicity	African American; Asian American; Hispanic; Native American; White; Other	2; 1; 1; 1; 2; 0	6
Main Career Function	Accounting/ Finance; Law; Technical; Other	4; 1; 1; 1	4

Degree Type	Business; Law; Liberal Arts; Technical	3; 1; 2; 1	5
Education Level	High School; Bachelor's; Master's or Higher	0; 3; 4	5
Age	N/A	0.25 (coefficient of variation)[191]	5
Aggregate Heterogeneity Score:			**30**

D. Example 4: Index compliance via complete heterogeneity in three types (with complete homogeneity in the other types)

Type	**All Sub-Types**	**Distribution of Sub-Types**	**Score**
Gender	Female; Male	3; 4	10
Ethnicity	African American; Asian American; Hispanic; Native American; White; Other	0; 0; 0; 0; 7; 0	1
Main Career Function	Accounting/ Finance; Law; Technical; Other	2; 2; 2; 1	10
Degree Type	Business; Law; Liberal Arts; Technical	5; 1; 0; 1	3
Education Level	High School; Bachelor's; Master's or Higher	1; 3; 3	8
Age	N/A	0.05 (coefficient of variation)[192]	1
Aggregate Heterogeneity Score:			**33**

[191] For example, if the seven directors' ages were as follows: 30, 44, 55, 59, 63, 64, and 71.

[192] For example, if the seven directors' ages were as follows: 60, 63, 63, 64, 65, 65, and 71.

E. Example 5: Index compliance with varied heterogeneity among types (a middle-ground approach)

Type	**All Sub-Types**	**Distribution of Sub-Types**	**Score**
Gender	Female; Male	1; 6	2
Ethnicity	African American; Asian American; Hispanic; Native American; White; Other	1; 1; 0; 2; 3; 0	8
Main Career Function	Accounting/ Finance; Law; Technical; Other	2; 2; 2; 1	10
Degree Type	Business; Law; Liberal Arts; Technical	4; 2; 1; 0	4
Education Level	High School; Bachelor's; Master's or Higher	1; 4; 2	5
Age	N/A	0.05 (coefficient of variation)[193]	1
Aggregate Heterogeneity Score:			**30**

[193] For example, if the seven directors' ages were as follows: 60, 63, 63, 64, 65, 65, and 71.