Specialist Directors

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What determines the effectiveness of corporate boards? Corporate legal scholars usually approach this question by focusing on directors' incentives, such as counting how many directors are independent or whether the roles of the CEO and Chair are separated. Yet on the ground, the focus has been shifting to directors' skill sets and experience. Investors, regulators, and courts are now pressuring companies to appoint directors with specific types of expertise. In response, more and more companies are adding what we term "specialist directors": a DEI director, a climate director, a cyber director, and so on. These changes in board composition could reshape corporate governance and impact broader societal issues such as data privacy and environmental degradation. This Article examines the ongoing shift in board expertise and makes the following three contributions.

First, the Article presents evidence on the scope and magnitude of the changes in board expertise. We hand-collect and hand-code data from the proxy statements of S&P 500 (large cap) and S&P 600 (small cap) companies over the 2016–2022 period. We find that over the past few years companies have not only significantly increased their emphasis on expertise disclosure, but also added hundreds of directors with narrower, ESG-related expertise.

Second, the Article analyzes how these shifts in board expertise could affect corporate behavior, and whether they are likely to prove overall desirable from a societal perspective. It is intuitive to think of board expertise as an unalloyed good. But we merge insights from interviews with nomination committee members with insights from the literature on group decision-making, to highlight five realistic concerns arising from the current trend. The injection of new, narrow types of expertise could distort board

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dynamics, create "authority bias," overly increase the size of boards, hinder efforts to promote board diversity, and result in "board washing" whereby human capital disclosure camouflages the company's actual behavior.

Finally, the Article generates concrete policy implications. For regulators, the main lessons concern rethinking the desirability of legal intervention and ensuring more credible and comparable expertise disclosure. For courts, the main lessons revolve around how to assess board behavior in oversight-duty litigation and what to consider when approving derivative settlements.

Introduction

The Boeing 737 Max debacle was a human tragedy on a mass scale that ignited a heated discussion on airplane safety regulation.[1] It also turned into a key moment in corporate law. Beyond the true victims, the crashes caused significant attendant financial and reputational harms to the company.[2] Pension fund shareholders filed a derivative action against Boeing's directors, claiming that the board breached its oversight duties, thereby causing the company to suffer these harms. In September 2021, a Delaware court allowed the derivative suit to proceed based on the theory that Boeing's directors did not do enough to monitor, prevent, and react to fatal airplane safety issues.[3] Shortly thereafter, the defendants settled. The *Boeing* case was covered extensively by practitioners and academics, highlighting how the court's reasoning reflected a new era of heightened oversight duties, and how the settlement amount ($237 million) was by far the largest ever in such cases.[4]

But a peculiar aspect of the settlement went unnoticed: aside from the payment, Boeing committed to appoint a new director with expertise in airplane safety, and to ensure that, going forward, at least three of its directors would have aviation, engineering, or product safety oversight experience.[5] In other words, litigation pressured Boeing to add specific expertise to its boardroom.

In that respect, the *Boeing* settlement is a part of a broader trend that is reshaping corporate boardrooms these days: companies are facing various pressures to appoint directors with a specific subject-matter expertise. The SEC's proposed cybersecurity disclosure rules required companies to disclose whether their board has a director with cybersecurity

1. *See, e.g.*, Niraj Chokshi, *House Report Condemns Boeing and F.A.A. in 737 Max Disasters*, N.Y. TIMES (Mar. 1, 2020), https://www.nytimes.com/2020/09/16/business/boeing-737-max-house-report.html [https://perma.cc/7NPR-HH5C] (describing a House Report detailing the lack of regulatory oversight).

2. Chris Isidore, *Boeing's 737 Max Debacle Could Be the Most Expensive Corporate Blunder Ever*, CNN BUS. (Nov. 17, 2020), https://www.cnn.com/2020/11/17/business/boeing-737-max-grounding-cost/index.html [https://perma.cc/32X5-UKLW].

3. *In re* Boeing Co. Derivative Litig., No. 2019-0907, 2021 WL 4059934, at *36 (Del. Ch. Sept. 7, 2021).

4. *See, e.g.*, Gail Weinstein, Steven Epstein & Mark H. Lucas, *Boeing: Rejecting Early Dismissal of Claims against Directors for Inadequate Risk Oversight*, HARV. L. SCH. F. ON CORP. GOVERNANCE (Oct. 21, 2021), https://corpgov.law.harvard.edu/2021/10/21/boeing-rejecting-early-dismissal-of-claims-against-directors-for-inadequate-risk-oversight [https://perma.cc/7TFC-Z4KY]; Roy Shapira, *Max Oversight Duties: How Boeing Signifies a Shift in Corporate Law*, 48 J. CORP. L. 119 (2022).

5. Linda Chiem, *Boeing Board Inks $238M Deal to End 737 Max Derivative Suit*, LAW360 (Nov. 5, 2021), https://www.law360.com/articles/1438180/boeing-board-inks-238m-deal-to-end-737-max-derivative-suit [https://perma.cc/9W79-BT3U].

expertise.[6] The largest asset managers frequently call on companies to add directors with expertise in sustainability.[7] Socially minded activist shareholders are mounting proxy campaigns to pressure big oil companies to add directors with expertise in climate change,[8] and to pressure big tech companies to add directors with civil rights expertise.[9] In fact, even more traditional activist shareholders have started emphasizing lack of board expertise as a selling point in their campaigns.[10]

The push toward adding specialist directors could end up changing how we think about corporate governance. There is a consensus that boards play a critical role in monitoring and advising corporations.[11] But there is also a staggering hole in our understanding of what makes boards effective.[12] Corporate legal scholars tend to approach this question by focusing on directors' incentives, such as counting how many directors are independent or whether the roles of chair and CEO are separated.[13] But a

6. *See* Press Release, SEC Proposes Rules on Cybersecurity Risk Management, Strategy, Governance, and Incident Disclosure by Public Companies (Mar. 9, 2022), https://www.sec.gov/news/press-release/2022-39 [https://perma.cc/E8B2-75WK].

7. In fact, BlackRock nominated a climate scientist to its board. Press Release, BlackRock, Inc., BlackRock Elects New Independent Directors (Mar. 18, 2018), https://ir.blackrock.com/news-and-events/press-releases/press-releases-details/2018/BlackRock-Elects-New-Independent-Directors/default.aspx [https://perma.cc/K9D5-PBEP].

8. Collin Eaton, *After Defeating Exxon, Engine No. 1 Works with Oil Giants on Emissions*, WALL ST. J. (July 14, 2022, 3:47 PM), https://www.wsj.com/articles/after-defeating-exxon-engine-no-1-works-with-oil-giants-on-emissions-11657803660 [https://perma.cc/R42K-5K87]; Matt Phillips, *Exxon's Board Defeat Signals the Rise of Social-Good Activists*, N.Y. TIMES (June 9, 2021), https://www.nytimes.com/2021/06/09/business/exxon-mobil-engine-no1-activist.html [https://perma.cc/32T7-YGQE].

9. *See* Press Release, Open MIC, Shareholders Tell Google and Facebook: Confronting Your Civil Rights Failures Includes Fixing Your Boards (Apr. 15, 2020), https://www.openmic.org/news/civil-rights-governance [https://perma.cc/W887-BD56].

10. To illustrate, the 2023 activist campaign to insert three new directors into Salesforce's board was based on the theory that the incumbent board lacked expertise in technology and operational matters. *Salesforce Announces Appointment of Three New Independent Directors*, BUSINESSWIRE (Jan. 27, 2023, 8:15 AM), https://www.businesswire.com/news/home/20230127005227/en/Salesforce-Announces-Appointment-of-Three-New-Independent-Directors [https://perma.cc/4WQD-8FCX].

11. *See, e.g.*, David Becher, Michelle Lowry & Jared I. Wilson, *The Changing Landscape of Corporate Governance Disclosure: Impact on Shareholder Voting* 2 (ECGI Working Paper No. 915/2023), https://ssrn.com/abstract=4425950 [https://perma.cc/XT2U-JT3R] ("[T]here is an increasing consensus among academics that the board plays a critical role in monitoring and advising the firm."); Melvin Aron Eisenberg, *Legal Models of Management Structure in the Modern Corporation: Officers, Directors, and Accountants*, 63 CALIF. L. REV. 375, 376 (1975) (discussing the origins of the board as the core of modern corporate decision making).

12. A 2023 Stanford study listed board effectiveness as the number one gap in our understanding of corporate governance. *See* Brian Tayan & David F. Larcker, *Seven Gaping Holes in Our Knowledge of Corporate Governance* (ECGI Working Paper No. 914/2023, 2023), https://ssrn.com/abstract=4416663 [https://perma.cc/ZG5W-PYRN]. *See also* Richard Fields & Rusty O'Kelley, *Global Corporate Governance Trends for 2023*, HARV. L. SCH. F. ON CORP. GOVERNANCE (Mar. 10, 2023), https://corpgov.law.harvard.edu/2023/03/10/global-corporate-governance-trends-for-2023 [https://perma.cc/VUW6-W9C3] (noting that a leading board consultant listed "skepticism about board quality" as one of the three main global corporate governance trends in 2023).

13. *See, e.g.*, Tayan & Larcker, *supra* note 12.

board full of independent directors will not necessarily be effective. Without some skills or prior experience, even the most motivated director could have a hard time asking the right questions, processing answers, and anticipating future problems. Until recently, corporate boards consisted almost entirely of "generalists": former CEOs in their 60s and 70s with general experience in running businesses on a large scale.[14] Today, the emphasis is shifting to adding directors with specific expertise in environmental, social and governance (ESG) issues.[15] More and more companies now feature a "cyber" director, a "diversity" director, a "climate" director, and so on.

Board expertise is thus becoming the most recent battlefront in the ESG debate, revolving around the increased societal demands that companies are facing.[16] In the past, demands to treat workers or the environment better were relegated to a "nice-to-have," corporate philanthropy category.[17] These days, by contrast, certain ESG issues are becoming a must.[18] Companies that fail to meet societal demands on issues such as user privacy, racial and gender diversity, and environmental degradation may face significant blowback.[19] In other words, ESG concerns have become a major source of risk for companies and their shareholders. The corporate organ in charge of monitoring risks is the board of directors. To do an effective job of monitoring evolving risks, boards must evolve as well.[20] From that angle, it is not surprising that companies feel pressure to

14. *See* Melvin A. Eisenberg, *The Duty of Care of Corporate Directors and Officers*, 51 U. PITT. L. REV. 945, 951 (1990).

15. Throughout the paper we use the terms "narrow" or "specific" expertise to denote skill sets and experiences in a particular ESG domain, such as climate change or diversity. We contrast them with "general" expertise of the kind described here, derived from having experience in running a business.

16. Leo E. Strine, Jr., Kirby M. Smith & Reilly S. Steel, Caremark *and ESG, Perfect Together: A Practical Approach to Implementing an Integrated, Efficient, and Effective* Caremark *and EESG Strategy*, 106 IOWA L. REV. 1885, 1887 (2021).

17. *See* Allison Herren Lee, SEC Comm'r, Keynote Address at the 2021 Society for Corporate Governance National Conference (June 28, 2021), https://www.sec.gov/news/speech/lee-climate-esg-board-of-directors [https://perma.cc/X55L-2SD9] ("[E]nvironmental and social issues, once perhaps treated as more peripheral, are now central business considerations. So boards are stepping up their engagement on climate and ESG related risks and opportunities.").

18. *Id*.

19. Roy Shapira, *Mission Critical ESG and the Scope of Director Oversight Duties*, 2022 COLUM. L. REV. 732, 734-35 (2022).

20. *See* Maria Castañón Moats, Paul DeNicola & Carin Robinson, *Board Effectiveness: A Survey of the C-Suite*, HARV. L. SCH. F. ON CORP. GOVERNANCE (July 4, 2023), https://corpgov.law.harvard.edu/2023/07/04/board-effectiveness-a-survey-of-the-c-suite-2 [https://perma.cc/ET5K-FQMS] (noting based on a survey of executives that "[w]ith companies facing new and rapidly evolving strategic challenges and business risks, today's board oversight responsibilities extend well beyond traditional areas"); *see also* Lee Ballin, Maureen Bujno & Kristen Sullivan, *Board Governance Structures and ESG*, HARV. L. SCH. F. ON CORP. GOVERNANCE (Feb. 15, 2023), https://corpgov.law.harvard.edu/2023/02/15/board-governance-structures-and-esg [https://perma.cc/KU6F-STQD] (noting that "boards [may have to] adapt their governance structures to provide effective oversight in such a rapidly changing environmental and social landscape").

add expertise in climate change, cyber, diversity, and safety to their boards. What is surprising is how little we know about board expertise.

To what extent do companies respond to the abovementioned pressures and reconfigure their boards? How would the shift in board expertise change corporate behavior? Is it likely to prove overall desirable from a societal perspective? And what role, if any, should regulators and judges play in board expertise? This Article presents the first systematic endeavor to answer these questions. In the process, we generate the following three sets of contributions.

First, we provide empirical evidence on the scope and magnitude of on-the-ground changes in board expertise. We hand-collect and hand-code a novel dataset with details about board expertise from the proxy statements of S&P 500 (large-cap) and S&P 600 (small-cap) companies in three-year intervals (2016, 2019, and 2022). Creating this dataset of board expertise allows us to spotlight several notable patterns. For example, we observe that companies have significantly increased their emphasis on expertise disclosure, as evident by the adoption of image-based "skills matrices." In 2016, only 14% of the companies reported skills matrices. By 2022, that number had jumped to 66%. Companies have also started regularly tracking ESG-related expertise, as evident by the addition of new rows to skills matrices. To illustrate, over the 2016–22 period, 215 of the S&P 500 companies started tracking "technology" expertise, and 143 started tracking more specifically "cybersecurity." Beyond changes in how companies report expertise, our dataset reveals changes in how companies add expertise. To recast the cyber example, from 2019 to 2022, S&P 500 companies added 199 new directors who were "cyber" experts. The dataset also reveals stark differences between how large companies react to pressures to add expertise and how small companies do.

Second, we analyze how this recent shift in board expertise is likely to affect corporate behavior. Does adding directors with expertise in climate change mean less environmental degradation? Does adding directors with expertise in cyber mean more user privacy? Here we draw on interviews that we conducted with nomination committee members and search consultants,[21] and borrow insights from the multidisciplinary literature on group decision-making, to explore the pros and cons of adding expert directors. It is intuitive to think of board expertise as an unalloyed good (what harm could come of adding more expertise?). And, indeed, the push toward new expertise has potential advantages. For one, it can

21. "Nomination committees" are the board's subcommittees responsible for identifying candidates for positions on boards. They often work with third-party "search consultants" in various stages of their process. These two sets of individuals have first-hand insight into how individual director attributes affect board work.

raise awareness of important societal problems that the old boys club of generalist directors may have a hard time grasping.

But adding specific expertise also comes with distinct disadvantages. Consider the following five. The first and most obvious drawback stems from the limited supply of quality directors who are also experts in specific fields such as climate change and cybersecurity. When all large companies are pressured to add expert directors from a very limited pool of candidates, companies may end up adding directors with lower-than-average bandwidth, motivation, and understanding of the business. As a result, adding a director with a narrow range of expertise may reduce the quality of board discussions on other, more prevalent topics on the agenda. The second drawback comes from *authority bias*. Counterintuitively, adding a director with expertise in a specific subject matter may hinder the quality of board discussions on that specific subject, due to a tendency of directors to overly rely on opinions and information coming from perceived experts. A third drawback has to do with suboptimal *board size*. To the extent that companies inject expertise into their boards by adding new members (instead of replacing old ones), the push toward more expertise may cause boards to become bloated, thereby slowing down communication and hindering coordination. A fourth drawback concerns *board diversity*. The push toward diversity in directors' skill sets could clash with efforts to promote diversity in their demographics and viewpoints (gender and minority-group diversity). This is because the pool of available expert directors in any given area may be limited and skewed. To illustrate, less than 12% of the directors with cyber expertise in S&P 600 companies are females or minorities. Finally, by touting the addition of expert directors, companies may be engaging in *board washing*, that is, trying to alleviate societal pressures without improving their underlying behavior.

Whether the benefits of adding ESG-expert directors outweigh the costs is a context-specific question. Still, we can highlight one general reason to worry about the tradeoff: today's evolution of corporate boardrooms is not happening gradually and organically. In many ways, it is rather a reaction to the abovementioned outside pressures through litigation, regulation (disclosure requirements), and shareholder involvement (activist campaigns and asset managers' voting policies). As a result, companies may fast-track expert directors into their boardrooms while compromising the director selection process and without careful onboarding and succession plans.

Finally, the Article generates concrete policy implications. For regulators, our analysis highlights the need to rethink the desirability of legal intervention. Addressing first-order problems such as climate change, racial discrimination, and data privacy by focusing on a specific observable director trait seems misguided. Having a certain skill set adds value only under specific circumstances, which vary across firms and over time. A one-size-fits-all nudge could backfire by limiting companies' flexibility to reconfigure their boards. To the extent that regulators intervene in board expertise, they should focus not on adding specific traits, but rather on ensuring more credible and comparable expertise disclosure. Indeed, our dataset reveals just how haphazard and unstandardized expertise disclosure currently is. We find many examples of two companies reporting different expertise for the same individual director who sits on both boards, and of companies checking more and more boxes in skills matrices even though no concurrent change in actual expertise occurred (cheap talk). For judges, our analysis spotlights the need to rethink how to assess board behavior (whether individually or collectively) and whether to assess the liability of domain-specific expert directors differently. For academics, our analysis situates the changes in board expertise within broader timely debates on "welfarism" in corporate governance, the promise and perils of mandatory disclosure, and the proper scope of director oversight duties.

A few words on methodology and terminology are in order from the outset. The reason legal scholars have understudied board expertise and board effectiveness is not because they find these issues unimportant, but rather because they find them to be lacking in data and hard to capture in neat models.[22] To overcome the lack of data we constructed our own dataset. To overcome the fact that board effectiveness is hard to capture in neat models, we conducted in-depth open conversational interviews with practitioners.[23] The advantages of such interviews are especially pronounced when trying to understand complex, nuanced issues such as the director selection process and how individual attributes affect board dynamics.[24] The interviews help us provide context and qualitative understanding of findings from our own dataset, large-scale practitioner surveys, and the theoretical literature on board decision-making. And the iterative nature of these interviews allowed us to probe deeper into specific themes that we did not anticipate, and to go back to the dataset to test the new hypotheses.

22. Renee B. Adams, *Boards, and the Directors Who Sit on Them*, *in* THE HANDBOOK OF THE ECONOMICS OF CORPORATE GOVERNANCE 291, 332 (2017) (noting that lack of available data makes it notoriously hard to understand how boards work, and imploring researchers not to give up and to utilize methods such as interviews or content analysis of board minutes).

23. In this type of interview, the researcher introduces a topic in broad strokes, the interviewee talks freely about his experience and insights into the topic, and the researcher further probes specific experiences with follow-up questions. THE SAGE ENCYCLOPEDIA OF QUALITATIVE RESEARCH 127 (Lisa Given ed., 2008).

24. We elaborate on the methodology in Section II.A and Appendices A and B below. *See also* Amedeo Pugliese, Alessandro Zattoni, Bruno Buchetti & Francesca Romana Arduino, *The Methodological Challenges to Opening Up the Black Box of Boardroom Dynamics*, *in* HANDBOOK OF RESEARCH METHODS FOR CORPORATE GOVERNANCE 268, 272 (2023) (noting the importance of using interviews to understand the inner processes of corporate boards).

We define "expertise" for our purposes as directors' ability to comprehend the issues at hand.[25] Board expertise is the function of the knowledge, skills, and experience that individual directors bring to the table. As will become clearer in the sequel, perhaps the biggest problem with expertise disclosure is the lack of consensus on how to define and measure expertise. The problem is exacerbated because expertise is not a monolithic concept: there exist numerous sets of knowledge, skills, and experiences, and some of them are easier to assess than others (e.g., the ability to comprehend financial reports versus the ability to comprehend climate risks). We refer to the new types of domain-specific expert directors as "specialist directors," while emphasizing that their special expertise lies in areas that until recently were not considered very relevant to directors' skillsets, such as climate or diversity. Instead of lumping all these directors together as "ESG directors," we try to break down the ESG category into its various components and highlight how each newly emphasized expertise comes with different challenges for disclosure, nomination, and onboarding. For example, "safety" and "cyber" are closer in kind to traditional, industry-related types of expertise than "DEI" and "climate" are.[26]

The Article proceeds in four parts. Part I provides background on why boards matter for corporate governance, and why expertise matters for boards. It also canvasses previous developments in board expertise, for some perspective on today's shift toward different types of expertise. Part II presents evidence on the scope and magnitude of the current shift in board expertise. Part III moves from the descriptive to the normative, analyzing the counterintuitive ramifications of the push toward new types of expertise. Part IV moves from the normative to the prescriptive, highlighting concrete policy implications. A short Conclusion clarifies our original contributions by juxtaposing them with the extant literature and acknowledges the limitations of our study.

