COMMENTS

submitted on behalf of

Alliance for Fair Board Recruitment

Concerning the

The Nasdaq Stock Market LLC;

Notice of Filing of Proposed Rule Change to Adopt Listing Rules

Related to Board Diversity,

Amendment No. 1

File No. SR-NASDAQ-2020-081

by

C. Boyden Gray
Jonathan Berry
Primary Contact
Michael Buschbacher
James R. Conde
T. Elliot Gaiser
Jordan E. Smith
BOYDEN GRAY & ASSOCIATES
[redacted]

April 6, 2021

CONTENTS

INTERESTED PARTY

Alliance for Fair Board Recruitment is a non-profit membership organization incorporated under the Texas Business Organizations Code and located in Texas. The Alliance was formed to defend the civil rights of director candidates, including their right to equal protection under the law, through all lawful means.

The Alliance for Fair Board Recruitment appreciates consideration of its comments on The Nasdaq Stock Market LLC's ("Nasdaq's") *Notice of Filing of Proposed Rule Change to Adopt Listing Rules Related to Board Diversity*, File No. SR-NASDAQ-2020-081.

INTRODUCTION

Responding to the calls of the "social justice movement," and dissatisfied with "the pace of progress" toward "gender parity" in corporate boardrooms, Nasdaq proposes to increase boardroom diversity in its listed companies through a "regulatory approach." Nasdaq seeks the Securities and Exchange Commission's (SEC's) approval of proposed listing rule 5605(f), requiring Nasdaq-listed companies to have (A) "at least one director who self-identifies as female," and (B) "at least one director who self-identifies as Black or African American, Hispanic or Latinx, Asian, Native American or Alaska Native, two or more races or ethnicities, or as LGBTQ+." In the alternative, Nasdaq would require listed companies to publicly "explain"—in writing—why they do not comply. Firms that fail to comply or explain after a warning would be delisted from the exchange.

The diversity rule should be disapproved because it is contrary to law, arbitrary, and unconstitutional.

First, Nasdaq's discriminate-or-explain command is unlawful because it fails to advance any legitimate exchange purpose. It is instead a prohibited regulation of "matters not related to the purposes" of the Exchange Act. To be lawful, Nasdaq's diversity rule must be "designed to" achieve one or more of the purposes of an exchange, like preventing fraud or protecting investors, and it may not impose unnecessary burdens on competition. But Nasdaq's rule is designed to promote board diversity, not to prevent fraud or further any other legitimate purpose under the Exchange Act.

Nasdaq's contrary argument is unsupported by the evidence. Nasdaq's pretext is that the diversity rule will mystically improve corporate governance. But its analysis is based on misrepresentations of the evidence and defective pseudoscience by self-interested social advocacy groups and investors that is contradicted by more rigorous and scholarly meta-analyses.

Professor Jon Klick's literature review of the relevant studies, commissioned by the American Enterprise Institute, is attached as Exhibit A. Professor Klick concludes:

> The vast majority of the studies used to support the diversity regulations do not identify causal effects, and, therefore, they do not constitute reliable evidence. Among the few studies that provide valid insights into the causal effects of mandating diversity, the evidence is, at best, mixed; as a whole, the literature is more suggestive that such mandates will do little to improve firm performance and may actually generate losses for shareholders.

The SEC should review Exhibit A, as Professor Klick's literature review undermines Nasdaq's characterization of the evidence and highlights the unreasonableness of drawing any causal inferences from the existing literature on boardroom diversity.

Most studies cited by Nasdaq suffer from serious design flaws. As Professor Klick explains in detail, studies finding a correlation often exclude the control variables needed to isolate the effect of diversity on firm performance. This likely biases the results. It could be, for example, that technology firms are doing better than other firms and are also independently more likely to recruit female directors than other firms. If so, a study that fails to control for differences between technology firms and other firms would misleadingly attribute the positive performance effect of being a technology firm to the effect of recruiting a female. This form of omitted variable bias is pervasive in the boardroom diversity literature and alone makes it impossible to reasonably infer that the correlations asserted by Nasdaq are causal.

Yet Nasdaq's proposed rule fails to acknowledge these design problems and invites the SEC to unreasonably infer causation from fatally flawed studies lacking even the most basic controls, let alone robust controls. The SEC should decline this invitation.