I. Background: The Push for Board Expertise

Companies are facing increased regulatory and societal demands these days, imploring them not just to provide good returns to investors

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25. We adopt this definition from Donald C. Hambrick, Vilmos F. Misangyi & Chuljin A. Park, *The Quad Model for Identifying a Corporate Director's Potential for Effective Monitoring: Toward a New Theory of Board Sufficiency*, 40 ACAD. MGMT. REV. 323, 324 (2015).

26. The new type of specialist directors—whether the cyber expert or the safety expert or the sustainability expert—are all expected to monitor and advise management on issues that go beyond the immediate interests of the company's shareholders, such as user privacy, consumer safety, and climate change. In that respect, one can justify calling them "ESG directors," or "ESG-specialist directors." After all, "win-win" versions of stakeholderism (that is, arguments positing that companies that take care of other stakeholders will also deliver better long-term results for shareholders, if only because they are better at mitigating long-term risks) tend to collapse the distinction between safety and cyber to sustainability and DEI in that regard.

but also to treat the environment and their employees better.[27] Failing to meet these demands can generate significant financial and reputational risks.[28] The organ in charge of oversight of such risks is the board of directors. And when risks materialize it is usually the directors who shoulder the blame in the courtroom and in the court of public opinion.[29]

To effectively fulfill their demanding role, directors need something more than just motivation and independence. Without some level of expertise, even the most public-spirited director may find it hard to ask the right questions, process the answers, and anticipate future developments. In the past, practitioners and regulators largely left the question of what skill sets directors should have to their respective companies, or emphasized the importance of general "financial" expertise. These days, by contrast, investors and regulators implore boards to add expertise in specific, ESG-related domains, such as climate change, diversity, and data privacy.

This Part provides the background necessary for understanding the push toward new board expertise. Section A delineates the central roles that boards play in corporate decision-making and explains why boards need expertise to effectively fulfill these roles. Section B highlights the various forces that currently nudge companies toward changing the types of expertise that they have on their boards.

A. Boards Matter, and Expertise Matters for Boards

Business companies play a central role in modern societies, serving as a hub around which most economic and social activity centers. And boards play a central role in the governance of these companies.[30]

We can group the various roles that boards play in corporate behavior into two categories, namely, monitoring and resource provision.[31]

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27. Strine et al., *supra* note 16, at 1886 (on increased societal demands); John F. Savarese, Ralph M. Levene, Wayne M. Carlin, David B. Anders & Sarah K. Eddy, *Wachtell Lipton Discusses White-Collar and Regulatory Enforcement: What Mattered in 2020 and What to Expect in 2021*, CLS BLUE SKY BLOG (Feb. 10, 2021), https://clsbluesky.law.columbia.edu/2021/02/10/wachtell-lipton-discusses-white-collar-and-regulatory-enforcement-what-mattered-in-2020-and-what-to-expect-in-2021 [https://perma.cc/Z3LE-JV6T] (discussing increased regulatory demands).

28. Shapira, *supra* note 19, at 734-35.

29. *See* Adams, *supra* note 22, at 292.

30. *See* Rev. Model Bus. Corp. Act § 8.01(b) (2023); DEL. CODE. ANN. tit. 8, § 141(a) (2024); *see also* STEPHEN BAINBRIDGE & M. TODD HENDERSON, OUTSOURCING THE BOARD: HOW BOARD SERVICE PROVIDERS CAN IMPROVE CORPORATE GOVERNANCE 17-19 (2018) (tracing the principles and centrality of corporate boards to the thinking of the U.S. founding fathers); Yaron Nili, *Out of Sight, Out of Mind: The Case for Improving Director Independent Disclosure*, 43 J. CORP. L. 35, 39 (2017) (discussing the growing importance of directors in board governance); Gregory H. Shill, *The Independent Board as Shield*, 77 WASH. & LEE L. REV. 1811, 1822-28 (2020) (describing the rise of the independent board model). To be sure, saying that "boards matter" is a generalization: boards play a larger role in some corporations than in others, as a function of myriad factors, such as ownership structure.

Corporate legal scholars tend to focus on the former, monitoring role.[32] The idea is that boards mitigate the agency problems that emanate from the separation of ownership and control.[33] Directors supervise and curtail managerial attempts to extract private benefits and hurt the interests of dispersed public shareholders.[34] Boards employ various levers to monitor managers from hiring and firing managers, to designing their executive pay packages, to participating in key decisions on issues such as mergers.[35]

Organization scientists tend to emphasize the latter, resource provision role of boards.[36] Here the underlying theoretical framework is not agency theory but rather resource dependence theory. Directors provide access to resources that are critical to the company's success. They provide advice and counsel on the company's most strategic decisions. They lend companies their "reputational capital," thereby bolstering the companies' image and legitimacy.[37] And they also lend companies their human capital (connections), as in providing access to regulators or communication channels with different stakeholder groups.[38]

In both their monitoring and resource-provision roles, boards affect not just their company's financial bottom line, but also broader societal issues.[39] Boards impact corporate behavior on issues such as environmental degradation, racial justice, minimum wage, and gender equality.[40] Indeed, in recent years a booming ESG movement has raised environmen-

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31. Amy J. Hillman & Thomas Dalziel, *Boards of Directors and Firm Performance: Integrating Agency and Resource Dependence Perspectives*, 28 ACAD. MGMT. REV. 383, 383 (2003).

32. Usha R. Rodrigues, *Do Conflicts of Interest Require Outside Boards? Yes. BSPs? Maybe*, 74 BUS. LAW. 307, 308 (2019) ("Students of the modern corporation know that recent decades have emphasized this monitoring role for the board.").

33. *See* MELVIN ARON EISENBERG, THE STRUCTURE OF THE CORPORATION: A LEGAL ANALYSIS 129, 139-41 (1976); Stephen M. Bainbridge & M. Todd Henderson, *Boards-R-Us: Reconceptualizing Corporate Boards*, 66 STAN. L, REV. 1051, 1053 (2014) ("[S]tate law requires boards to mediate the relations between ownership and control of the corporation."); Dalia Tsuk Mitchell, *Status Bound: The Twentieth Century Evolution of Directors' Liability*, 5 N.Y.U. J. L. & BUS. 63, 136-38 (2009).

34. *See generally* 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, 1468 (2007).

35. STEPHEN BAINBRIDGE, CORPORATE GOVERNANCE AFTER THE FINANCIAL CRISIS 45 (2012).

36. *See* Hillman & Dalziel, *supra* note 31, at 383.

37. Amy Hillman, Gavin Nicholson & Christine Shropshire, *Directors' Multiple Identities, Identification, and Board Monitoring and Resource Provision*, 19 ORG. SCI. 441, 444 (2008).

38. *See* BAINBRIDGE & HENDERSON, *supra* note 30, at 38; *cf.* Nili, *supra* note 30, at 43 (discussing the role of the board in facilitating firm access to resources).

39. *Cf.* Yaron Nili, *Horizontal Directors*, 114 NW. U. L. REV. 1179, 1188-90 (2020) (discussing the increased reliance on boards).

40. *See, e.g.*, Tom C.W. Lin, *Incorporating Social Activism*, 98 B.U. L. REV. 1535, 1560-61 (2018) (providing concrete examples of the size and the outsized influence of large corporations on society writ large).

tal and social issues to the top of corporate boards' agendas.[41] Boards now incorporate ESG considerations into many of their abovementioned processes, such as designing executive pay packages.[42] Accordingly, while most Americans are not shareholders, they are impacted by the actions (or inaction) of corporate boards.[43]

If boards play such a critical role in society, understanding what determines board effectiveness is critical. Corporate legal scholars and regulators have traditionally answered this question by focusing on directors' incentives, such as whether the roles of the CEO and chairperson should be separated, how many of the directors should be independent of the controlling shareholder, or what function the Lead Independent Director plays.[44] But by now the independence debate is virtually over. Independence won. Almost all large companies have boards that consist mostly of people coming from outside the company.[45] Beyond the sheer numbers, stock exchange listing requirements have led to the reconfiguration of board committees, such that nowadays the most important committees are usually comprised solely of independent directors.[46]

But as boards became increasingly independent, it became clear that independence does not guarantee board effectiveness.[47] Beyond having good incentives, directors must also have good abilities. That is, even if directors are not dependent on top management, and truly want to rigidly monitor companies and bring a fresh set of advice to the table, they will not necessarily be able to do so without having certain skill sets and experience. Granted, some issues on a board's agenda are not that hard to comprehend as long as directors have common sense. But other issues are complex enough that a director may find it hard to know what questions to ask, understand the answers given, and grasp potential future risks. In-

41. Steve Klemash, Rani Doyle & Jamie C. Smith, *Eight Priorities for Boards in 2020*, HARV. L. SCH. F. CORP. GOVERNANCE (Jan. 14, 2020), https://corpgov.law.harvard.edu/2020/01/14/eight-priorities-for-boards-in-2020 [https://perma.cc/9C9M-MTC7].

42. *See* Lucian A. Bebchuk & Roberto Tallarita, *The Perils and Questionable Promise of ESG-Based Compensation*, 48 J. CORP. L. 37, 45-47 (2022).

43. Kim Parker & Richard Fry, *More Than Half of U.S. Households Have Some Investment in the Stock Market*, PEW RSCH. CTR. (Mar. 25, 2020), https://www.pewresearch.org/fact-tank/2020/03/25/more-than-half-of-u-s-households-have-some-investment-in-the-stock-market [https://perma.cc/QK43-M5R9].

44. *See, e.g.*, Rodrigues, *supra* note 32, at 308; Yaron Nili, *Board Gatekeepers*, 72 EMORY L.J. 91 (2022). Independence is usually measured as lack of financial ties to the company's top management or controlling shareholder.

45. Gordon, *supra* note 34, at 1468, 1475.

46. *Id.*; N.Y.S.E. Listed Company Manual, §§ 303A.02 & 802-05; NASDAQ Stock Mkt. LLC Rules §§ 5605(a)(2), (c)(3) & (d)(2).

47. Jeffrey L. Coles, Naveen D. Daniel & Lalitha Naveen, *Survey of Boards' Monitoring and Advisory Roles, in* HANDBOOK OF CORPORATE FINANCE 9 (David J. Denis ed., 2024), https://ssrn.com/abstract=4505978 [https://perma.cc/MDK8-6LPZ]; Martin Edwards, *Expert Directors*, 90 U. COLO. L. REV. 1051, 1054 (2019) (noting that "the heavy focus on independence has crowded out potentially useful discussions about appointing directors with specific substantive skills, experience, or expertise").

deed, empirical studies show that corporate performance suffers when board expertise is not aligned with the specific governance challenges that the company is facing.[48]

It is therefore clear that board expertise matters. Now the question becomes *what types* of expertise are needed in boardrooms. The answer to this question is context specific: the expertise that is needed in an upstart biotech company is not the same as the expertise that is needed in a well-established food retailer. Still, there are certain trends in the types of expertise that are being emphasized by practitioners and regulators. Up until the past couple of decades, the emphasis had been on "industry-specific expertise."[49] The idea is intuitive: to be effective in advising management, boards should have at least some directors with close familiarity with the operations and the competitive landscape specific to the company. Following a wave of corporate governance scandals in the early 2000s, regulators started emphasizing "financial" expertise more heavily.[50] Here as well the logic is intuitive: to be effective in monitoring management, overseeing budgeting, and detecting financial fraud, boards should have at least some directors who are able to dissect financial reports.[51] Indeed, pursuant to the Sarbanes–Oxley Act of 2002, the SEC started requiring companies to disclose whether their audit committee members possess financial expertise.[52] By the start of the 2010s, all boards of large companies had at least one director with finance and accounting skills.[53] Other common skill sets that companies have traditionally sought to add to their boards include "legal" (understanding the regulatory framework), "leadership" (providing advice on how to galvanize and manage talent), and

48. Karen Schnatterly, Felipe Calvano, John P. Berns & Chaoqun Deng, *The Effects of Board Expertise-Risk Misalignment and Subsequent Strategic Board Reconfiguration on Firm Performance*, 42 STRATEGIC MGMT. J. 2162, 2185 (2021).

49. *See, e.g.*, Asaf Eckstein & Gideon Parchomovsky, *Toward a Horizontal Fiduciary Duty in Corporate Law*, 104 CORNELL L. REV. 803, 827 (2019).

50. Schnatterly et al., *supra* note 48, at 2165-66.

51. *Id.*; Lawrence A. Cunningham, *Rediscovering Board Expertise: Legal Implications of the Empirical Literature*, 77 U. CIN. L. REV. 465, 466 (2008).

52. Item 407(d) of Regulation S-K. Accounting and Finance scholars have since examined how the requirement to add financial expertise has affected corporate behavior. One of the interesting findings for our purposes is the marked differences between variants of financial expertise: the market reacted positively to appointments of "financial experts" with accounting expertise, but not to appointments of "financial experts" who did not possess accounting expertise. Mark L. Defond, Rebecca N. Hann & Xuesong Hu, *Does the Market Value Financial Expertise on Audit Committees of Boards of Directors?*, 43 J. ACCT. RSCH. 153, 158 (2005); Cunningham, *supra* note 51, at 477-78 (decrying the SEC's choice to adopt a more expansive definition of financial expertise instead of focusing on accounting expertise). This raises the question of what counts as expertise in a given domain, which we will revisit in Parts III-IV below.

53. Renee B. Adams, Ali C. Akyol & Patrick Verwijmeren, *Director Skill Sets*, 130 J. FIN. ECON. 641, 642 (2018). Note that any company trading on NYSE or NASDAQ must have a director with financial expertise or disclose the reason for not having one.

"marketing" (providing advice on how to bolster the brand and stay on top of customers' evolving preferences).[54]

Skills and experience in classic ESG issues, such as diversity or climate change, were traditionally not considered relevant director traits.[55] To the extent that boards grappled with such issues, they did so by relying on company officers or by hiring ad-hoc outside consultants. But times are changing. We are currently witnessing a growing demand for board-level involvement in ESG. The demand has already transformed certain aspects of board governance: for example, more and more companies have been amending their board committee charters to explicitly address board ESG oversight.[56] As the next Section shows, the demand for board-level ESG accountability now translates into demands that boards reshape not just their committees' charters but also their overall composition.

B. Companies Face Pressures to Add ESG Expertise to Their Boards

Companies occasionally reconfigure their boards when they perceive a gap between their evolving needs and their directors' expertise.[57] Such reconfiguration is not always a voluntary, organic process, though: it sometimes comes as a response to outside pressures. This seems to be the case these days, with companies facing significant pressures to add specialist directors with new types of ESG expertise: from cyber, to climate change, to DEI.[58] Below we identify three key conduits of pressure: institutional investors, disclosure requirements, and litigation.

First, an important source of pressure to add specialist directors with ESG expertise to the board is *institutional investors*. The largest asset managers, such as BlackRock and State Street, have updated their voting policies and declared publicly that boards should include directors who are experts in sustainability.[59] Activist shareholders have called on Big

54. *Id.* at 645.

55. To illustrate, in 2018 top academics in the field published a comprehensive categorization of directors' skill sets and did not even mention DEI. *Id.* at 645 tbl.2.

56. Lisa M. Fairfax, *Board Committee Charters and ESG Accountability*, 12 HARV. BUS. L. REV. 371, 372 (2022).

57. Schnatterly et al., *supra* note 48, at 2167, 2175, 2179-80 (identifying such strategic board reconfiguration); Fairfax, *supra* note 56, at 398-99 (compiling surveys showing that boards believe that they suffer from an ESG expertise gap).

58. We occasionally refer to these new types of narrow expertise as "ESG expertise," but as noted in the Introduction, we acknowledge that the ESG term is murky and its application here is contestable. For example, one could claim that expertise in safety (as in the *Boeing* example) or in cyber are not the same as expertise in climate. *See supra* note 26 and the accompanying discussion.

59. *See, e.g.*, Martin Lipton, Steven A. Rosenblum, Karessa L. Cain, Sabastian V. Niles, Amanda S. Blackett & Kathleen C. Iannone, *It's Time to Adopt the New Paradigm*, HARV. L. SCH. F. ON CORP. GOVERNANCE (Feb. 11, 2019), https://corpgov.law.harvard.edu/2019/02/11/its-time-to-adopt-the-new-paradigm [https://perma.cc/YSQ7-V3PK].

Tech companies to add directors with expertise in civil rights,[60] and on Big Oil companies to add directors with expertise in climate change.[61] The reasoning behind such shareholder proposals to add specific expertise is that a given company's checkered past on certain issues can generate significant legal, financial, and reputational risks for the company.[62] Adding a director with awareness and deep understanding of civil and human rights (for Big Tech) or sustainability (for Big Oil) could improve board oversight of said critical issue, or so the activist shareholders argue.[63] In fact, even the more "traditional" activist shareholders who are not normally focused on ESG now regularly criticize companies for their lack of board expertise on ESG issues, using this criticism as a rallying cry for their campaigns.[64]

A second important source of pressure to add ESG expertise to the board is *disclosure mandates*. The classic example here is the SEC's 2022 proposal to adopt cybersecurity disclosure rules.[65] The proposal pertained to respond to "evolving risks and investor needs" in cybersecurity by mandating certain disclosures of how companies handle incidents ex post and prevention ex ante.[66] Pertinently, the proposal required companies to identify which directors on the board, if any, have cybersecurity skills or experience.[67] To be sure, disclosure rules do not expressly require companies to add directors with specific expertise. On paper, companies could simply disclose that they have no cyber expertise on their board. Still, companies take such disclosure requirements seriously, and indeed many have responded to the SEC's proposal by allocating a "cyber seat" on their boards.[68]

A third source of pressure is *corporate law litigation*. The *Boeing* case is a classic example of adding settlement-induced directors: adding

60. Rebecca Klar, *Tech Giants Face Rising Pressure from Shareholder Activists*, THE HILL (May 25, 2021), https://thehill.com/policy/technology/555420-tech-giants-face-rising-pressure-from-shareholder-activists [https://perma.cc/SX6Z-JXZP].

61. Eaton, *supra* note 8; Phillips, *supra* note 8.

62. Eaton, *supra* note 8; Phillips, *supra* note 8.

63. Facebook, Inc., Current Report (Form 8-K) (May 26, 2021).

64. *See, e.g.*, Holly Gregory, *Board Oversight: Key Focus Areas for 2022*, HARV. L. SCH. F. ON CORP. GOVERNANCE (Jan. 5, 2022), https://corpgov.law.harvard.edu/2022/01/05/board-oversight-key-focus-areas-for-2022 [https://perma.cc/5SV7-HNKC].

65. *SEC Proposes Rules on Cybersecurity*, *supra* note 6. After the completion of this Article's first drafts, the SEC announced that following detailed critical comments of the proposed cyber expertise disclosure provision, it abandoned the provision. We discuss the SEC's retreat at length in Part IV below. The retreat is largely irrelevant to our discussion in Parts I-III, because the proposal in itself has already affected companies' decisions on what to disclose and how to compose their boards in the relevant timeframe for our data.

66. *Id.*

67. *Id.*

68. *See infra* Part II; *see also* Ballin et al., *supra* note 20 (noting that boards are revising their directors' skill sets, especially when it comes to issues on which the SEC demands disclosure, such as cyber and climate).

directors with a particular skill to the board as part of the company's "give" in a settlement agreement. To settle claims for failure of oversight duties, Boeing committed to appoint a new director with expertise in airplane safety, and to ensure that, going forward, at least three of its directors would have aviation, engineering, or product safety oversight experience.[69] In the past, when settlements contained prophylactic corporate governance measures, they usually focused on adding *independence*, for example, requiring that at least a majority of the board be outside independent directors.[70] To the best of our knowledge, *Boeing* is the first example of a settlement shifting focus to adding *expertise*. And we believe that it may be a harbinger of more settlements to come. After all, *Boeing* is a signifier of the dramatic rise in oversight duty litigation, which implicates broader societal interests.[71] When litigation revolves around behavior that harms shareholders qua shareholders, such as inflated executive pay or depressed acquisition prices or cooked books, it makes sense for settlements to focus on better incentives. But when litigation starts revolving around behavior that harms others, such as product safety or user privacy or toxic emission (as the new mode of oversight duty litigation seemingly does[72]), it makes sense for settlements to focus on better expertise.

In fact, the resurgence of oversight duty litigation is creating pressure to add specialist directors ex ante, before a specific company is even sued. Indeed, a cursory look at leading law firms' websites reveals that many of them send memos to their clients, advising the latter to reassess the types of expertise that they need to have on their boards.[73] To illustrate, Sidley Austin's memo recommends that (1) companies annually evaluate whether directors with new expertise are needed to make the board effective, and in particular that (2) ESG expertise be critical when considering new nominees.[74] When many of the major legal advisors to

69. *See supra* note 4; *Boeing Elects David L. Gitlin to Board of Directors*, CISION PR NEWSWIRE (June 21, 2022), https://www.prnewswire.com/news-releases/boeing-elects-david-l-gitlin-to-board-of-directors-301572445.html [https://perma.cc/7ZEH-XSM6].

70. *See, e.g.*, *In re* Alphatec Holdings, Inc. Derivative S'holder Litig., No. 37-2010-00058586 (Cal. Super. Ct., San Diego Cnty., Mar. 25, 2014); *In re* Ormat Techs., Inc. Derivative Litig., No. CV10-00759 (Nev. Dist. Ct., Washoe Cnty., Sept. 25, 2012).

71. On the rise of oversight duty litigation and its consequences, see generally Roy Shapira, *A New* Caremark *Era: Causes and Consequences*, 98 WASH. U. L. REV. 1857 (2021).

72. On how oversight duty litigation in its current, post-*Boeing* format focuses more on violations of regulations meant to protect the interests of non-investors see Shapira, *supra* note 4.

73. *See, e.g.*, Gail Weinstein, Philip Richter & Steven Epstein, *Chancery Court Addresses Board Responsibility under* Caremark *for Cybersecurity Risk*, HARV. L. SCH. F. ON CORP. GOVERNANCE (Nov. 17, 2022), https://corpgov.law.harvard.edu/2022/11/17/chancery-court-addresses-board-responsibility-under-caremark-for-cybersecurity-risk [https://perma.cc/XC35-2PKY] ("[W]hen recruiting new directors, take into consideration the board's expertise in addressing regulatory and other key risks (such as cybersecurity).").

74. Gregory, *supra* note 64.

corporate boards underscore the need to add specific types of expertise, it is reasonable to expect that boards will listen.

The question that we now turn to is, to what extent do companies respond to these pressures?

II. Evidence: The New Board Expertise

There already exist strong indications that companies are reacting to the abovementioned pressures by reconfiguring their boards.[75] Consider the following data points from annual director surveys: Korn Ferry's recent survey finds that "more than half [of survey respondents] are eager to add directors" with new skills.[76] PwC's recent survey notes that half of the respondents believed that at least one director on their board should be replaced in order for the firm to be able to better address the evolving risks it is facing.[77] And the National Association of Corporate Directors points out that "many companies created a board seat for a cybersecurity expert."[78]

While such surveys tell us that a change is underway, they do not tell us what the scope and magnitude of the change is. Nor do they tell us how the reshaping of corporate boards manifests differently across different companies. This is where our own empirical inquiry comes in. Section A details our methodology in building a novel dataset of companies' reporting on board expertise. Section B spotlights the main patterns emerging from our data. Throughout this Part we provide context and interpretations with the help of interviews that we conducted with nomination committee members and search consultants.

A. Methodology

The shift toward new, ESG types of board expertise is recent. As a result, it is not captured by existing empirical studies on board expertise.[79] To explore the shift, we therefore hand-collected and hand-coded our

75. Lee, *supra* note 17 (referring to studies showing an increase in ESG-related expertise).

76. *Korn Ferry Survey Finds Directors Eager to Add Needed Skills but Reluctant to Change Current Board*, KORN FERRY (July 5, 2016), https://www.kornferry.com/about-us/press/Korn-Ferry-Surveys-Finds-Directors-Eager-to-Add-Needed-Skills-But-Reluctant-to-Change-Current-Board [https://perma.cc/XEN2-DHU5].

77. *Turning Crisis into Opportunity: PwC's 2020 Annual Corporate Directors Survey*, PWC (Sept. 2020), https://www.pwc.com/us/en/services/governance-insights-center/assets/pwc-2020-annual-corporate-directors-survey.pdf [https://perma.cc/2HGG-YVN3].

78. Joyce Cacho, *Board Committees Are Key to Embedding ESG*, NACD BOARDTALK (Feb. 16, 2022), https://blog.nacdonline.org/posts/committees-key-embedding-esg [https://perma.cc/W4AN-JM9N].

79. To illustrate: when a comprehensive 2018 study catalogued twenty types of directors' skill sets, it did not include today's "hottest commodities" such as DEI or AI expertise. Adams et al., *supra* note 53, at 645 tbl.2.

own dataset. We read the proxy statements of all S&P 500 companies in three-year intervals, namely, 2022, 2019, and 2016. We did the same for a random sample of 100 companies out of the S&P 600, which represents small-cap companies.[80] In all, we searched 1,800 proxy statements for content on board expertise.

A short primer on how companies disclose board expertise in proxy statements is in order. In 2009, the SEC amended Regulation S-K to require public companies to disclose the expertise that each director brings to the table.[81] However, the regulation does not go into detail about how companies should disclose expertise. Most companies include a few sentences about each director's expertise in their "biography" section. Over the years, more and more companies started disclosing expertise also in other, image-based formats such as "general skills tables," "skills matrices," and "ideal skills sections." Appendix A provides graphic illustrations of these different formats based on examples from the reports of Verizon, Twitter, and Boeing.

In a nutshell, general skills tables provide information about board expertise on the aggregate, without reporting which individual director possesses what skill set. To illustrate, a general skills table will tell you that out of the eight board members, five have financial expertise, two have expertise in M&A, and three have expertise in sustainability; but it will not tell you who has what. Skills matrices, by contrast, offer the clearest breakdown of individual directors' types of expertise: the rows are the types of expertise, and the columns are the individual directors. Skills matrices thus operate as a dashboard and a reference point for nomination committees or the company's shareholders, allowing them to consider what expertise gaps exist on the board, who to replace, and who to add.[82] Finally, some companies also report on "ideal skills" for the board, reflecting the criteria that the nomination committee will use to select future board directors. The ideal skills section does not reflect existing board expertise, but rather aspirational board expertise.

The first step in hand-coding the data was therefore to identify the different formats of expertise disclosure in each proxy statement. Not all companies include all four formats, and the different formats often contain different pieces of information. For example, a director biography

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80. We recognize the limitations of drawing comparisons between a sample (albeit random) of small-cap companies and the entire population of large-cap companies. But the comparison plays a minor role in our analysis; we use it mainly to highlight conjectures and trends that can be further tested in future research.

81. Proxy Disclosure and Solicitation Enhancements, 74 Fed. Reg. 35083 (July 17, 2009) (codified at 17 C.F.R. § 229.401).

82. Richard Clune, Dana R. Hermanson, James G. Tompkins & Zhongxia (Shelly) Ye, *The Nominating Committee Process: A Qualitative Examination of Board Independence and Formalization*, 31 CONTEMP. ACCT. RSCH. 748, 748 (2014) (quoting a head of a nomination committee in a NASDAQ-traded company).

may contain information on one unique skill set that is not represented as a row in the skills matrix.[83]

When extracting data from these different formats, we focused on two aspects that existing studies have largely overlooked. First, instead of measuring board expertise in the aggregate, we broke down the data into individual director attributes. Second, instead of focusing on traditional skill sets such as financial and industry-specific expertise, we focused on five new types of ESG expertise: "safety," "technological/cyber/AI," "environmental," "DEI," and general "ESG" expertise.[84] There already exist studies that document the prevalence of "traditional" skills such as finance or leadership.[85] Our aim was to study how companies are reconfiguring their boards to respond to today's pressures to add new, ESG-related expertise.

To provide context and highlight the dynamics behind the observable changes, we also conducted interviews with board members and search consultants. Appendix B lists our interviews. For each interview, we retain copies of the full transcript or detailed notes, with personal details removed. All our interviewees had experience in picking candidates to serve on boards. They served on or consulted with boards of companies ranging from giant Fortune 500 companies to smaller Russell 3000 companies. Our sampling of interviewees was largely based on the "snowballing" technique, starting from referrals from executives at organizational consulting firms, and asking each interviewee to refer us to others.[86]

Using the qualitative methodology of interviews is especially conducive to understanding complex, nuanced issues such as the director selection process, and how individual director attributes affect board effectiveness.[87] Previous attempts to study boards have usually focused solely on observable structural aspects, thereby underplaying the importance of board dynamics and decision-making processes and norms. By contrast,

83. To say that expertise disclosure is not standardized would be an understatement. We will return to this point when discussing policy implications in Section IV.A below.

84. On the choice to lump these types together as "ESG expertise" see note 58 *supra*.

85. *See, e.g.*, Adams et al., *supra* note 53, at 642 ("All boards have a director with finance and accounting skills. Boards also tend to have management skills (89.5% of boards) and leadership skills (74.7%) in common. But some boards will also have legal skills (34%) or risk management skills (27.6%), while others have manufacturing skills (37.3%) or entrepreneurial skills (16%).").

86. A note on our sample size: the current draft utilizes insights from six interviews. Since interviews are not the primary source of data in this Article, but rather serve the purpose of adding richness and context to the data, a relatively small number of interviews could suffice, as long as we reach saturation. And indeed, additional interviews and conversations that we conducted with directors did not add much to the insights relayed here. For the guidelines and logic behind these considerations see, for example, Patricia I. Fuchs & Lawrence R. Ness, *Are We There Yet? Data Saturation in Qualitative Research*, 20 QUAL. REP. 1408 (2015).

87. *Cf.* Adams, *supra* note 22, at 352 (discussing studies analyzing the director-selection process); Pugliese et al., *supra* note 24, at 272.

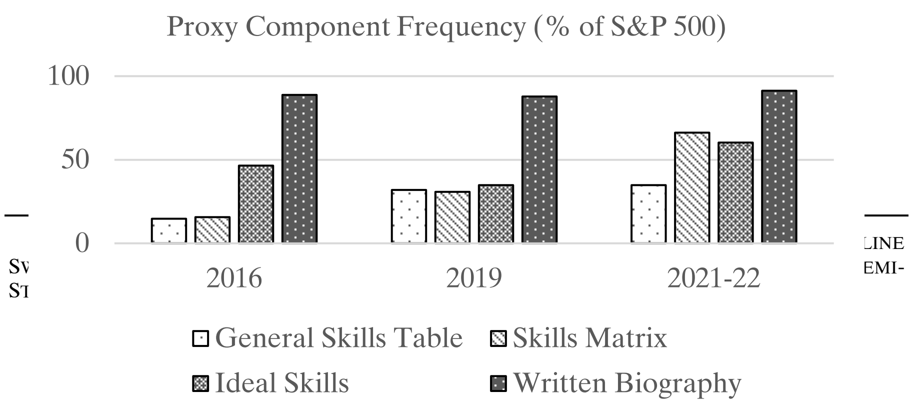
semi-structured conversations with board members and consultants can provide insight into the intricacies that are often overlooked in quantitative studies.[88] The iterative nature of interviews allowed us to probe deeper into specific themes that we did not anticipate, and to test the new hypotheses by rereading company disclosures and practitioner surveys. To be sure, the interview method has sharp limitations, such as the participant's willingness to be candid.[89] And our snowball sampling may lead to a biased sample of interviewees.[90] We acknowledge these limitations but note that the role of interviews here is limited to providing context to the statistical data. In other words, our methodology is based on triangulating multiple theoretical and empirical materials. Triangulation minimizes the biases of any single theory/method.[91] It is especially fitting when, as in our case, researchers are dealing with messy factors with little existing data.[92]

B. Findings

1. Companies Report More on Expertise

The first finding to jump out of our dataset is that companies have started putting heavier emphasis on board expertise disclosure. Specifically, there has been a significant growth in companies reporting expertise via skills matrices. As Figure 1 shows, while only 14.3% of S&P 500 included a skills matrix in 2016, 66.2% did so in 2022.[93] The prevalence of "general skills" rose from 14% to 34%, and the prevalence of "ideal skills" rose from 42% to 60% over the same period.[94]

Figure 1. Board Expertise Disclosure in the S&P 500



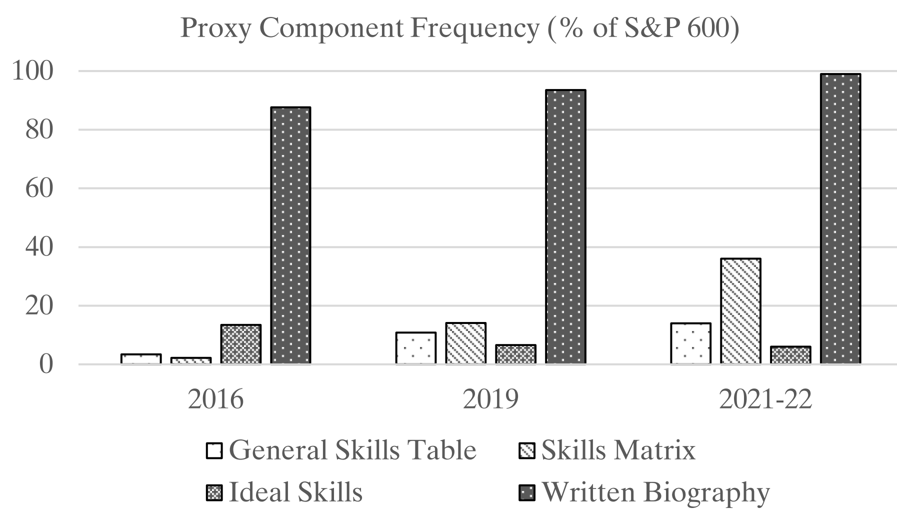
93. A recent working paper examines the extent to which companies reported skills matrices between 2011 and 2021 and finds that in 2011 only 5% of the companies surveyed did so. Becher et al., *supra* note 11, at 2.

94. The "director biographies" format remains relatively constant throughout the sample period, but this is to be expected as this is the one format that is required by regulation. 17 C.F.R. § 229.401 (Item 401) (2023).

One should not understate the importance of the widespread adoption of image-based expertise disclosure. Visualizing board expertise via skills matrices can increase investors' attention and ability to process information.[95] Skills matrices are used internally and externally to critically evaluate the human capital that boards need, and sometimes even to force directors off the board.[96] The fact that companies use this format indicates—and further intensifies—the increased emphasis on board expertise.

Note that the adoption of expertise disclosure formats varies between small-cap and large-cap companies. Figure 2 below shows the results for S&P 600 companies. It illustrates that, like large-cap companies, small-cap companies have provided more and more expertise disclosure over time. While only 2% of small-cap companies reported a skills matrix in 2016, by 2022 that number had jumped to 36%. But in absolute terms, the proportion of small-cap companies that use image-based expertise disclosure lags considerably behind large-cap companies. Recall that by 2022 more than 66% of large-cap companies adopted skills matrices.[97]

Figure 2. Board Expertise Disclosure in the S&P 600



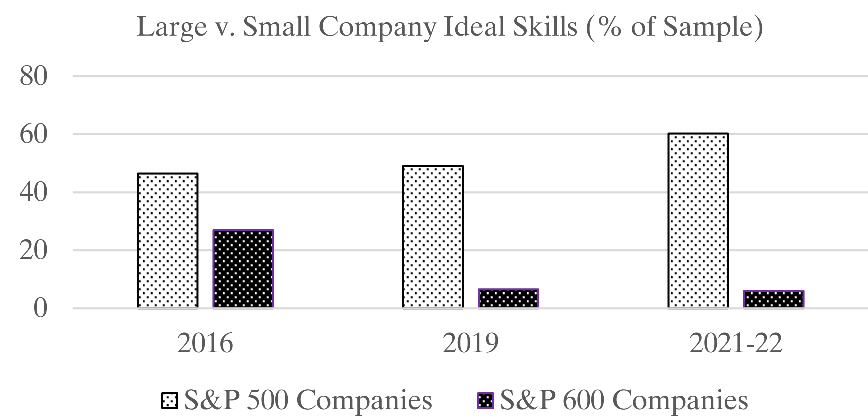
95. Becher et al., *supra* note 11, at 4-5.

96. Richard R. Clune, Dana R. Hermanson, James G. Tompkins & Zhongxia (Shelly) Ye, *The Governance Committee Process for U.S. Publicly Traded Firms*, 31 BEHAV. RSCH. ACCT. 21, 33 (2019).

97. Even among large-cap companies, there exists a nearly monotonic relation between firm size and skills matrix adoption. *See* Becher et al., *supra* note 11, at 9.

Nowhere are the differences between small- and large-cap companies clearer than when it comes to disclosing "ideal skills." As Figure 3 below shows, among S&P 500 companies there was a 15% increase in companies reporting ideal skills between 2016 and 2022. Over the same period, the number of S&P 600 companies reporting ideal skills *dropped* by 8%.

Figure 3. The Prevalence of Reporting on Ideal Skills



Why do large- and small-cap companies diverge so clearly in their approaches to reporting on aspirational board expertise? We conjecture that this data point could reflect a broader theme of the different corporate governance pressures that apply to large companies relative to those that apply to small companies.[98] In general, large companies face more pressures from the "corporate governance machine": they are followed by more analysts, covered by more journalists, monitored by more activist shareholders, researched by more academics, and held by more large institutional investors.[99] When corporate America faces ESG pressures, the pressures are not distributed equally, but rather apply much more strongly to the largest companies.[100] Indeed, a recent study finds that shareholder activism pressures regarding board composition are associat-

98. *See* Kobi Kastiel & Yaron Nili, *The Corporate Governance Gap*, 131 YALE L.J. 782, 787 (2022) (noting that governance standards differ significantly among small-cap corporations); Asaf Eckstein, *The Rise of Corporate Guidelines in the United States, 2005-2021: Theory and Evidence*, 98 IND. L. J. 921, 956-62 (2023) (showing that institutional investors' guidelines for interventions are targeted mostly at large-cap corporations).

99. Kastiel & Nili, *supra* note 98, at 802-17. On the "corporate governance machine," see Dorothy S. Lund & Elizabeth Pollman, *The Corporate Governance Machine*, 121 COLUM. L. REV. 2563, 2565 (2021).

100. Roy Shapira, *The Challenge of Holding Big Business Accountable*, 44 CARDOZO L. REV. 203, 265 (2022); Ann M. Lipton, *Beyond Internal and External: A Taxonomy of Mechanisms for Regulating Corporate Conduct*, 2020 WIS. L. REV. 657, 677 (2020).

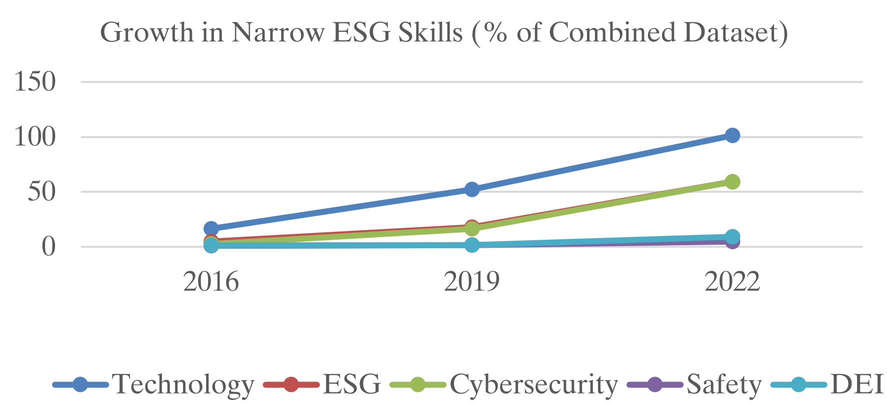
ed with a significant increase in the likelihood that the pressured company will adopt a skills matrix disclosure format.[101]

2. Companies Report on More Types of Expertise

Beyond a marked increase in the magnitude of board expertise disclosure (emphasizing it more via image-based formats), we also witnessed a marked increase in the scope of expertise disclosure, as in reporting on more types of ESG-related expertise (adding rows to skills matrices).[102] Among the S&P 500 companies that use either skills matrices or general skills tables, the share of companies that reported on at least one of the five ESG-related skills (safety, data privacy/cyber, environment, diversity, general ESG) increased from 46% in 2016 to 59% in 2022. For S&P 600 companies, the increase is even more pronounced: from 40% to 83% over that same period.

Figure 4 below breaks down the increased emphasis on ESG-related board expertise into the different parts of the ESG acronym. It illustrates more clearly the shift in emphasis on specific ESG-related expertise that occurred over the 2016-2022 period. To illustrate, among the S&P 500 companies, 215 companies started reporting on technology expertise over that period, 143 started reporting on cybersecurity expertise, and 138 started reporting on the umbrella-term ESG expertise.

Figure 4. Narrow ESG Skills



101. Becher et al., *supra* note 11 (finding that one standard deviation in their measure of shareholder activism pressure is associated with a 10% increase in the likelihood of skills matrix adoption).