Consistent with Professor Klick's literature review, our own review of the research reveals that rigorous, objective studies over the last two decades consistently show boardroom gender diversity has inconclusive effects on corporate performance or investor protections. There is little or no support to reasonably infer any causal connections given the inconsistent data, design problems, and the ambiguous correlations found in the more sophisticated studies. And there is no reliable empirical evidence of causation—not a shred—that having a minority director improves corporate performance or improves investor protections by enhancing internal controls or improving corporate auditing practices. The weakness of the empirical evidence compels the conclusion that Nasdaq's investor-protection justification is a mere pretext to engage in social justice legislation unrelated to the Exchange Act's purposes.

The SEC has been down this road before. In *Business Roundtable*, the Court of Appeals for the D.C. Circuit unanimously vacated the SEC's proxy access rule for relying on, "at best," mixed empirical evidence. The empirical evidence supporting the diversity rule in this proceeding is far weaker and, in the case of the minority director rule, non-existent. The SEC should not repeat the mistakes of the past. It should disapprove the diversity rule.

The diversity rule also fails as a matter of law because it imposes unnecessary burdens on competition, relies on arbitrary classifications and distinctions, contradicts SEC rules, and runs contrary to settled principles of federal anti-discrimination law.

Second, even if Nasdaq's diversity rule were legally permissible and supported by substantial evidence (and it is not), it is not permissible under the U.S. Constitution. The U.S. Constitution's Fifth Amendment prohibits federal discrimination based on sex, race, or sexual orientation except in very narrow circumstances. To approve the proposed discrimination, the SEC would have to conclude that Nasdaq's rule survives the exacting scrutiny needed to justify the discriminatory treatment of individuals based on their sex, race, or sexual orientation. Nasdaq's pretextual interest in improving securities markets does not remotely begin to justify discriminatory classifications based on sex, race, or sexual orientation. The diversity rule would also unconstitutionally compel speech, exceed federal authority, and raise serious separation of powers concerns.

Nasdaq's principal response is that an SEC order approving exchange rules is subject to *no* constitutional restraints because listing rules are a "private contract" and not "state action." Under Nasdaq's state-action test, the SEC must have coerced or encouraged Nasdaq's diversity rule. Otherwise, the diversity rule remains a mere private "contract" with listed firms.

Nasdaq is wrong. The Supreme Court has expressly rejected Nasdaq's argument that government coercion or encouragement is a necessary element of state action. The Supreme Court instead looks at a broad host of facts to determine whether the relationship between a private entity and the state is sufficient to give rise to state action.

The relevant facts support a finding of state action in this case. Nasdaq has a right to exist as a national exchange only if the SEC concludes that its listing rules adequately discharge public regulatory functions, like preventing and punishing securities fraud. The proposed diversity rule is not enforceable without an SEC order approving it, so it qualifies as state action under *Shelley v. Kraemer*'s holding that state orders enforcing "private" racial covenants are state action. Moreover, Nasdaq would have an ongoing federal duty to enforce the diversity rule against listed companies. Nasdaq would be subject to SEC sanctions if it does not enforce the rule. This state-sanctioned and state-backed regime of discrimination falls comfortably within the scope of the Supreme Court's state action doctrine. Nasdaq's assertion that its listing rules are a mere private agreement and not state action is no different from the argument that racial covenants are mere private agreements. That argument was unanimously rejected by the Supreme Court in *Shelley v. Kraemer*. Because *Shelley* *v. Kraemer* is right, Nasdaq is wrong.

Any other conclusion would greenlight the circumvention of core civil rights protections through "self-regulatory" quasi-governmental cartels. Nasdaq's state action test, if applied, would allow the SEC to approve listing rules that ban Jews, Blacks, or Catholics from serving as corporate directors with constitutional impunity. That cannot be right.

Nasdaq's alternative response is that the quota is no quota at all—it is merely an "aspiration," "objective," and even an "opportunity" for firms that can be ignored with impunity. But Nasdaq's diversity *rule* is no mere exhortation. A company that fails to comply will be banished from Nasdaq's exchange, impairing the company's value and access to capital.