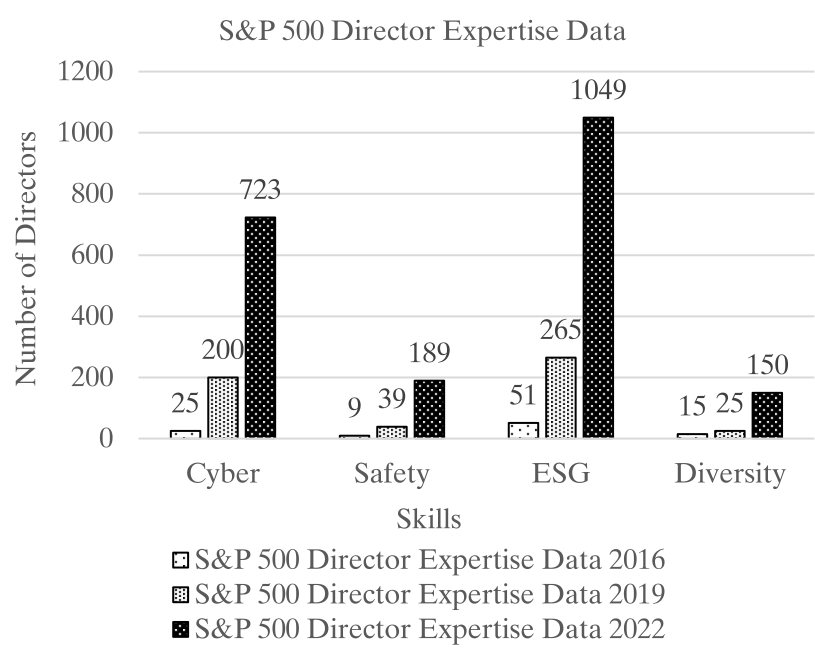
102. For an analysis of what skills in general companies include in their skills matrix, see *id.* at 10-11, which finds, for example, that 92% of matrix-reporting companies include a finance row, and 11% include a real estate row.

Two additional points are worth emphasizing here. First, the change in expertise disclosure is much more pronounced over the past couple of years.[103] That is, the jump from 2019 to 2022 is much bigger than the jump from 2016 to 2019, indicating an increasing trend. Second, we find it interesting that certain new, ESG-related skills are now overtaking more traditional skills. To illustrate, DEI expertise is now over three times more likely to be reported on than customer service expertise. To us, this reflects a broader theme in the corporate reputation literature, namely, that these days your reputation is dictated less by what you sell and more by who you are.[104]

3. Companies Add ESG Experts to Their Boards

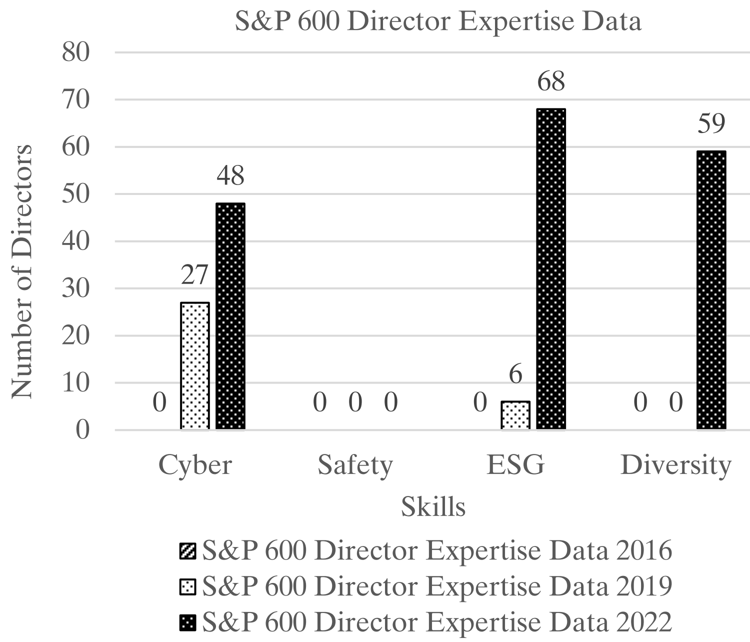
Aside from documenting a shift in how companies report board expertise, our dataset reveals a shift in the types of expertise that companies have on their boards. As Figure 5 below shows, among companies in the S&P 500 the number of directors with cyber expertise increased from 25 in 2016 to 200 in 2019 to 723 in 2022, reflecting almost a thirtyfold increase. The number of directors with safety expertise increased from 9 to 39 to 189 over that same period, reflecting a twentyfold increase. The number of directors with general ESG expertise increased from 51 to 265 to 1,049, reflecting a similar twentyfold increase. And lastly, the number of directors with diversity expertise increased from 15 to 25 to 150, reflecting a tenfold increase.

Figure 5. Dramatic Increase in Reported Board Expertise in the S&P 500



Among the S&P 600 companies, the relative jump is even more pronounced, simply because the starting point was much lower. In fact, Figure 6 below illustrates how *none* of the one hundred companies we surveyed in 2016 reported having any board expertise in cyber, safety, diversity, or ESG. By 2019, there were 27 directors with cyber expertise and 6 directors with ESG. By 2022, 48 directors were listed as cyber experts, 59 as diversity experts, and 68 as ESG experts.

Figure 6. Reported Board Expertise in the S&P 600



4. "Experts" in Name Only?

It was precisely the magnitude of the jump in the new types of board expertise that gave us pause. Knowing just how glacial board turnover can be,[105] we wondered how it is, for example, that from 2019 to 2022 the number of directors with expertise in cyber increased from 200 to 723. Where did all that expertise come from suddenly? We learned from our interviews that there are at least four factors contributing to the increase in cyber expertise. First, some of the increase is simply due to companies reporting on cyber expertise in 2022 but not in 2019. If veteran directors had cyber expertise in 2019, but their companies did not then include cyber as a row in the skills matrix, that expertise may not have counted in our 2019 data. Second, some of the increase is due to veteran directors acquiring expertise in a specific domain between 2019 and 2022. For example, TE Connectivity reports that in 2022 three of its directors gained cyber expertise by attending an NACD cybersecurity training program.[106]

105. Nili, *supra* note 39, at 1190.

106. TE Connectivity, Ltd., Definitive Proxy Statement (Schedule 14A), at 33 (Jan. 18, 2023), https://www.sec.gov/Archives/edgar/data/1385157/000155837022018900/tmb-20230315xpre14a.htm [https://perma.cc/282Y-BYYJ] ("Directors Davidson, Talwalkar and Wright participated in a National Association of Corporate Directors sponsored cybersecurity program during

Third, in some cases the increase is due simply to changes in disclosure rules, without any actual change in cybersecurity expertise. That is, a director who did not check the cyber box in 2019 may have changed her mind and started checking it in 2022.[107] Finally and most obviously, some of the jump is due to companies adding new directors with cyber expertise.

Deciphering the relative weight of each of these factors in explaining the change is important, as it tells us whether the reported change in board expertise is due to different reporting or to different expertise. For that purpose, we focused on the largest category of ESG-related expertise, namely, cyber. We located 149 companies whose proxy statement contains a skills matrix with cyber as one of its rows. Within these 149 companies, there were 723 directors that listed having cyber expertise in 2022. Out of these 723 directors, 570 are newly added cases of cyber expertise being checked.[108] Out of these 570 newly added cases, 348 are due to differences in how their companies disclose expertise: their companies did not have a cyber row in 2019 but added one by 2022. Another 23 newly added cases are due to how the individual directors reported on their own expertise: their companies had a cyber row in 2019, but these directors did not check the cyber box back then (but they do now). Another 199 of the newly added cases are due to changes in board composition: these are new directors who were added to the board after 2019 and brought with them cyber expertise.

It is thus clear that two forces play a meaningful role in the dramatic uptick in board expertise: while a significant part is due to the addition of new expert directors, another significant part is due to changes in how companies report on directors' skill sets and experience. To further understand the relative weight of these two factors, we coded the "biographies" section in the relevant proxy statements. We found that in only 275 of the 723 biographies, a director who checked the cyber box in the skills matrix is described in language indicating that they are a cyber expert. To be sure, this does not mean that the other 448 directors do not have cyber expertise. What it means is that for these other 448 directors, cyber probably is not a core element of their prior experience and qualifications. They may have experience discussing cybersecurity issues, but they are not cyber experts in the true sense of the word.

which each completed requirements established by the Software Engineering Institute of Carnegie Mellon University for a Certificate in Cybersecurity Oversight . . . .").

107. In some of these cases, it could be that the 2019 nondisclosure was unjustified.

108. Recall that 200 directors checked the cyber box in 2019, and so we excluded them from the sample. The number of new cases does not amount to 723 – 200 = 523, because some directors who checked cyber in 2019 had left the board by 2022.

One upshot is that there is more to board expertise than meets the eye. Expertise disclosure, in its current form, is not comprehensible, comprehensive, or comparable enough.[109]

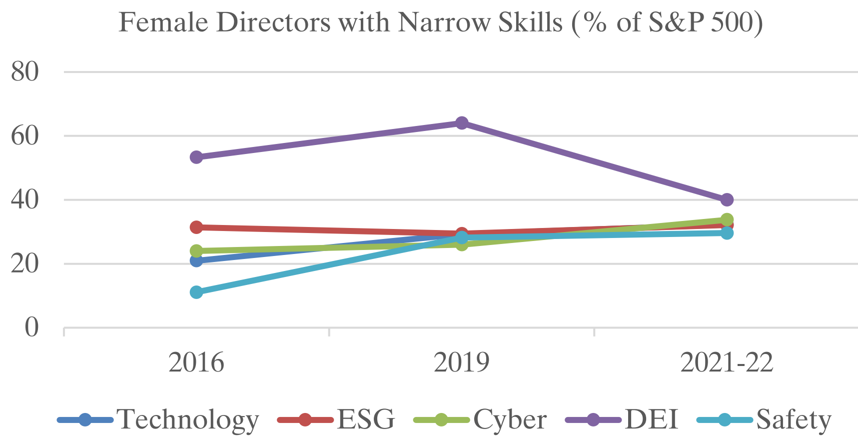
5. The Diversity of Expert Directors

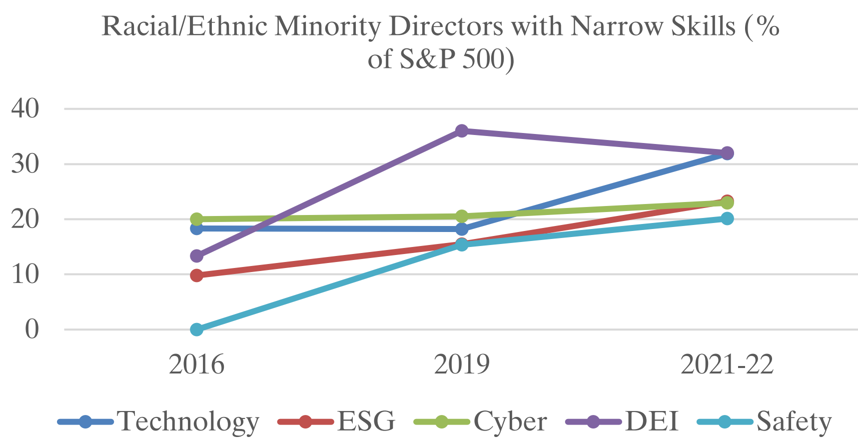
Once we identified the "new expertise directors" (i.e., those designated as having expertise in safety, cyber, environment, diversity, or ESG in general), we were able to look for patterns in their other attributes, and in particular their gender and racial diversity. Here, three types of variation stand out: over time, between large- and small-cap companies, and between types of expertise.

Over time there has been a marked increase in diversity among expert directors in large-cap companies. As Figure 7 illustrates, while 11% of directors with safety expertise were female in 2016, by 2022 that number jumped to 27%. The percentage of females among technology experts jumped from 20% to 32% (the percentage of females among cyber experts similarly jumped from 24% to 33%).

109. Section II.B.6 below elaborates on the inconsistencies in disclosure. Section IV.A below sketches policy implications.

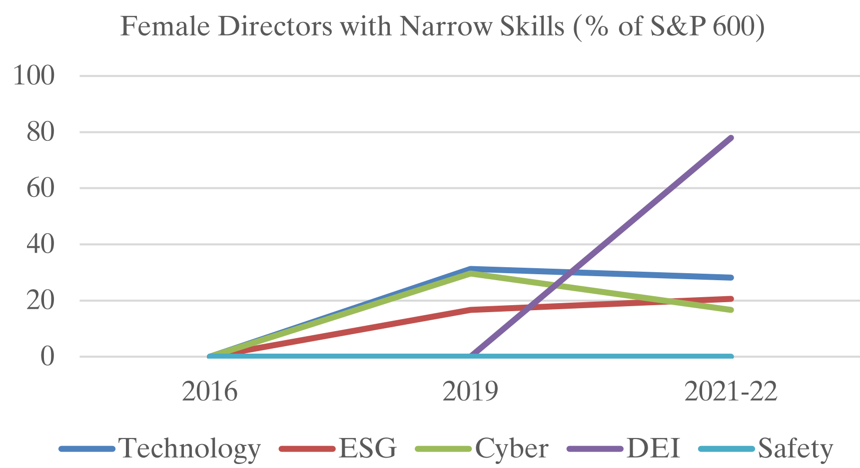
<u>Figure 7. Narrow ESG Skills for Gender and Racial/Ethnic Diversity in the S&P 500</u>

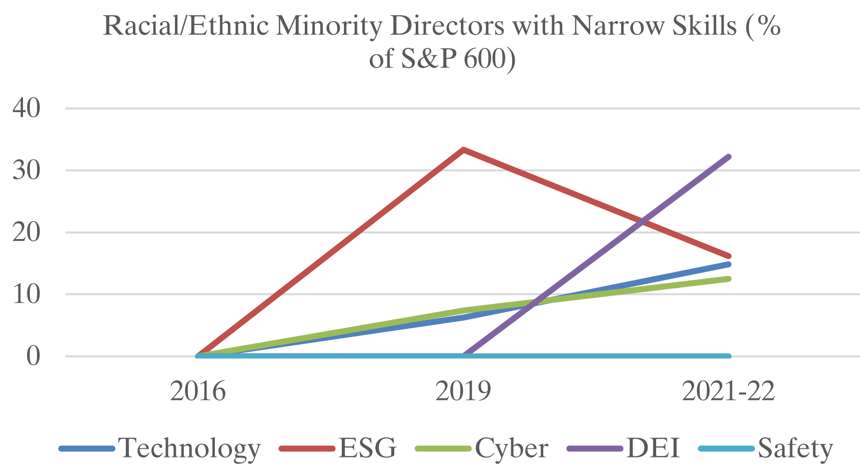




This trend is reversed (except for DEI expertise) for small-cap companies. As Figure 8 below shows, among expert directors in S&P 600 companies, the percentage of female cyber experts dropped from 30% to 17%, and the percentage of technology experts dropped from 31% to 28%.

Figure 8. Narrow ESG Skills for Gender and Racial/Ethnic Diversity in the S&P 600





To us, the best explanation for these contrasting trends is "poaching." The supply of potential directors who have expertise in narrow areas such as cybersecurity is limited. If larger companies are facing increased pressures to add cyber expertise and to improve their gender diversity, they are likely to "poach" the best female expert directors from smaller companies, leaving the latter with a pool of mainly male experts. A concrete example is Jane Lute, who currently serves on the board of Marsh & McLennan (an $85 billion professional services firm). Prior to 2021, Lute served on the board of Atlas Air Worldwide Holdings, a $2.9 billion small-cap company. Lute did not seek reelection in Atlas's 2021 elections, and instead joined Marsh & McLennan.[110] Atlas's 2021 proxy statement thanks Ms. Lute for her service and notes that the "[b]oard and management have benefited greatly from her expertise in cybersecurity."[111] Marsh & McLennan's 2022 proxy statement touts Lute's cybersecurity expertise in their skills matrix and director biography.[112]

There also exists variation in diversity among the different types of new expertise. Among S&P 500 companies, the percentage of female DEI experts is 5% higher than the percentage of female experts in any other new type of board expertise. Among S&P 600 companies, this margin staggeringly jumps to 48% (that is, the percentage of female DEI experts is much higher than the percentage of female experts in all other new types of board expertise). Similar trends apply to racial or ethnic diversity. In other words, directors from underrepresented groups are much more likely to be the diversity expert director or the ESG expert director than they are to be the safety expert director or the cyber expert director.

6. Inconsistencies in Expertise Disclosure

Our final observation from constructing the dataset concerns the problematic state of expertise disclosure, both in terms of overlaps and in terms of inconsistencies.

First, there is a growing overlap in expertise disclosures. Among S&P 500 companies the number of companies including both a general skills table and a skills matrix rose from 2.5% in 2016 to 16.6% in 2022. The problem is that companies too often report different aspects of board expertise in different sections of the same proxy statement.

Second, there are growing inconsistencies in expertise disclosure. At the most basic level, companies report on different types of expertise. To illustrate, Hewlett Packard reports on 16 skills while AT&T reports on only 5. More troublingly, different companies define expertise differently. As a corollary, there are many examples of two firms attributing different skills to the same director who sits on both boards.[113]

This is where our interviewees added important context. One nomination committee member explained that it is clear to the committee that there is an expectation that they will add directors with new types of ex-

110. Marsh & McLennan Companies, Inc., Definitive Proxy Statement (Schedule 14A), at 23 (May 20, 2021), https://www.sec.gov/Archives/edgar/data/62709/000119312510071594/ddef14a.htm [https://perma.cc/PEA3-FGRV].

111. Atlas Air Worldwide Holdings, Inc., Definitive Proxy Statement (Schedule 14A 14A), at 8e (May 25, 2021), https://www.sec.gov/Archives/edgar/data/1135185/000095015722000883/defa14a.htm [https://perma.cc/3ZXM-66RH].

112. Marsh & McLennan Companies, Inc., Definitive Proxy Statement (Schedule 14A), at 23 (May 19, 2022), https://irnews.marshmclennan.com/node/27461/html [https://perma.cc/W9VB-SN4X].

113. For detailed examples, see Section III.B.5 below.

pertise such as digital marketing or cyber, but that it is much less clear *how much* expertise is necessary.[114] A classic example that kept surfacing in our interviews is the "CEO dilemma," where director *X* has experience as a CEO and as such has dealt with cybersecurity matters even though she is not a cybersecurity expert per se; should director *X* check the cyber box in the skills matrix?[115] In other words, there is uncertainty regarding whether "some experience with" counts as "expertise in." These definitional issues and lack of standardization too often turn expertise disclosure into "cheap talk." The process is usually such that each company sends its directors a check-the-box list, and each director checks whatever boxes they feel appropriate. Once directors see that their colleagues are checking many boxes, they are likely to check more boxes themselves, and a ratcheting-up effect ensues. In the words of one nomination committee member: outside pressures to check expertise boxes often lead to "everybody's checking every box," such that "the whole credibility [of expertise disclosure] goes away."[116] In turn, the lack of standardized expertise disclosure is likely to make it harder for investors to collect, process, and act on information about board expertise.[117]

III. Analysis: The Pros and Cons of New Board Expertise

It is intuitive to think that adding expertise could only improve board decision-making. But a deeper look reveals that board expertise is not an unalloyed good. This Part merges insights from interviews with board members and search consultants with insights from the multidisciplinary literature on group decision-making, to highlight the conditions under which adding the new types of specialist directors could hurt board effectiveness. Section A explains the more intuitive pros of adding new board expertise. Section B spotlights the counterintuitive cons.[118]

114. Interview No. 1 (Feb. 9, 2023).

115. Interview No. 1 (Feb. 9, 2023); Interview No. 3 (Feb. 7, 2023) ("I was a public company CEO . . . Am I an ESG 'expert' because of that?"); Interview No. 4 (Feb. 27, 2023) ("I think a lot of it is judgmental. How do you define an expert in anything? Am I a financial expert because I'm a CEO?").

116. Interview No. 2 (Feb. 6, 2023).

117. We return to this point when discussing policy implications in Part IV below.

118. As the previous Part showed, some of the change in reported expertise can be attributed to companies changing their board expertise disclosure rather than changing their board composition. In circumstances where the change is merely in disclosure, some of the potential drawbacks that this Part highlights become irrelevant. For example, if companies merely check more boxes in skill matrices but do not add directors, there is no reason to worry about board packing or about authority bias. Still, the previous Part also showed that a significant part of the change is due to additions of new directors with domain-specific expertise, and that the trend of adding domain-specific expertise is quickly intensifying. Accordingly, there is every reason to analyze potential drawbacks. Further, some of the drawbacks that this Part highlights, such as board washing, are relevant even in circumstances where companies only changed their disclosure without adding specialist directors.

A. The Promise of New Board Expertise

In a 2023 directors' survey, a third of the respondents said that their board lacks the expertise to oversee cybersecurity, and over 40% felt the same regarding climate risks.[119] In an era when directors' oversight responsibilities are expanding, expanding the diversity of directors' skill sets thus seems intuitive. This Section highlights four important ways in which adding specialist directors with nontraditional expertise can improve board effectiveness: (1) enhancing boards' ability to analyze ESG issues, (2) allowing boards to switch from a reactive to a proactive mode (anticipating future developments instead of putting out fires), (3) alleviating "groupthink" and "escalation of commitment" biases, and (4) providing better channels of communication with stakeholders. The Section then explains why having the expertise (specialist directors) in-house may be preferable to hiring outside experts: in-sourcing allows boards to deal with emerging issues on a continuous rather than ad-hoc basis and also mitigates cognitive biases that normally prevent companies from seeking outside advice to begin with.

At the most basic level, increasing the diversity of skills brings *greater resources* to the table, and thus could lead to a more complete analysis of the ESG issues that increasingly make it to the board's agenda.[120]

At a deeper level, our interviewees emphasized that having a director with expertise in a specific subject matter helps the board s*witch from a reactive to a proactive mode* on that subject.[121] When a board does not have expertise in issues such as, say, AI bias or data privacy violation, it usually deals with problems only after they arise. Adding directors with expertise in dealing with such issues could help the board anticipate and avoid the problems from the outset.[122]

Further, adding new types of expertise could help boards alleviate some of the more stubborn biases that plague board decision-making. Consider for example groupthink and pluralistic ignorance.[123] Incumbent

119. *See* Ted Sikora, *Director Perspective: Top Priorities of 2023*, HARV. L. SCH. F. ON CORP. GOVERNANCE (Feb. 10, 2023), https://corpgov.law.harvard.edu/2023/02/10/director-perspective-top-priorities-of-2023 [https://perma.cc/N4VZ-2YQP]; *see also* Moats, DeNicola & Robinson, *supra* note 20 (reporting on a 2023 executives survey that yields even starker results: while most executives view their boards as effective in traditional oversight areas, many executives view their boards as lacking the necessary expertise to engage in oversight of ESG areas).

120. *Cf.* Donald C. Langevoort, *The Human Nature of Corporate Boards: Law, Norms, and the Unintended Consequences of Independence and Accountability*, 89 GEO. L.J. 797, 802 (2001) (noting that "[c]arefully chosen board members help make the company more legitimate in the eyes of key resource providers . . . .").

121. Interview No. 5 (Mar. 7, 2023).

122. Interview No. 2 (Feb. 6, 2023) (explaining that expert directors can assess situations independently and not rely only on formal PowerPoint presentations at board meetings).

123. On the groupthink problems in boards, see Stephen M. Bainbridge, *Why a Board? Group Decisionmaking in Corporate Governance*, 55 VAND. L. REV. 1, 32 (2002).

board members, who are usually current and former CEOs and CFOs in their 60s and 70s, may be less willing to introduce new thinking on issues such as racial diversity or climate change. Adding diverse perspectives and skill sets is a classic antidote for groupthink, spurring discussions about timely topics that were hitherto ignored.[124] A related bias is "escalation of commitment," which denotes our tendency to stick with the path we have taken even if we have indications that it is best to cut our losses and switch paths.[125] The cure for escalation of commitment is usually to install new decision makers who are not personally committed to the existing path.[126] Applied here, adding directors with expertise in issues such as green production or racial justice could mitigate the escalation of commitment on these issues in corporate boardrooms.

One may argue that such advantages could be achieved by hiring outside experts instead of by nominating specialist directors. However, there exist distinct advantages for in-sourcing rather than out-sourcing expertise. Hiring outsiders on an ad-hoc basis is costly and hurts the continuity of dealing with such issues. As one of our interviewees explained, "Once the outside advisors' engagement is done, they're done," and the board is more likely to fall into complacency on that given issue.[127] By contrast, when a member of the board "owns" that issue, she would regularly check to confirm that the company's policy is up to the most current standards.[128] As another interviewee (a search consultant) explained, expert directors can "help people understand the opportunity cost of not doing anything."[129]

Having experts on the board rather than hiring third-party experts can also help alleviate the cognitive biases of top executives.[130] Managers tend to be overconfident and heavily invested in certain beliefs, which in turn makes them less likely to seek outside advice that could tell them that they are wrong.[131] By contrast, when the experts are sitting on the board, managers are forced to confront their biases and take dissonant viewpoints seriously.[132]

Beyond better monitoring, directors with new types of expertise could also bolster the resource-provision function of boards. ESG-expert directors could help the company communicate better with shareholders

124. *Cf.* Adams, *supra* note 22, at 347 (discussing the connection policy-makers have drawn between nondiverse boards and the groupthink of the "old Boy's Club").

125. *See* Amir N. Licht, *My Creditor's Keeper: Escalation of Commitment and Custodial Fiduciary Duties in the Vicinity of Insolvency*, 98 WASH. U. L. REV. 1731, 1737-44 (2021).

126. *Id*.

127. Interview No. 5 (Mar. 7, 2023).

128. *Id.*

129. Interview No. 4 (Feb. 27, 2023).

130. Langevoort, *supra* note 120, at 803.

131. *Id*.

132. *Id*.

and stakeholders on ESG issues. Indeed, recent surveys show that ESG issues are at the top of what shareholders want to discuss with boards.[133] In 2021, ESG topped strategy for the first time as the most common discussion topic in board–shareholder engagement. Accordingly, consultants to boards advise their clients to improve the credibility of their ESG communications by letting ESG expert directors lead the communications.[134] Beyond better communication with shareholders and stakeholders, directors who come from the worlds of AI, cyber, and climate science may also add value to the firm because of who they know in these worlds (human capital).[135]

All in all, the case for adding specific expertise seems straightforward: director surveys reveal that boards are currently overwhelmed by the scale, scope, and complexity of their newfound ESG responsibilities.[136] Adding environmental expertise (e.g., climate change), social expertise (e.g., DEI), and governance expertise (e.g., cyber) to the board thus seems like an intuitive step. Or is it?

B. The Perils of New Board Expertise

The drawbacks of injecting new types of expertise become clearer once we consider a couple of effects that are oft ignored in the corporate law literature, namely, supply-side concerns and group dynamics. The recent uptick in demand for ESG expertise in boardrooms does not necessarily meet the supply. When an external shock such as the SEC disclosure rules increases the demand for directors with cyber expertise, the supply of cyber experts who are willing and able to be directors will not

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133. Fairfax, *supra* note 56, at 391.

134. Maria Castañón Moats, Paul DeNicola & Matt DiGuiseppe, *Director Shareholder Engagement: Getting it Right*, HARV. L. SCH. F. ON CORP. GOVERNANCE (June 5, 2023), https://corpgov.law.harvard.edu/2023/06/05/director-shareholder-engagement-getting-it-right [https://perma.cc/2KFQ-VVQ5] ("When investors read that directors are discussing certain topics with shareholders, they want to know what makes those directors qualified on that topic. . . . If they discussed the company's cyber strategy—does the director have a cyber background? By leveraging disclosure about directors (including any skills matrix), companies can draw these connections and illustrate what the directors bring to the discussion."). To use a vivid example, the retailer Patagonia nominated to its board a "Director of Philosophy" who oversees communication channels with employees, advertisers, journalists, and other stakeholder groups. *See* Emily Demkes, *The More Patagonia Rejects Consumerism, the More the Brand Sells*, THE CORRESPONDENT (Apr. 28, 2020), https://thecorrespondent.com/424/the-more-patagonia-rejects-consumerism-the-more-the-brand-sells [https://perma.cc/JVZ4-K5XJ].

135. *Cf.* Adams, *supra* note 22, at 349 (discussing the different ways in which directors may add value to a firm).

136. Frederik Otto, Rachael De Renzy Channer & Ashley Summerfield, *Boards: Stepping Up as Stewards of Sustainability*, HARV. L. SCH. F. ON CORP. GOVERNANCE (Nov. 20, 2022), https://corpgov.law.harvard.edu/2022/11/20/boards-stepping-up-as-stewards-of-sustainability [https://perma.cc/6LBB-JPB2] (citing a study wherein directors expressed concerns lack of expertise hinders their ability to deal with ESG responsibilities); *see also infra* text accompanying note 194.

concomitantly increase.[137] Indeed, Thomson Reuters recently observed that "there are very few board-level candidates with ESG expertise."[138] Companies pressured to add directors with one specific desired skill may therefore select candidates that score relatively low on other attributes that are important for being an effective director. One of our interviewees summed it up thusly:

> There's so much pressure to [have the] "boxes checked" to satisfy these institutional shareholders . . . that I think a lot of what's happening is the opposite. We're being forced to find director candidates with time limits. . . . [There's] a growing percentage of new directors that have never been on a board before. They don't understand what it means to be on a board.[139]

Beyond having difficulties in adding quality individual directors, the push toward new board expertise may also disrupt the functioning of the board as a group. The relevant question is not whether a candidate is a good director in isolation, but rather how her attributes interact with the attributes of existing directors, and how she would affect board dynamics. This is a context-specific question. Adding a director with cyber expertise could help some corporate boards but hurt others. It could help a given company in some scenarios but hurt the company in other scenarios.

To concretize, this Section highlights five concerns about injecting new types of expertise: (1) that it will hurt the overall quality of directors and group dynamics, (2) that it will lead to overreliance on subject-specific experts, (3) that it will increase boards beyond their optimal size, (4) that it will slow down efforts to boost gender and racial diversity, and (5) that it will mask problematic corporate behavior.

1. Individual Attributes and Group Dynamics

Board effectiveness is a function of (1) individual directors' attributes and (2) the interactions between the individuals (group dynamics). The push to add new expertise can hinder both (1) and (2).

At the individual level, directors are effective when they combine four attributes, namely, independence, expertise, bandwidth, and motivation.[140] "Independence" denotes ability to be objective about the issue at hand.[141] "Expertise" denotes ability to comprehend the issue.[142] "Band-

137. *See, e.g.*, Natalie Runyon, *How Companies Can Upskill Their Board of Directors to Meet ESG Expectations*, THOMSON REUTERS (June 1, 2022), https://www.thomsonreuters.com/en-us/posts/news-and-media/upskilling-board-directors-esg [https://perma.cc/4DD5-CQ6P].

138. *Id*.

139. Interview No. 2 (Feb. 6, 2023).

140. Hambrick et al., *supra* note 25, at 323-25.

141. *Id*. at 330.

width" denotes ability to devote enough time and attention to the issue.[143] And "motivation" denotes willingness to exert oneself and ask tough questions about the issue.[144] An individual director may possess independence and expertise, but lack bandwidth: for example, if she simultaneously serves on fifteen boards, she may not be able to allocate the time needed to be an effective monitor and advisor for her fifteenth company. Or, an individual director may possess expertise, independence, and bandwidth, but lack motivation: for example, her personal makeup may be such that she is not willing to break from "the general norm of acquiescence" and raise tough issues as is expected from an effective monitor.[145]

In other words, expert directors are not one-dimensional. Sure, a director may have expertise in cyber, but it does not mean that she has critical-thinking skills, interpersonal skills, willingness to ask tough questions, and time on her hands. As one nomination committee chairperson put it, "You bring on board someone who's a cybersecurity expert, but hasn't been commercially involved in the overall running of a company; now, that person could [be of] limited overall use to the board."[146] Another interviewee who is a CEO and serves on multiple boards echoes similar concerns: "I don't want [people] that [have] no clue of what it means to be a board member and [who are] so myopically involved with what they know that they can't see the forest for the trees."[147]

On paper, companies that add directors with new types of expertise could alleviate these concerns by carefully selecting directors who do not just have expertise in a narrow area but also score high on *all* other relevant attributes. In reality, the pool of available talent is limited. As a result, there is reason to worry that the push to add ESG expertise may reduce directors' average bandwidth, motivation, and non-ESG expertise.[148]

Consider bandwidth first. Busier directors who serve on many boards or have very demanding "day jobs" may be ineffective monitors.[149] Applied here, talented directors who also possess coveted new

142. *Id*. at 331.

143. *Id*. at 332.

144. *Id*. at 333.

145. *Id*.

146. Interview No. 1 (Feb. 9, 2023).

147. Interview No. 2 (Feb. 6, 2023).

148. We assume here that the push to add expertise will not affect independence, because the pool of candidates with ESG-related expertise is comprised of enough directors who are not beholden to management of a specific company. *Cf.* Cunningham, *supra* note 51, at 467 ("It is customary to see independence and expertise as tradeoffs. This view seems correct when expertise arises from insider status but incorrect when the expertise is substantive knowledge in a discipline.").

149. *See* Eliezer M. Fich & Anil Shivdasani, *Are Busy Boards Effective Monitors?*, 61 J. FIN. 689, 689 (2006). *But see* Adams, *supra* note 22, at 315 (compiling references suggesting that the evidence is mixed); Coles et al., *supra* note 47, at 21 (noting the cross-sectional variation in

types of board expertise such as cyber or DEI are in high demand these days and are constantly being added to more boards. As a result, some of them are bound to become overboarded, if they are not already. To illustrate, consider the case of Bethany J. Mayer, a former CEO and currently an executive advisor at Siris Capital Group.[150] Mayer is an expert in cyber who recently joined the boards of Lam Research[151] and Sempra Energy[152] in 2019, then the board of Box, Inc. in 2020,[153] then the board of NextRoll in 2021,[154] and then the boards of Hewlett Packard Enterprise Co.[155] and Celestial AI[156] in 2023. To be sure, Mayer seems like the dream director: she brings to the table not just specific expertise in cyber, but also a host of other relevant skills and experience gained from successfully leading companies as a top manager and a director for decades. But precisely because subject-specific experts with Mayer's kind of credentials are so rare, there is a risk that companies will overwhelm her bandwidth.

Next consider motivation.[157] Organization scientists note that directors tend to keep tabs on their contributions.[158] That is, when a director believes that she has contributed a lot to board tasks in one domain, she may feel like she has fulfilled her obligations and may be less motivated to engage in tasks in other domains.[159] Applied here, this finding suggests that narrow-expertise directors will be highly motivated to raise concerns

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the results, whereby the key determinant is not how many directorships one has, but rather whether one is a full-time director or a siting executive in another firm).

150. *Bethany Mayer*, SIRIS, https://www.siris.com/team/bethany-mayer [https://perma.cc/SUB3-KGSD].

151. Lam Research Corporation, Definitive Proxy Statement (Schedule 14A) (Nov. 5, 2019), https://www.sec.gov/Archives/edgar/data/707549/000119312519254747/d800072ddef14a.htm [https://perma.cc/Z8BN-HLTZ].

152. Sempra Energy, Definitive Proxy Statement (Schedule 14A) (Mar. 22, 2019), https://www.sec.gov/Archives/edgar/data/1032208/000119312519082379/d674771ddef14a.htm [https://perma.cc/AGK7-U84R].

153. Box, Inc., Definitive Proxy Statement (Schedule 14A), at 12 (May 28, 2020), https://www.sec.gov/Archives/edgar/data/1372612/000114036120012615/nc10009599x1_def14a.htm [https://perma.cc/9EPR-28QL].

154. PRNewswire, *Bethany Mayer, Lisa Blackwood-Kapral, and Marcy Campbell Join NextRoll Board of Directors*, MARTECHSERIES (Sep 22, 2021), https://martechseries.com/marketing-intelligence/bethany-mayer-lisa-blackwood-kapral-and-marcy-campbell-join-nextroll-board-of-directors/ [https://perma.cc/7K47-ATCZ].

155. Press Release, *Hewlett Packard Enterprise Names Experienced Networking and Cybersecurity Technologist Bethany Mayer to Board of Directors* (June 14, 2023), https://www.hpe.com/us/en/newsroom/press-release/2023/06/hewlett-packard-enterprise-names-experienced-networking-and-cybersecurity-technologist-bethany-mayer-to-board-of-directors.html [https://perma.cc/9FRM-K824].

156. *Celestial AI Announces Appointment of Bethany Mayer to Board of Directors*, BUSINESSWIRE (July 11, 2023, 08:00 AM), https://www.businesswire.com/news/home/20230710382303/en/Celestial-AI-Announces-Appointment-of-Bethany-Mayer-to-Board-of-Directors [https://perma.cc/7958-LGMC].

157. For a comprehensive study on directors' motivations and how they vary, see Renée B. Adams & Daniel Ferreira, *Do Directors Perform for Pay?*, 4 J. ACCT. & ECON. 154 (2008).

158. Hambrick et al., *supra* note 25, at 333.

159. *Id*.

about the specific domain that they were "earmarked" for, but much less motivated to address other issues on the board's agenda that lie outside their domain. Indeed, our interviewees suggested that this is a real concern.[160]

Finally, consider the expertise of the new specialist directors. Unlike independence, bandwidth, and motivation, expertise is a domain-specific trait. A director who has expertise in a certain domain may not have expertise in other domains. The worry here is that companies will rush to add directors with specific expertise in, say, cyber or DEI, even if said directors have less expertise than the average director in, say, financial reporting or strategy or marketing. In other words, the worry is that narrow-expertise directors may be effective monitors and advisors in one domain, but ineffective monitors and advisors in the many other domains that boards deal with.[161] Here as well, a concrete example is illustrative: Chipotle's board recently added one director who identifies as having cyber expertise. Aside from cyber, that director checked three other boxes in the skills matrix.[162] All other directors on Chipotle's board checked a minimum of five boxes. The average Chipotle director checked 7.4 boxes. We have no reason to doubt that this specific director is a fantastic director. We use this example simply to illustrate that companies now readily add directors who check fewer boxes than their directors used to, as long as these new directors have expertise in a specific domain.

Beyond each individual director's attributes, board effectiveness is a function of group dynamics. The relevant question is how the attributes of a given director interact with those of the other directors. Even if a given candidate brings to the table many good attributes, adding that candidate to the board could disrupt the functioning of the group.[163] Indeed, an unpopular yet persistent theme in the empirical literature on board governance is that "boards with greater skill diversity do not perform better."[164] This counterintuitive result is "plausibly driven by a lack of common ground": to communicate effectively among themselves, directors must share some skills and experiences.[165]

160. In the words of one search consultant: "When we recruit, we always keep in touch with our board placement and with our client. And we've heard [things] like 'John Doe is amazing when it comes to marketing and he has a lot to add and he's visionary, but we want to hear his voice more when we're going over the financials or when they have the operating team come in and present because he/she/whoever it is has great thoughts.' A lot of them actually will be able to add value, but they get nervous." Interview No. 4 (Feb. 27, 2023).

161. Furthermore, to the extent that companies rush to parachute in narrow-expertise directors from outside the company, said directors may not have the deep understanding of company-specific aspects that one can only develop with time.

162. These were Leadership/Board Service, Risk Management, and Digital/Social Media/Consumer Trends.

163. Adams, *supra* note 22, at 333-34 (compiling references).

164. Adams et al., *supra* note 53, at 642.

165. *Id*. at 642, 654.

Increasing the diversity of the professional backgrounds of the directors on the board increases the likelihood that board members will look at problems differently and disagree on how to approach them.[166] More misunderstandings and disagreements prolong the decision-making process and render the task of reaching a consensus less pleasant.[167] This, in turn, could reduce individual directors' willingness to invest in collecting information and in communicating with each other.[168]

We should be careful not to overstate our point, though. There are certainly advantages to having directors with diverse skill sets. Indeed, for every argument advanced in the previous paragraph, a "but see" reference could be put forward.[169] For example, one could argue that increasing the diversity of skills and experiences could incentivize existing directors to be better prepared ahead of meetings in order to solve stalemates and convince others.[170] Our point should therefore be read more modestly, as a warning against assuming that introducing newer types of expertise will improve board dynamics.

A potential rebuttal is that introducing new, ESG-related skill sets could be valuable in and of itself, even if it slows down board decision-making. Say that one believes that companies should treat their employees, the environment, and user privacy better, even if it does not immediately contribute to the company's financial bottom line. One could then value the appointment of directors with expertise in DEI, climate change, and AI bias, even if this means that the board's discussions on core issues such as marketing strategy or financial reporting become more cumbersome. Such a rebuttal assumes that adding directors who specialize in a specific ESG domain would improve the board's treatment of the specific ESG issue. As the next Section shows, this is not necessarily the case.

2. Authority Bias

The previous Section explained why adding a director with expertise in one narrow topic may hinder board effectiveness in other topics. This Section advances a more counterintuitive claim, namely, that adding a director with expertise in a specific ESG domain may end up hurting board

166. For an early study, see Pieter J. Beers, Henny P. A. Boshuizen, Paul A. Kirschner & Wim H. Gijselaers, *Common Ground, Complex Problems and Decision Making*, 15 GRP. DECISION & NEGOT. 529 (2006); for an overview, see Adams, *supra* note 22, at 333-34.

167. *See, e.g.*, Lorenzo Garlappi, Ron Giammarino & Ali Lazrak, *Ambiguity and the Corporation: Group Disagreement and Underinvestment*, 125 J. FIN. ECON. 417 (2017) (providing a formalized model).

168. Langevoort, *supra* note 120, at 810; Adams et al., *supra* note 53, at 654.

169. *See generally* Ronald C. Anderson, David M. Reeb, Arun Upadhyay & Wanli Zhao, *The Economics of Director Heterogeneity*, 40 FIN. MGMT. 5 (2011) (discussing the costs and benefits of firms constituting a heterogeneous pool of directors).

170. *See, e.g.*, Jason Roderick Donaldson, Nadya Malenko & Giorgia Piacentino, *Deadlock on the Board*, 33 REV. FIN. STUD. 4445 (2020).

effectiveness in that specific domain. The reason has to do with the well-documented authority bias.

"Authority bias" is the human tendency to overvalue the ideas and opinions of those we perceive to be of higher authority.[171] In the corporate governance literature, it is known as one of the most damaging biases that boards can suffer from. Boards are effective when directors are willing to respectfully ask tough questions and entertain a healthy skepticism toward each other. Boards are less effective when a single director monopolizes the discussion, or when directors automatically accept what others are saying.[172]

Authority bias creeps into boardrooms when directors are less confident of their own understanding of the topic at hand and perceive others in the room to have much greater expertise in said topic.[173] Sometimes the authority that directors are biased toward is that of outside advisors. To illustrate, consider the *Southern Peru* case, which revolved around a company considering acquiring its largest shareholder.[174] There, the court found that the board blindly accepted its financial advisor's (Goldman Sachs) "inscrutable" analyses, and a prominent Delaware judge suggested that it was due to excessive deference to Goldman's expertise.[175] Other times, directors are biased toward the perceived authority of top management or that of fellow directors.[176] Enron is a case in point. Why did Enron's board fail to detect the massive financial fraud and prevent the company's eventual collapse? One prominent management professor suggested that the problem was authority bias: "the fact that many [Enron] board members were financially sophisticated seemed to have encouraged the other board members to defer to their expertise."[177]

The application to our context is straightforward. Director surveys show that directors are overwhelmed with the scope and complexity of

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171. Timothy R. Clark, *Don't Let Hierarchy Stifle Innovation*, HARV. BUS. REV. (Aug. 23, 2022), https://hbr.org/2022/08/dont-let-hierarchy-stifle-innovation [https://perma.cc/8JE8-3K26].

172. Holly J. Gregory, *Establishing Norms for Director Behavior to Enhance Board Culture and Effectiveness*, HARV. L. SCH. F. CORP. GOVERNANCE (Nov. 8, 2022), https://corpgov.law.harvard.edu/2022/11/08/establishing-norms-for-director-behavior-to-enhance-board-culture-and-effectiveness [https://perma.cc/6Q5S-NEZL].

173. Lisa Fairfax, *Managing Expectations: Does the Directors' Duty to Monitor Promise More Than It Can Deliver?*, 10 U. ST. THOMAS L.J. 416, 447 (2012); Eckstein & Parchomovsky, *supra* note 49, at 838.

174. *In re* Southern Peru Copper Corp. Shareholder Derivative Litig. C.A. No. 961-CS (Del. Ch. Oct. 14, 2011).

175. Travis Laster, *Cognitive Bias in Director Decision-Making*, 20 CORP. GOV. ADVISOR 1, 5-6 (2012).

176. *Cf.* Nicola Sharpe, *Informational Autonomy in the Boardroom*, 2013 U. ILL. L. REV. 1089, 1119 (2013) (describing scenarios where the CEO's extensive knowledge and expertise may hinder the quality of board decision-making).

177. Jeffrey A. Sonnenfeld, *What Makes Great Boards Great*, HARV. BUS. REV. (Sep. 2002).

their newfound ESG responsibilities.[178] These are exactly the conditions under which directors are likely to defer to other directors who they perceive as experts on given ESG topics.[179] This theme kept surfacing, unprompted, by our interviewees, usually citing the example of cyber expertise.[180] Once a board adds a cyber expert, the other members become less motivated to gather information and educate themselves on cybersecurity risks, and less willing to apply a healthy skepticism to questions of cybersecurity, or so the argument goes.[181] A recent publication by the National Association of Corporate Directors illustrates this point perfectly: "many companies created a board seat for a cybersecurity expert, with the *onus landing on that person to know all and see all.*"[182]

Putting the onus on one person to know all and see all is hardly a recipe for effective risk oversight in large companies.[183] The problem is exacerbated when the cyber-expert director herself underestimates the complexity of information that she discusses, or the amount of detail necessary for others around her to grasp the issue.[184] As a leading executive search firm warned its corporate clients, "[s]imply recruiting a sustainability director who served as a chief sustainability officer will likely leave them isolated. Instead, look for great directors who believe business isn't divorced from wider society and who can align all they do to sustainability."[185]

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178. *The Director's New Playbook: Taking on Change*, *PwC's 2021 Annual Corporate Directors Survey*, PWC (Oct. 2021), https://www.corporatecomplianceinsights.com/wp-content/uploads/2021/10/pwc-2021-annual-corporate-directors-survey.pdf [https://perma.cc/G2DC-2Y9J].

179. After all, opposing an expert requires a big investment of time and resources (for starters, the time needed to study the field), which directors too often lack. Eckstein & Parchomovsky, *supra* note 49, at 838-39.

180. Interview No. 6 (Feb. 27, 2023) (mentioning overreliance on cyber directors); Interview No. 3 (Feb. 7, 2023) ("I don't think you can let that director drive the conversation.").

181. This drawback is explicitly mentioned by those who consult to boards on cybersecurity. *See, e.g.*, Catie Hall & Sean Joyce, *Overseeing Cyber Risk*, HARV. L. SCH. F. CORP. GOVERNANCE (Feb. 24, 2022), https://corpgov.law.harvard.edu/2022/02/24/overseeing-cyber-risk-2 [https://perma.cc/6TVW-Z2GR].

182. Joyce Cacho, *Board Committees Are Key to Embedding ESG*, NACD BOARDTALK (Feb. 16, 2022), https://blog.nacdonline.org/posts/committees-key-embedding-esg [https://perma.cc/S9NK-UC5N] (emphasis added). In another publication, the NACD explicitly warns directors of overreliance on subject-specific experts. *See* Ballin et al., *supra* note 20.

183. One could argue that if directors are already prone to authority bias on a certain issue (say, cyber), it is better that they overly defer to an expert director than to an expert officer. But this argument assumes that bringing the expertise inside the boardroom will not alter the severity of authority bias. This is a questionable assumption, given that directors are more likely to trust (here: overly trust) a fellow director than they are to trust an outsider officer or third-party consultant. *See* Edwards, *supra* note 47, at 1084 n.169.

184. *Cf.* Sharpe, *supra* note 176 (commenting on an analogous issue in the context of authority bias toward the CEO).

185. *See* Laura Sanderson, Sarah Galloway & Kurt Harrison, *Board Actions to Boost Corporate Sustainability*, HARV. L. SCH. F. CORP. GOVERNANCE (May 9, 2023), https://corpgov.law.harvard.edu/2023/05/09/board-actions-to-boost-corporate-sustainability [https://perma.cc/K54Q-MWY8].

3. Board Packing

Once one acknowledges the fact that companies face pressures to add new expertise to their boards, the question becomes how they will do it. Companies can inject new expertise into their boards either by adding new directors or by turning over old directors.[186] It seems that the former method is more prevalent than the latter.[187] To the extent that the push toward new board expertise results in adding new members, many boards could grow beyond their optimal size.

The literature on optimal board size recognizes the inherent tradeoff that comes with adding more members. On the one hand, adding more members increases the pool of information, expertise, and social capital to tap for advising and monitoring purposes.[188] On the other hand, adding more members may slow down communications and hurt coordination.[189] Larger boards increase each director's incentives to free ride.[190] Increasing the number of directors makes preexisting directors view their contributions to the group as less germane, which in turn can make them exert less effort in developing expertise of their own, and reduce their motivation to ask tough questions.[191] The point about reduced motivation to engage in monitoring also explains why companies do not necessarily self-correct and reach the optimal board size on their own: if larger boards are less effective monitors of CEOs, CEOs have an interest in keeping boards too large.[192] While several influential empirical studies have found a negative correlation between board size and firm value, other studies point in the opposite direction.[193] Whether increasing the number of di-

186. Schnatterly et al., *supra* note 48, at 2167.

187. *Id*. at 2184. *See also* Moats et al., *supra* note 20 (reporting on a survey of executives, where two-thirds of the respondents do not trust their board to refresh by removing underperforming directors).

188. *Cf*. Renée B. Adams, *Boards, and the Directors Who Sit on Them*, *in* THE HANDBOOK OF THE ECONOMICS OF CORPORATE GOVERNANCE 291, 333 (2017) (discussing the advantages and drawbacks of larger groups).

189. *See, e.g.*, Theodore Eisenberg, Stefan Sundgren & Martin T. Wells, *Larger Board Size and Decreasing Firm Value in Small Firms*, 48 J. FIN. ECON. 35, 37 (1998); Michael Jensen, *The Modern Industrial Revolution, Exit, and the Failure of Internal Control Systems*, 48 J. FIN. 831, 865 (1993); Martin Lipton & Jay W. Lorsch, *A Modest Proposal for Improved Corporate Governance*, 48 BUS. LAW. 59, 67-68 (1992).

190. Milton Harris & Artur Raviv, *A Theory of Board Control and Size*, 21 REV. FIN. STUD. 1797, 1799 (2008).

191. *Id*.

192. Jensen, *supra* note 189, at 865.

193. *Compare* David Yermack, *Higher Market Valuation of Companies with a Small Board of Directors*, 40 J. FIN. ECON. 185 (1996) (finding that small boards are more effective), *with* Jeffrey L. Coles, Naveen D. Daniel & Lalitha Naveen, *Boards: Does One Size Fit All?*, 87 J. FIN. ECON. 329 (2008) (finding that both larger and smaller boards can be optimal). For the most recent contribution to this literature, see Dirk Jenter, Thomas Schmidt & Daniel Urban, *Does Board Size Matter?* (ECGI Working Paper No. 916, 2023), https://ssrn.com/abstract=4371743 [https://perma.cc/SBN2-77EZ] (exploiting an external shock to identify a negative causal relation between board size and firm performance).

rectors is good for the company is therefore a highly context-specific question.

Increasing the size of boards may seem inevitable in our context, given our description of companies facing increased societal and regulatory demands. If boards today face a broader range of risks to deal with relative to boards in the 1990s, there is no reason to hold as sacred the number of six or eight board members that the literature suggested in the 1990s. Indeed, the abovementioned practitioner-based surveys suggest that boards today are overwhelmed by the scale, scope, and complexity of their newfound ESG responsibilities.[194] Adding new members with ESG expertise may therefore seem like an efficient reconfiguration to enhance the board's capacity to monitor and advise on today's hottest topics.[195]

But this "natural reconfiguration" argument seems a bit too optimistic. Recall that today's pressures to inject new expertise are often *external*, such as from derivative settlements, disclosure requirements, and activist campaigns.[196] It is therefore not unlikely that some companies are scrambling to meet one-size-fits-all, copycat-compliance-type standards, in attempts to appear good now. In other words, companies' decisions of how to inject expertise (whether to add or replace) may be hastened and distorted. A company may think that waiting a year and adding expertise by replacing directors would be better for the quality of board discussions, yet still opt to add new members now, simply to quell current reputational pressures.[197]

4. Board Diversity

As Section II.B.5 above illustrated, the push to add new types of board expertise could hinder efforts to promote gender and racial diversity. Assessing the tradeoffs between diversity in skill sets (by adding a director with ESG expertise) and diversity in demographics (by adding a director from an underrepresented group) is beyond the scope of this already too ambitious Article.[198] Still, we wish to highlight three points that

194. *The Director's New Playbook*, *supra* note 178, at 8-9.

195. *See, e.g.*, Moats et al., *supra* note 20 (recommending that boards reconsider increasing their size to add diversity of perspectives and experiences); *cf.* Kenneth Lehna, Sukesh Patroa & Mengxin Zhao, *Determinants of the Size and Structure of Corporate Boards: 1935–2000*, 38 FIN. MGMT. 747, 747 (2009) (concluding that boards are generally composed rationally and optimally).

196. *Supra* Section I.B.

197. In the reputation literature, this is referred to as "bad reputation effects," to denote circumstances where agents attempting to maintain a good reputation among their principals act in ways that actually hurt the principals' interests. *See* Jeffrey C. Ely & Juuso Välimäki, *Bad Reputation*, 3 Q. J. ECON. 785 (2003).

198. *Compare* Jesse M. Fried, *Will NASDAQ's Diversity Rules Harm Investors?*, 12 HARV. BUS. L. REV. ONLINE 1 (2021) (finding that increasing board diversity may result in lower share prices), *with* Richard W. Painter, *Board Diversity: A Response to Professor Fried*, 27

could help practitioners, regulators, and academics think about the tradeoff.

First, we note that increasing the gender and racial diversity in corporate boardrooms carries advantages beyond contributing to the financial bottom line.[199] For example, racial and gender diversity in the boardroom is associated with increased diversity within the company's workforce as a whole.[200] From that perspective, focusing on adding a new skill such as cyber may not be worthwhile if it shrinks the pool of racially- or gender-diverse candidates.

Second, we note the variation across types of expertise. On the one hand, our dataset reveals that focusing on adding DEI and general ESG expertise boosts the efforts to increase gender and racial diversity as well.[201] The shift to new expertise in that regard expands the pool of candidates from former CEOs and CFOs to a larger, more diverse group. On the other hand, some boards could use the push to add expertise in other areas (think cyber) as an excuse to resist efforts to diversify the boardroom, by limiting their focus to a pool of less-diverse candidates.

Finally, and as always with board diversity, companies and investors should be wary of the trap of tokenism. That is, if the company designates one director as a DEI expert, there is a risk that the value of diversity in board discussions may be diminished. Several studies have shown that one is not enough: for the board decision-making processes to truly internalize the importance of diversity, there must exist a critical mass of diverse directors.[202]

STAN. J.L. BUS. & FIN. 173 (2022) (finding that increasing board diversity creates "positive value of boardroom diversity for corporations, shareholders, and society").

199. Erica Hersh, *Why Diversity Matters: Women on Boards of Directors*, HARV. T.H. CHAN SCH. OF PUB. HEALTH EXEC. & CONTINUING EDUC. (July 21, 2016), https://www.hsph.harvard.edu/ecpe/why-diversity-matters-women-on-boards-of-directors [https://perma.cc/2HR5-873A].

200. *Cf.* Cydney Poser, *Addressing the Challenge of Board Racial Diversity*, HARV. L. SCH. F. CORP. GOVERNANCE (Sept. 8, 2020), https://corpgov.law.harvard.edu/2020/09/08/addressing-the-challenge-of-board-racial-diversity [https://perma.cc/JC36-UYW5] ("More diverse boards were also more likely to prioritize diversity within the company.").

201. *Supra* Section II.B.5.

202. *See* Miriam Schwartz-Ziv, *Gender and Board Activeness: The Role of a Critical Mass*, 52 J. FIN & QUANT. ANALYSIS 751, 753-55 (2017) (detailing the critical mass theory); Jared Landaw, *Maximizing the Benefits of Board Diversity: Lessons Learned from Activist Investing*, HARV. L. SCH. F. CORP. GOVERNANCE (July 14, 2020), https://corpgov.law.harvard.edu/2020/07/14/maximizing-the-benefits-of-board-diversity-lessons-learned-from-activist-investing [https://perma.cc/3YBL-V83A] (applying the point to our context).

5. Board Washing

Companies may respond to increased societal demands by changing their appearance without changing their actual behavior.[203] Indeed, many studies have documented corporate "greenwashing," whereby companies profess to have seen the light and become environmentally friendly while in practice they continue to degrade the environment.[204] More recent studies have documented "diversity washing," whereby companies' human capital disclosures paint a rosier picture than the companies' actual commitment to diversity merits.[205]

Could companies employ the same window-dressing tactics in our context? That is, could companies use board expertise disclosures to inflate how much they are truly committed to a given ESG issue? This is a question for future systematic empirical research. For now, we can point to several causes for concern, based on our interviews and our dataset. Consider for example what one search consultant for boards candidly shared about her clients: "Sometimes they've sort of just said, 'let's fill this [meaning, check the box in the skills matrix] because we don't have a strong enough cyber,' but it's more for show than actual substance because if you're a board member, you're not going to go in there and really figure out how to fix cyber for the company; that's not your job as a board member."[206]

Further, when going over expertise disclosures we kept finding examples of directors who serve on multiple boards and are listed as ESG experts in one company but not in another. To illustrate, Richard Davis checks the box for "sustainability" expertise in Mastercard's skills matrix,[207] but does not check the box for "environmental" expertise in Dow Inc.'s skills matrix.[208] James Crown checks the box for "technology" ex-

203. *See, e.g.*, Lucian A. Bebchuk & Roberto Tallarita, *The Illusory Promise of Stakeholder Governance*, 106 CORNELL L. REV. 91 (2020) (providing reasons for skepticism about companies' ESG commitments).

204. *See* Miriam A. Cherry, *The Law and Economics of Corporate Social Responsibility and Greenwashing*, 14 U.C. DAVIS BUS. L.J. 281 (2014); Sebastiao Vieira de Freitas Netto, Marcos Felipe Falcão Sobral, Ana Regina Bezerra Ribeiro & Gleibson Robert da Luz Soares, *Concepts and Forms of Greenwashing: A Systematic Review*, 32 ENV'T SCI. EUR. 19 (2020).

205. Andrew C. Baker, David F. Larcker, Charles McClure, Durgesh Saraph & Edward M. Watts, *Diversity Washing* 18-22 (ECGI Finance, Working Paper No. 868, 2023), https://ssrn.com/abstract=4298626 [https://perma.cc/LT5T-M5UT].

206. Interview No. 4 (Feb. 7, 2023).

207. Mastercard Inc., Definitive Proxy Statement (Schedule 14A), at 29 (Apr. 29, 2022), https://www.sec.gov/Archives/edgar/data/1141391/000114139122000099/mastercard2022proxystateme.htm [https://perma.cc/F6LX-5REA].

208. Dow Inc., Definitive Proxy Statement (Schedule 14A), at 44 (Mar. 4, 2022), https://www.sec.gov/Archives/edgar/data/1751788/000119312522066088/d189067ddef14a.htm [https://perma.cc/K97W-MGUQ].

pertise in JPMorgan's statement,[209] but does not check the same box in General Dynamics' statement.[210] This is not to say that Davis and Crown are not highly qualified directors, or that they necessarily lack expertise in sustainability and technology. What these examples illustrate is just how unstandardized and undefined director expertise disclosure is. As a result, expertise disclosure is an area ripe for "board washing," should companies choose to use it.

One should not take the risk of "board washing" lightly. Using board expertise disclosures to inflate the company's actual ESG commitment could distort the allocation of assets being invested according to ESG criteria, ease reputational pressures by civil society organizations, and obviate more direct regulation of ESG issues.[211]

* * *

Ultimately, whether the advantages of adding new board expertise outweigh the disadvantages is an empirical question that must be answered on a company-specific basis. Our aim in this Section was (1) to showcase how adding specific types of expertise is not an unalloyed good, and (2) to provide tools to assess the tradeoffs in given cases. Following our analysis here, one could think about several pinpointed questions to ask when approaching the adding-expertise dilemma. For example, one could ask how prevalent the specific issue is in board discussions. When Boeing adds a director with expertise in airplane engineering and flight safety, the likelihood that this specific expertise will be tapped is high. Aviation safety is, after all, "mission critical" not just in the sense of regulatory compliance but also in the sense of the viability of Boeing's business model.[212] By contrast, adding a director with climate change expertise to a software company with a very limited environmental footprint may be less germane to the ability of that board to monitor and advise management. One could also ask whether the addition of expertise was done in response to one-size-fits-all pressures or to company-specific pressures. Pressuring a specific airline-manufacturing company to add directors with Aviation expertise is unlike pressuring all public companies

209. JPMorgan Chase & Co., Definitive Proxy Statement (Schedule 14A), at 13 (Apr. 4, 2022), https://www.sec.gov/Archives/edgar/data/19617/000001961722000303/a2022proxystatement.htm [https://perma.cc/UR99-NV32].

210. General Dynamics Corp., Definitive Proxy Statement (Schedule 14A) (Mar. 24, 2022), https://www.sec.gov/Archives/edgar/data/40533/000130817922000109/lgd2022_def14a.htm [https://perma.cc/NQP4-6QDA].

211. *Cf*. BAINBRIDGE & HENDERSON, *supra* note 30, at 45 (noting that the rise of the monitoring board was driven to some extent by lawyers and businesspersons wishing to obviate federal intervention in corporate governance).

212. The "mission critical" designation was popularized and operationalized in the *Blue Bell* case, in the context of director oversight duties. *See* Marchand v. Barnhill, 212 A.3d 805, 822 (Del. 2019).

to add directors with climate expertise or cyber expertise. All else being equal, the former is more likely to prove desirable than the latter.[213]

One thing is clear: those with on-the-ground experience in what makes boards effective warn that the recent emphasis on adding specific expertise could come at the expense of having informed generalists.[214] Vice Chancellor Laster, for example, implores boards to "seek out informed generalists," because they bring "something perhaps even more important than depth of expertise in a particular field: common sense."[215] A search consultant for boards that we interviewed summed it up perfectly:[216]

> You've got to be careful when you bring somebody on who only knows cyber. You have to also make sure that they have a business orientation, and they can add value in other ways to the board. And this is not me picking on cyber; it's me picking on any exact expertise. Sometimes when we're trying to fill a hole – ESG, cyber . . . you might get somebody who's not an enterprise leader. You get somebody who's very functionally focused. So you've got to pressure test to make sure you're getting the right executive, not just because they check the box. [Even if] they're the chief security officer at a Fortune 500 company, they might not be the best board member. To bring that expertise to the board isn't enough. You have to be able to translate that into business issues, solutions, and strategies. For all these very specific searches, some people can't do that. And so, you have to really make sure you're interviewing somebody who could be a generalist on the board as well as have a specific expertise.

The one thing that is of most concern is that the trend of adding new types of expertise to boardrooms seems to be a hasty reaction to external pressures rather than an organic reconfiguration.[217] The director selection process is a complicated and context-specific endeavor.[218] To the extent that this process now prioritizes appearances over meeting actual firm-

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213. On how one-size-fits-all is an ineffective approach to corporate governance, see Zohar Goshen & Richard Squire, *Principal Costs: A New Theory for Corporate Law and Governance*, 117 COLUM. L. REV. 767, 774 (2017); Jill Fisch & Steven Davidoff Solomon, *The Problem of Sunsets*, 99 B.U. L. REV. 1057, 1063 (2019).

214. Lawrence A. Cunningham, *Corporate Directors are Generalists, Not Specialists*, OXFORD BUS. L. BLOG (May 18, 2023), https://blogs.law.ox.ac.uk/oblb/blog-post/2023/05/corporate-directors-are-generalists-not-specialists [https://perma.cc/9X4Q-UARS].

215. Laster, *supra* note 175, at 7.

216. Interview No. 4 (Feb. 27, 2023).

217. The management literature has long documented that boards strategically reconfigure themselves to meet evolving firm needs. For a recent example, see Schnatterly et al., *supra* note 48, at 2184 ("[W]e find that when a firm has a risk in certain domains but has no directors with expertise in that domain, firms are more likely to add at least one director with such expertise in the next 3 years.").

218. Isil Erel, Léa H. Stern, Chenhao Tan & Michael S. Weisbach, *Selecting Directors Using Machine Learning*, 34 REV. FIN. STUD. 3226, 3227 (2021).

specific needs, it increases the risk that the disadvantages of adding new board expertise will outweigh the advantages.

IV. Implications

Our story thus far is three-pronged: over the last couple of years, companies have faced increasing pressures to add new types of expertise to their boardrooms (Part I above). Companies have responded to these pressures both by disclosing in greater detail their board expertise, and by adding more specialist directors with ESG-related expertise (Part II). But there is reason to be skeptical about the social desirability of this push to add expertise and the reaction that it elicits (Part III). Taken together, these three observations carry important policy implications.

Section A highlights two lessons for regulators: a general lesson concerning the desirability of legal intervention in board expertise, and a specific lesson concerning the current state of expertise disclosure. Section B explains how the developments around board expertise could affect the way that corporate law judges assess director liability in derivative actions, and the way that federal judges assess claims for misstatements in ESG securities fraud cases. Section C explains how our analysis sheds light on recent academic proposals to reshape corporate boards, and sketches directions for future research.

A. Lessons for Regulators

The key policy implication of our analysis is the need to rethink the desirability of regulatory intervention in narrow types of board expertise.[219] We do not question the need for intervention for issues such as environmental degradation, diversity and inclusion, and data privacy.[220] But we do question the desirability of addressing such problems by focusing on a specific observable director trait.[221]

219. Dipesh Bhattarai, Matthew Serfling & Tracie Woidtke, *Do Individual Directors Matter? Evidence of Director-Specific Quality* (ECGI Finance Working Paper, 2022), https://ssrn.com/abstract=4216979 [https://perma.cc/8WS6-EAGN] (noting the recent surge in public policies calling for the representation of specific observable director traits). As the subsequent paragraphs will clarify, we distinguish regulatory intervention in the new types of expertise from regulatory intervention in, say, financial expertise.

220. In fact, we have written extensively on these topics. *See, e.g.*, Yaron G. Nili, *Beyond the Numbers: Substantive Gender Diversity in Boardrooms*, 94 IND. L.J. 145 (2019) (on board diversity); Roy Shapira & Luigi Zingales, *Is Pollution Value-Maximizing? The DuPont Case* (NBER Working Paper No. 23866, 2017), https://ssrn.com/abstract=3037091 [https://perma.cc/R5GR-YW99] (on environmental degradation).

221. The regulatory environment can affect the push for board expertise even if there is no specific mandate or disclosure requirement concerning the expertise in question. For example, as the regulatory pressures around cybersecurity increase, boards are likely to add more cyber expertise.

Focusing on a particular trait obscures the more relevant question, namely, how an individual director contributes to board effectiveness overall. The nomination committee members and search consultants that we interviewed kept stressing that finding the right director is a multidimensional search problem. That is, companies want to nominate someone who not only has experience, but also possesses good interpersonal skills, is independent of management, comes from underrepresented groups, and so on. In reality, the available pool of candidates is limited, and companies are unable to optimize over every dimension.[222] Consequently, when regulators or investors pressure companies to add a new row to their skills matrix and check boxes in that row, they may inadvertently reduce the effectiveness of the director selection process. By trying to maximize one particular trait, companies could end up selecting candidates whose other individual traits are not conducive to board effectiveness.[223] And because boards function as a group, insistence on recruiting specific traits could also hurt board dynamics.

Moreover, the empirical literature on directors' skill sets reveals that certain skills add value only under specific circumstances.[224] The optimal quantity and quality of board expertise is highly situational, depending on each company's industry, its stage in the life cycle, and the reputational threats it is currently facing.[225] The emphasis is on *currently*: companies operate in evolving business and social environments, and each company's unique threats and opportunities vary over time. A regulatory approach that nudges all companies to add a specific skill could therefore backfire, by limiting a given company's flexibility to reconfigure its board according to that company's specific needs.[226] Indeed, empirical studies on previous regulatory efforts to promote changes in board structures conclude that such attempts tend to be suboptimal.[227]

222. Adams et al., *supra* note 53, at 643.

223. Interview No. 3 (Feb. 7, 2023) ("[T]he ideal candidate is able to contribute across multiple of those dimensions. And frankly, where I think you get that pressure, it's attacking maybe the symptom and not the core problem, which is that you haven't undertaken a prioritization of, 'this is an important issue and we need to do something about it.'").

224. *See, e.g.*, Ronald W. Masulis, Cong Wang & Fei Xie, *Globalizing the Boardroom—The Effects of Foreign Directors on Corporate Governance and Firm Performance*, 53 J. ACCT. & ECON. 527 (2012); A. Burak Güner, Ulrike Malmendier & Geoffrey Tate, *Financial Expertise of Directors*, 88 J. FIN. ECON. 323 (2008); Amy J. Hillman, *Politicians on the Board of Directors: Do Connections Affect the Bottom Line?*, 31 J. MGMT. 464 (2005).

225. *See also* BAINBRIDGE & HENDERSON, *supra* note 30, at 97.

226. Bhattarai et al., *supra* note 219. For the argument that companies that perform poorly adjust their boards voluntarily, see Benjamin E. Hermalin & Michael S. Weisbach, *Boards of Directors as an Endogenously Determined Institution: A Survey of the Economic Literature*, 9 ECON. POL. REV. 7, 14 (2023).

227. *See, e.g.*, Jenter et al., *supra* note 193, at 25 ("[Our findings] are a warning that ill-designed board regulations can have large costs."); James S. Linck, Jeffry M. Netter & Tina Yang, *The Determinants of Board Structure*, 87 J. FIN. ECON. 308 (2008).

The SEC's recent decision to abandon the proposed provision of cyber expertise disclosure is a step in the right direction.[228] The SEC's original proposal did not cite a single academic study regarding the desirability of adding cyber experts to corporate boards. The provision was met with a slew of critical comments. And the SEC eventually recognized that "directors with broad-based skills in risk management and strategy often effectively oversee management's efforts without specific subject matter expertise, as they do with other sophisticated technical matters."[229] Granted, for some companies having cyber experts on the board could add value, and for some investors information about directors' cyber expertise could be valuable. But these companies and investors can (and often do) disclose and gather such valuable information organically, without needing a one-size-fits-all mandate.

Here lies an important difference between types of expertise. When the SEC previously intervened in board expertise, it was in the context of financial expertise (requiring that companies disclose whether their audit committee members possess such expertise).[230] In such a context, external intervention is more readily justifiable: management will not necessarily want to have directors who are better equipped to monitor them and ferret out fraud, and so companies may not necessarily reach the optimal level of financial expertise on their own. In our context of ESG-related expertise, management already have incentives to ensure that the company monitors risks such as cyberattacks, and so companies are more likely to self-correct and add cyber expertise to the boardroom when the advantages outweigh the disadvantages.

To the extent that regulators intervene in the new types of board expertise, they should focus not on nudging companies to add specific traits, but rather on ensuring better expertise disclosure. If boards matter for corporate governance, and expertise matters for boards, expertise disclosure should be of high quality. Yet as Parts II and III above detailed, the current quality of expertise disclosure leaves a lot to be desired. Former SEC commissioner Lee acknowledged as much, noting that "reported board expertise on ESG may be ill defined and still lacking . . . there is more work to be done."[231]

But what is the work to be done, and who should be doing it? Some improvements in expertise disclosure could come organically from the

228. SEC Press Release, SEC Adopts Rules on Cybersecurity Risk Management, Strategy, Governance, and Incident Disclosure by Public Companies (July 26, 2023), https://www.sec.gov/news/press-release/2023-139 [https://perma.cc/9PJD-QB9P].

229. *Id*. at 84.

230. *See supra* note 52 and accompanying text.

231. Herren Lee, *supra* note 17.

companies themselves.[232] Indeed, after our interviewees would lament that "director skills matrices look to me like they're in the dark ages,"[233] they would usually continue in the same sentence to sketch relatively easy fixes. For example, one interviewee suggested that companies should ask directors to differentiate between areas that are their core strengths and areas that are secondary, or limit directors as to the number of boxes that they can check.[234] In our dataset we similarly encountered anecdotal examples of companies switching to more comprehensible and informative ways of disclosing expertise. Darden Restaurants distinguishes between directors with cyber expertise as a "cornerstone element" in their career success and those who have had "meaningful involvement" with cybersecurity. DTE Energy's skills matrix includes four category levels of expertise: limited knowledge, working knowledge, managerial knowledge, and technical expertise/advanced knowledge. And perhaps the easiest to implement and most practically relevant fix is to distinguish between "expertise" and "experience," like Fortive Group recently started doing.

Still, even if such fixes are easy to implement, some regulatory intervention may be needed to get companies to adopt them. This is because of the collective action problem: all companies as a group would benefit from more consistent and credible expertise disclosure (because investors will not discount such disclosure).[235] But some companies prefer to selectively report information that portrays their board expertise in a rosier light, and do not internalize the benefits from having a standardized, comprehensible system of expertise disclosure.[236] Some regulatory intervention may therefore be needed to ensure greater comparability across firms.[237]

Beyond dealing with how to disclose, companies should strive to adopt a more systematic approach regarding when and what expertise to

232. *See* Lisa M. Fairfax, *Dynamic Disclosure: An Exposé on the Mythical Divide Between Voluntary and Mandatory ESG Disclosure*, 101 TEX. L. REV. 273, 299 (2022) (lamenting in a similar context that "instead of seeking to address the shortcomings of voluntary ESG disclosure, the typical response to these shortcomings is to use them as the rationale for the necessity of mandated ESG disclosure").

233. Interview No. 3 (Feb. 7, 2023). The interviewee continued to note that "it's a flawed tool. . . . It's not illuminating[,] . . . it's almost like the box is checked because we have to in the proxy. . . . We're at the early stages of what really enlightened director skills management looks like." *Id.*

234. *Id.*

235. On the purported redundancy of mandatory disclosure, see, for example, Frank H. Easterbrook & Daniel R. Fischel, *Mandatory Disclosure and the Protection of Investors*, 70 VA. L. REV. 669, 683-85 (1984).

236. On the efficiency case for mandatory disclosure, see, for example, John C. Coffee, Jr., *Market Failure and the Economic Case for a Mandatory Disclosure System*, 70 VA. L. REV. 717, 722 (1984).

237. For a critique of the prevalent view that pits voluntary ESG disclosure against mandatory ESG disclosure, see Fairfax, *supra* note 232. Like Fairfax, we do not envision mandatory expertise disclosure as a panacea to all ills of voluntary expertise disclosure or as a wholesale rejection of voluntary expertise disclosure.

add to their boards. Thinking that adding one director with expertise in diversity will suddenly fix the corporate culture is naïve at best. And even if it did work, the glacial pace of board turnover makes this strategy ill-suited to deal with ever-evolving risks and opportunities. Companies could invest more in onboarding and training of existing directors on timely issues (think AI bootcamp). Companies could also adopt outside-the-box models, such as an X-team: a formal board that is comprised of a core group, alongside additional advisory members who are called on to advise on specific matters of sustainability.[238] These types of solutions could inject much needed specific expertise without overcrowding the board and hurting the quality of discussions on other issues.

B. Lessons for Judges

Our analysis also carries implications for corporate law litigation. Consider for example the method for assessing settlements. Courts are required to approve settlements in class and derivative actions.[239] When such settlements include the appointment of new expert directors as part of the "give" (as was the case in *Boeing*), courts need to develop tools to assess the extent to which such additions are beneficial to the group that is being represented by the plaintiff. One could argue that the bounty - hunting model of corporate law litigation is ill suited to effect changes in board expertise. Entrepreneurial plaintiff attorneys finish one case and move on to the next. They are not necessarily the best candidates for monitoring and assessing changes over time in board effectiveness.[240]

Another implication concerns the method for assessing director liability.[241] Corporate legal scholars usually focus on the standard of review that applies to claims against directors. But an equally important question is, how do courts evaluate board behavior against a given standard, individually or collectively?[242] To generalize, courts tend to assess claims of

238. Jaap Winter, *Towards a Duty of Societal Responsibility of the Board*, 17 EUR. COMP. L.J. 192, 197 (2020). *See also* Brett McDonnell, *Stakeholder Governance as Governance by Stakeholders*, SEATTLE U. L. REV. (forthcoming) (manuscript at 18), https://ssrn.com/abstract=4557291 [https://perma.cc/5BB6-TSWY].

239. Fed. R. Civ. P. 23.1(c).

240. Contrast the new, *Boeing*-like settlement provision to add expert directors with the familiar provision to add independent directors. The addition of independence is easier to track and comprehend than the addition of expertise in a specific domain (which, as Part III demonstrated, has subtle effects on board behavior).

241. Interestingly, the abovementioned SEC's proposed cyber disclosure rules combined the requirement to disclose whether a board has cyber experts with a "safe harbor" clarifying that directors identified as cyber experts do not assume liabilities greater than those assumed by nonexpert directors. As the requirement to disclose cyber expertise was not adopted, the safe harbor was not as well. As will become clearer in the rest of this Section, the questions that we posit here would be relevant even if such safe harbor would be in place.

242. Darian M. Ibrahim, *Individual or Collective Liability for Corporate Directors?*, 93 IOWA L. REV. 929, 932-33 (2008).

breach of loyalty by looking at the behavior of each board member individually, whereas they tend to assess claims of breach of care by looking at the behavior of the board as a whole.[243] Failure-of-oversight claims (dubbed *Caremark* claims, after Delaware's leading precedent[244]) seem to be an exception: while they are nestled under the duty of loyalty, courts usually evaluate them by looking at the board as a whole.[245]

This oft-ignored aspect of oversight liability interacts in interesting ways with the recent push to nominate specialist directors. Say for example that a company has acquiesced to shareholder activist campaigns and nominated a couple of "green directors" who serve as official advocates for the environment.[246] Having such green directors on the board could help the remaining incumbent directors defend against future *Caremark* claims. This is because the presence of green directors increases the chances that the company's books and records will contain indications that the board discussed climate-related issues and was apprised of how the company manages them.[247] That may be enough to dismiss the *Caremark* claim against all directors.[248]

To the extent that courts conduct a director-by-director analysis, it remains to be seen whether having domain-specific expertise will change the likelihood that a given director is found liable. Delaware case law offers relatively little guidance in that regard.[249] A notable exception comes from deal litigation in *Emerging Communications*.[250] There, the court inferred that a director with financial expertise knew that the proposed price in a going-private transaction was too low.[251] In other words, the director's subject-matter expertise heightened the likelihood that he will be held liable (his fellow nonexpert directors escaped liability). Leading

243. *Id*. at 933.

244. *In re* Caremark Int'l Inc. Derivative Litig., 698 A.2d 959 (Del. Ch. 1996), *adopted by* Stone v. Ritter, 911 A.2d 362, 365 (Del. 2006).

245. Eckstein & Parchomovsky, *supra* note 49, at 817 n.79.

246. For an example of such an activist campaign, see Myles McCormick & Tom Wilson, *Activist Group* Follow This *Launches Climate Campaign Against Big Oil*, FIN. TIMES (Dec. 18, 2022), https://www.ft.com/content/c695432d-436a-4784-aa66-a06bfeec186d [https://perma.cc/A78Y-P2RR]. For an example of such an academic proposal, see Brett McDonnell, Hari M. Osofsky, Jacqueline Peel & Anita Foerster, *Green Boardrooms?*, 53 CONN. L. REV. 335, 380-81 (2021).

247. In Delaware, shareholders enjoy a qualified right to inspect their company's books and records, nestled in Section 220. In recent years Delaware courts have liberalized the requirements of this rule, so that they now award access to internal documents in more cases, and award access to more types of internal documents (not just formal board minutes but also electronic communications among the directors and their advisors). Shapira, *supra* note 71, at 1872-77.

248. Theoretically, the courts could also decide to stop looking at whether a board engaged in oversight efforts as a unit and examine the bad faith of each director individually.

249. Edwards, *supra* note 47, at 1088.

250. *In re* Emerging Comm'ns Shareholder Deriv Litig., 2004 WL 1305745, at *1 (Del. Ch. May 3, 2004).

251. *Id*. at *40.

commentators decried this maneuver, arguing that it unjustifiably punishes expertise, and rewards "ignorance over knowledge."[252] Applied to oversight duty litigation, we could envision a scenario where similar reasoning applies to "red flags" claims: the court may find it easier to infer that a director with expertise in the issue at hand should have seen a warning sign and reacted to it (that is, the director's subject-matter expertise makes it more likely that the warning signs were obvious to him).

Outside of corporate law, the presence of expert directors could increase the chance of individual director liability via the "responsible corporate officer" doctrine (often dubbed the *Park* doctrine, after the leading precedent).[253] Under that doctrine, company officials who bear a responsible relation to a violation of certain rules can be found criminally liable even without proof of mens rea. Normally, scholars cabin discussion of director liability to the *Caremark* doctrine and private litigation, thinking that application of the responsible corporate officer doctrine in criminal enforcement is limited to top officers such as the Chief Compliance Officer or the Chief Financial Officer. But the more directors enter the sandbox of operational corporate decisions,[254] the bigger the overlap between *Caremark* and *Park* becomes.[255] Consider for example the safety expert director and the cyber expert director. To the extent that these directors' roles spill over into operational, managerial realms, they may be subject to direct liability for their companies' violations in these realms.

Similar dynamics could be in play in securities fraud litigation. More and more cases these days are based on claims that the company misstated its ESG risks.[256] Such cases usually come down to determining whether corporate insiders knew of a high probability of an ESG risk of substantial magnitude.[257] Adding directors who are experts in cyber, for example, may reflect an expectation that the company now monitors cyber risks at a high level. This could make it more difficult on the defendants to claim that they were unaware of such risks.[258] One could even envision a future

252. Cunningham, *supra* note 51, at 498.

253. United States v. Park, 421 U.S. 658, 673 (1974).

254. Interview No. 1 (Feb. 9, 2023) ("What's changed is the sandboxes have been mixed up somewhat . . . [B]oards have to play in a lower level inside of business.")

255. Indeed, practitioners have already started discussing this potential development. *See, e.g.*, Paul E. Kalb & Coleen Klasmeier, *Where* Caremark *Meets* Park*: A New Era of Regulatory Compliance and Criminal Liability*, PHARMAEXEC.COM (Feb. 7, 2023), https://www.pharmexec.com/view/where-caremark-meets-park-a-new-era-of-regulatory-compliance-and-criminal-liability [https://perma.cc/99VY-M2RV].

256. *See* James J. Park, *ESG Securities Fraud* (UCLA School of Law, L. & Econ Rsch. Paper No. 23-02, 2023), https://ssrn.com/abstract=4428212 [https://perma.cc/8BYE-42RN].

257. *Id*.

258. A similar dynamic could be in play in *Caremark* litigation: the appointment of a director with expertise in, say, cyber or climate might serve as an indication that cyber or climate is a "mission critical" compliance risk for that company, which could in turn activate a heightened scrutiny of board oversight. Shapira, *supra* note 19, at 732-33.

scenario where investors sue the company for misstating its directors' expertise: say that company *X* discloses that it has a carbon emission expert, a cyber expert, and a product safety expert on its board. Now company *X* suffers a colossal pollution, or privacy, or safety failure. And it turns out in retrospect that company *X*'s directors were experts in name only (they self-checked boxes in skill matrices simply because they had limited experience discussing these topics). Can investors then sue on the theory that the professed board expertise was a material piece of information in their evaluation of the company? These are the types of questions that the new trend in board expertise could bring to the fore.

C. Lessons for Academics: Limitations, Relation to the Extant Literature, and Directions for Future Research

Our attempt to explore the recent shifts in board expertise suffers from several limitations. In particular, one could argue that (1) board expertise disclosure can be unreliable, and so our findings should be taken with a grain of salt, (2) board expertise is fast-evolving, and so our snapshot could soon become obsolete, and (3) board ESG oversight is determined by multiple factors, and so our focus on ESG skill sets underplays factors such as director mindsets and board culture.

We fully acknowledge these limitations but view them more as a feature rather than as a bug in our analysis. By spotlighting the problematic state of expertise disclosure, we create room to discuss potential policy implications. By deciphering the extent to which reported changes in cyber expertise reflect actual changes, we provide a blueprint that future work on other types of board expertise can follow. Similarly, by snapshotting the current shifts in board expertise, we provide a benchmark against which future assessments can be conducted. One clarification is in order, though. Our goal here is *not* to claim that directors' individual skill sets are the only, or even the most important, determinant of how boards approach ESG issues. We focus on skill sets simply because it is the dimension that regulators and institutional investors have been shifting attention to (probably because it is the easiest, most salient dimension to focus on). Part I showed just how much attention is being paid to the issue, and Parts II and III highlighted areas where this attention is misguided.

Our focus on board expertise makes our analysis closely related to a couple of recent influential accounts. Consider first Bainbridge and Henderson's thought-provoking proposal to outsource the board.[259] Bainbridge and Henderson start their analysis by highlighting a lack of expertise problem. The decades-long emphasis on board independence has rendered current boards with "generalists with little firm-specific

259. BAINBRIDGE & HENDERSON, *supra* note 30.

knowledge, skills, or expertise," they argue.[260] To solve this problem, Bainbridge and Henderson suggest allowing companies to hire an outside governance consulting firm to run (be) their board. Outsourcing the board to (non-human) specialized entities would solve the expertise problem, by permitting the board to "insource its development of expertise."[261] One important difference between our analyses is that Bainbridge and Henderson focus on firm-specific expertise, whereas we focus on the recent shift to ESG expertise. Another distinction is that Bainbridge and Henderson focus on what *ought to* happen: removing the legal ban on non-human directors would free up companies to experiment with different types of boards. We, by contrast, focus on a shift that *is* happening.[262]

Closely related accounts come from Kastiel and Nili's "board suite" model,[263] and Gilson and Gordon's "board 3.0" model.[264] Both accounts start from recognizing the challenges that 2010s boards faced in dealing with the increased scope and complexity of risks and the intensification of investor activism.[265] Kastiel and Nili point to examples of activist representation on boards that led to the creation of "super directors," and propose to institutionalize and expand this innovation by creating a dedicated "board suite," with more information and bandwidth. Gilson and Gordon divide corporate boards into distinct eras, where board 1.0 was the version prevalent up until the 1970s, functioning mostly as an advisory board, and comprised mostly of insiders. Board 2.0 is the model prevalent today, functioning mostly as a monitoring board, and comprised mostly of independent directors. But because the abilities of board 2.0 are stretched too thin, Gilson and Gordon propose that boards upgrade to a 3.0 model: a board that contains a mix of monitoring provided by independent directors, and strategic advice provided by professional board members who are "thickly informed" and "well resourced."[266] One could view the increased emphasis on board expertise that we documented here

260. *Id*. at 71.

261. *Id*. at 42.

262. On the potential drawbacks of replacing the current model of corporate boards with professional board service providers, see, for example, Ronald J. Gilson & Jeffrey N. Gordon, *Board 3.0: An Introduction*, 74 BUS. LAW. 351, 365 (2019) (noting that shifting to board service providers will merely replace one agency problem with another); Andrew Verstein, *Upstream Liability, Entities as Boards, and the Theory of the Firm*, 74 BUS. LAW. 313 (2019); Faith Stevelman & Sarah C. Haan, *Board Governance for the Twenty-First Century*, 74 BUS. LAW. 329 (2019).

263. Kobi Kastiel & Yaron Nili, *Captured Boards: The Rise of Super Directors and the Case for a Board Suite*, 17 WIS. L. REV. 19, 47 (2017).

264. Gilson & Gordon, *supra* note 262, at 361.

265. For an application to markets outside of the United States, see Zenichi Shishido, *The Monitoring Board Revisited*, *in* CORPORATE LAW AND ECONOMICS (Adam B. Badawi ed., 2023).

266. Gilson & Gordon, *supra* note 262, at 353.

as fitting what Kastiel and Nili and Gilson and Gordon envisioned as the next step in board-governance evolution. An important distinction between their analyses and ours is that the trend that we document is focused on expertise and bandwidth in ESG issues.[267]

The focus on ESG expertise in corporate boardrooms also connects us to recent accounts of a "welfarist turn" in corporate governance.[268] Kahan and Rock suggest that corporate governance today is increasingly viewed as a means to reduce negative externalities and produce positive externalities.[269] The trend of adding directors with ESG expertise that we documented here fits nicely with Kahan and Rock's big-picture observation.[270] More provocatively, one could claim that adding ESG-expert directors could generate what Jennifer Arlen referred to (in the context of oversight duties) as a shift from solving agency problems to creating agency problems.[271] Under this view, the new specialist directors could ensure that board oversight focuses on preventing not only managerial conduct that harms shareholders, but also managerial conduct that benefits shareholders by externalizing larger costs on society.

Going forward, corporate legal scholars would have to shift attention from the well-studied topic of board independence to the understudied topic of board expertise.[272] All boards today are nominally independent.[273] The variation between boards lies in expertise, practices, and culture. When focusing on board expertise, several directions seem especially promising. One is the determinants of appointing specialist directors: what types of companies, under what conditions, appoint a director with a specific expertise? Another is the effects of appointing specialist directors: does appointing a "climate" director increases a company's commitment to fighting climate change? Does appointing a "safety" or "cyber" director reduces the likelihood that the company will be embroiled in large-scale accidents or cyberattacks and face "event-driven"

267. An interesting question for future research is how the increase in specific director expertise will mesh with activist shareholders' attempts to nominate their own directors.

268. Marcel Kahan & Edward B. Rock, *Corporate Governance Welfarism* (ECGI Working Paper No. 683, 2023), https://ssrn.com/abstract=4328626 [https://perma.cc/V6BJ-P9GZ].

269. *Id.* at 5.

270. As with many aspects of the ESG and corporate-purpose debates, there is a strong sense of "everything old is new again" here. *See, e.g.*, Victor Brudney, *The Independent Director: Heavenly City or Potemkin Village?*, 95 HARV. L. REV. 597, 602-03 (1982).

271. Jennifer Arlen, *Evolution of Director Oversight Duties and Liability under* Caremark*: Using Enhanced Information-Acquisition Duties in the Public Interest*, *in* RESEARCH HANDBOOK ON CORPORATE LIABILITY 213 (Martin Petrin & Christian Witting eds., 2023).

272. Two prescient exceptions to the trend of overemphasizing independence and underemphasizing expertise are Cunningham, *supra* note 51, and Edwards, *supra* note 47. Both analyses predate the recent shift toward specialist directors with ESG-related expertise that we analyze here.

273. *See generally* Yaron Nili, *The Fallacy of Director Independence*, 3 WIS. L. REV. 491 (2020) (discussing and critiquing the current system for ensuring director independence).

litigation?[274] Or one could examine the effects of resignations of expert directors. Say that a company designates director *X* as a product safety expert or a diversity expert. Then director *X* publicly resigns. Could the resignation of specialist directors have different consequences compared to the resignation of generalist directors?

While proper testing of these questions may need to wait a few more years, an immediate avenue for future research is examining the effects of the shift to a "universal proxy card."[275] In November 2021, Rule 14a-19 of the Securities Exchange Act of 1934 mandated a universal proxy card for contested director elections. In the past, shareholders had to vote on different proxy cards ("slates"): either voting for the entire slate of the incumbents or voting for the entire slate of dissidents. Now, shareholders can pick and choose individual directors from multiple slates. The shift from slate-based voting to candidate-based voting is likely to increase proxy advisors' and shareholders' focus on directors' skills and qualifications.[276] Indeed, early reports from 2022 suggest that "companies and dissidents alike have emphasized director qualifications more in the initial campaigns of the universal proxy card era than we have seen in past years."[277] Leading advisors have accordingly nudged boards to more "regularly evaluate their composition in light of the company's strategic and operational priorities."[278] All in all, the universal proxy card is yet another reason why the emphasis on board expertise is only going to intensify going forward.[279]

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274. A less intuitive avenue for future research is examining how the addition of individuals from outside the traditional pool of candidates affects board behavior through its effect on directors' value preferences. A veteran CEO, a young CTO who is a cyber expert, and an academic who is a climate expert will often have different motivational goals. Each will attempt to channel corporate behavior toward the goals that he or she views as desirable. *See* Amir N. Licht & Renée B. Adams, *Shareholders and Stakeholders Around the World: The Role of Values, Culture, and Law in Directors' Decisions* (LawFin Working Paper No. 13, 2021), https://ssrn.com/abstract=3766934 [https://perma.cc/72P5-2HRU].

275. For an early account, see Scott Hirst, *Universal Proxies*, 35 YALE J. ON REGUL. 437 (2018).

276. Fields & O'Kelley, *supra* note 12 ("[T]he US is entering a new universal proxy era that will invite a more assertive approach by shareholders on director qualifications and disclosure.").

277. Kai H.E. Liekefett, Derek Zaba & Eric S. Goodwin, *What the First Universal Proxy Card Contests Say About the Future of Activism*, HARV. L. SCH. F. ON CORP. GOVERNANCE (Apr. 19, 2023), https://corpgov.law.harvard.edu/2023/04/19/what-the-first-universal-proxy-card-contests-say-about-the-future-of-activism [https://perma.cc/6FNK-GQEH].

278. *Id*; Rusty O'Kelley & Rich Fields, *Universal Proxy, Increased Activism and Director Vulnerability*, HARV. L. SCH. F. ON CORP. GOVERNANCE (Nov. 16, 2022), https://www.russellreynolds.com/en/insights/articles/universal-proxy-increased-activism-and-director-vulnerability [https://perma.cc/P8WN-XQ99].

279. In the words of interviewee #3: "Let's be honest about why everyone is thinking about director skill matrices: they are because of the universal proxy card, and how easy it is to target one director."

Conclusion

Compliance and ESG have been the two biggest developments in corporate governance over the past decade.[280] These two developments are now starting to influence the composition of corporate boards, causing a shift in board expertise. Investors and regulators now critically evaluate directors' skill sets and experiences and require companies to add specific types of expertise. Companies respond to these pressures by disclosing more prominently their directors' skill sets, and by adding more directors with ESG expertise, such as a cyber director or a climate change director. But addressing first-order problems such as data privacy, racial diversity, or environmental degradation through focusing on a specific trait of individual directors seems misguided. Not all additions of expertise are created equal. Some may hurt board effectiveness. Nomination committees, institutional investors, and regulators should therefore tread more carefully. Checking boxes in skills matrices is the easy thing to do, but not necessarily the right thing to do.

This Article presented the first comprehensive assessment of the current developments in board expertise. We have fleshed out the various factors that push companies to add new types of expertise. We have created a dataset of expertise disclosure, which allowed us to highlight the significant shift in how companies report expertise and select new directors. We have drawn on interviews with nomination committee members and board consultants to add context to the potential drawbacks of the current trends in board expertise. And we have sketched policy implications for regulators and judges.

Still, there exist many important facets of board expertise that we were not able to cover here, if only for considerations of scope. For example, our analysis strictly focused on companies trading in U.S. markets, but the same trends in board expertise seem to be relevant in many other countries.[281] As another example, our data collection focused on the growing demand for the ESG traits that were trending in 2022, such as cyber and climate change. But the demand is fast-evolving, and by 2024 it

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280. *See, e.g.*, Sean J. Griffith, *Corporate Governance in an Era of Compliance*, 57 WM. & MARY L. REV. 2075, 2082 (2016) (commenting on the centrality of compliance); Jill E. Fisch & Steven Davidoff Solomon, *Should Corporations Have a Purpose?*, 99 TEX. L. REV. 1309, 1310 (2021) (commenting on the centrality of ESG).

281. *See, e.g.*, Fields & O'Kelley, *supra* note 12 (providing examples from Brazil, India, and Germany); Maria Castañón Moats, Paul DeNicola & Matt DiGuiseppe, *What Boards Should Know About Balancing ESG Critics and Key Stakeholder*s, HARV. L. SCH. F. ON CORP. GOVERNANCE (Apr. 9, 2023), https://corpgov.law.harvard.edu/2023/04/09/what-boards-should-know-about-balancing-esg-critics-and-key-stakeholders [https://perma.cc/7RFP-86FG] (providing examples from the European Union); Anne Lafarre & Titiaan Keijzer, *Board's Digital Oversight and Expertise: Initial Findings from the Netherlands*, *in* CORPORATE GOVERNANCE AND ARTIFICIAL INTELLIGENCE: A CONFLICTING OR COMPLEMENTARY APPROACH (Indrajit Dube ed., forthcoming), https://ssrn.com/abstract=4466946 [https://perma.cc/UHT9-NRHG].

may well be that other types of ESG-related expertise, such as AI bias, will earn their own rows in skills matrices.[282]

The potential for contributions that were not developed here only strengthens the message that much work remains for scholars, regulators, and practitioners in understanding board expertise and how it affects corporate behavior. Board expertise is now being invoked daily in activist campaigns, consultants' memos, and company disclosures, yet it is too often treated as an unalloyed good with little reference to on-the-ground evidence. Tellingly, the SEC's cyber disclosure proposal did not cite a single academic study on board expertise. This Article represents a first step toward injecting much-needed theory and evidence into the discussion.

282. As one search consultant explicitly told us, "I've done a couple of searches where [my clients] want people to really understand AI/web 3/NFTs." Interview No. 4 (Feb. 27, 2023). For recent studies about how AI could affect board work, see Zhaoyi Li, *Technology Governance under Corporate Law* (U. of Pittsburgh L. Stud. Rsch. Paper No. 2023-31, 2023) (commenting on the potential rise of AI-expert directors); Erel et al., *supra* note 218, at 3226-30 (commenting on the potential for AI to improve the director-selection process); Sergio Alberto Gramitto Ricci, *Artificial Agents in Corporate Boardrooms*, 105 CORNELL L. REV. 869, 901 (2020) (commenting on the possibility of using AI to create expertise-on-tap in boardrooms); Christopher M. Bruner, *Artificially Intelligent Boards and the Future of Delaware Corporate Law*, 22 J. CORP. L. STUD. 1 (2022) (commenting on how the AI revolution could affect board liability).

Appendix A: Examples of Formats of Expertise Disclosure

General Skills Table Example – Verizon[283]

10	Consumer/B2B/retail
3	Cybersecurity
9	Financial expertise
3	Marketing
4	Regulatory/public policy
11	Risk management
11	Strategic planning
4	Technology
3	Telecommunications

283. Verizon, Definitive Proxy Statement (Schedule 14A), at ii (Mar. 28, 2022), https://www.verizon.com/about/sites/default/files/2022-Proxy-Statement.pdf [https://perma.cc/R3N5-7QQR].

Skills Matrix Example – Twitter[284]

Skills & Expertise — Experience	Durban	Pichette	Agrawal	Alemayehou	Kordestani	Lane Fox	Li	Rosenblatt	Taylor
Global Business Experience	●	●	●	●	●	●		●	●
Outside Public Company Board Experience	●	●		●	●	●		●	●
Management/Leadership Experience	●	●	●	●	●	●	●	●	●
Regulatory/Government Experience		●		●		●		●	
Finance/Accounting Experience	●	●		●	●	●	●	●	●
Risk Oversight Experience				●	●	●			●
Cybersecurity Experience	●	●	●			●			
Strategy/Business Development Experience	●	●	●	●	●	●			●
Innovation Experience		●	●		●	●	●	●	●
Technology Industry Experience	●	●	●	●	●	●	●	●	●
Consumer Industry Experience	●	●	●		●	●		●	●

Ideal Skills Table Example – Boeing[285]

Board Refreshment

The Board is committed to adding new members with compatible skill sets and fresh perspectives. Since the 2019 Annual Meeting, eight independent directors have left the Board and six have been added as part of the Board's refreshment efforts. These six new directors bring significant experience in aerospace, safety, engineering, cyber/software, risk oversight, audit, supply chain management, and finance. Lt. Gen. Harris and Mr. Joyce, who joined the Board in 2021, were recommended to the GPP Committee by an independent search firm and an incumbent independent director, respectively. Meanwhile, the GPP Committee continues to seek highly qualified director candidates in furtherance of the Board's ongoing refreshment strategy. By identifying and electing directors with safety-related experience, expertise in areas such as aerospace/aviation, risk management, software development, engineering, sustainability, and finance, and diverse backgrounds and perspectives, the Board seeks to continue to fulfill its oversight responsibilities and uphold Boeing's core values, all while enabling Boeing to achieve its evolving strategic imperatives. As part of the Board's commitment to diversity, 45% of our directors, including the chairs of the Audit, Compensation, and GPP Committees, are diverse with respect to gender and/or race/ethnicity.

Appendix B: List of Interviews

To capture the fuzzy dynamics of how adding specific types of expertise affects board effectiveness, we conducted in-depth open conversational interviews with board members and their search consultants. In this type of interview, the researcher introduces a topic in broad strokes, the interviewee talks freely about the interviewee's experience and insights into the topic, and the researcher further probes specific experiences with follow-up questions. In our case, we started each interview by introducing the phenomenon of companies facing pressures to add directors with specific sets of expertise. We then asked each interviewee general questions

284. Twitter, Inc., Definitive Proxy Statement (Schedule 14A), at 11 (May 25, 2022), https://www.sec.gov/Archives/edgar/data/1418091/000114036122014049/ny20001921x3_def14a.htm [https://perma.cc/8JNL-79H5].

285. Boeing Co., Definitive Proxy Statement 8 (Schedule 14A), at 8 (Apr. 29, 2022) https://www.sec.gov/Archives/edgar/data/12927/000119312522073265/d240748ddef14a.htm [https://perma.cc/6ZJJ-DSK8].

such as whether they felt these pressures in their company, how their company reacted, what they see as the pros and cons of adding directors with specific expertise, and how their company discloses director expertise.

The interview method is of course subject to biases. Some of them were already discussed when introducing the method in Part II above. For example, interviewees may tell their interviewers what they think that the latter want to hear or distort their responses to boost their image. The factor that alleviates such concerns in this Article is that our analysis is based on triangulation with other methods. Another potential bias is the selection bias, particularly because we compiled our sample of interviewees based on the snowballing technique. Normally, when interviewers do not sample interviewees randomly but rather ask the first interviewees to refer them to others (snowballing), the risk is that the sample will consist of interviewees who are too similar to each other (the idea is that the first person in the referral chain will know and tend to refer to individuals who are similar to him/her). To mitigate this bias, we started our sample with an outside advisor (search consultant) who works with many boards and asked her to refer us to directors with varied experiences—serving on the boards of large and small companies, former CEOs, and non-CEOs, and so on.