To be sure, Nasdaq's rule gives issuers the "option" of publicly explaining why they do not discriminate, even if the explanation is a simple statement of disagreement with Nasdaq's diversity "philosophy." But a choice between being forced to discriminate and being forced to engage in protected speech is no constitutional choice at all. Nor is Nasdaq's "explanation" option a free lunch. As Nasdaq acknowledges and intends, the comply-or-explain rule encourages listed firms to engage in discriminatory director recruitment based on gender, race, or sexual orientation. That encouragement results from the fact that Nasdaq's "explanation" option is a functional penalty for most or all publicly traded firms. The non-compliance explanation will inflict reputational and litigation risks on firms that fail to meet Nasdaq's diversity quotas, creating a target for activist divestment campaigns or shareholder lawsuits alleging misrepresentations and breach of fiduciary duties. Firms will need to spend limited resources to hire communications consultants and attorneys (like the ones supporting the proposal) to evaluate the marketing and legal risks of providing an explanation of non-compliance instead of discriminating. Given the real costs of an explanation, Nasdaq's repeated insistence that the quota is best characterized as an aspirational "objective" is mere semantics. A choice between meeting a quota or issuing a costly non-compliance explanation does not make the quota any more constitutional. Nasdaq's quotas can be avoided, but only at a price.

The SEC has no choice—it is legally bound to disapprove the proposed diversity rule.

These comments proceed as follows. Part I of the comments will review the academic literature cited by Nasdaq. Part II will explain why Nasdaq's diversity rule is not a mere "objective." Part III will explain why Nasdaq's diversity rule is unlawful and lacks substantial evidence under the Exchange Act, is arbitrary and capricious, and contradicts SEC policy. Part IV will explain why Nasdaq's diversity rule is inconsistent with core anti-discrimination principles of federal civil rights law. Part V will explain why Dodd-Frank's diversity provision is irrelevant and provides no support to Nasdaq. Part VI will explain why approval of Nasdaq's diversity rule would be unconstitutional, and why Commissioners Lee and Crenshaw are recused from this proceeding.

PROCEDURAL HISTORY

On December 1, 2020, Nasdaq filed a notice of the proposed diversity rule with the SEC.[1] The notice was published for comment in the Federal Register on December 11.[2] On February 5, 2021, Nasdaq, through Ballard Spahr, filed a letter to the docket responding to several commenters who argued that the diversity rule was unconstitutional and violated civil rights laws.[3] On February 26, Nasdaq filed "Amendment No. 1" with the SEC, making changes to the original proposed rule, along with a response to comments.[4] On March 10, the Acting Director of Trading and Markets instituted proceedings to determine whether to approve or disapprove

[1] Securities Exchange Act Release No. 90574 (Dec. 4. 2020).

[2] 85 Fed. Reg. 80,472 (Dec. 11, 2020).

[3] Ballard Spahr Response Letter (Feb. 5, 2021) (Ballard Spahr Response).

[4] Nasdaq's response and Amendment 1 are available on the online SEC docket. Nasdaq, Response to Comments and Notice of Filing of Amendment No. 1, File No. SR-NASDAQ-2020-081 (Feb. 26, 2021) (Nasdaq Response), https://www.sec.gov/comments/sr-nasdaq-2020-081/srnasdaq2020081-8425992-229601.pdf.

the proposed rule.[5]

COMMENT

I. ACADEMIC RESEARCH DOES NOT SUPPORT NASDAQ'S DIVERSITY RULE.

In reviewing the available academic research, Nasdaq makes two bold claims: (1) that "the overwhelming majority of studies" show that board diversity improves corporate financial performance[6] and (2) that "[t]here is substantial evidence that board diversity" "enhances the quality of a company's financial reporting, public disclosures and management oversight."[7]

The "overwhelming" academic consensus is fiction. Rigorous observational studies show that gender diversity has little or no discernible effect on firm performance or investor protections. At best, the available evidence is inconclusive. As for the other types of diversity favored by Nasdaq—race and LGBTQ+ identity—there is no reliable empirical evidence at all.

Professor Jonathan Klick's review in Exhibit A provides a detailed explanation for why the academic research does not support drawing causal inferences.[8] As Professor Klick explains, most or all studies are poorly designed and likely suffer from omitted variable bias, making it impossible to infer causal effects from any correlation. These comments complement his more searching analysis.

---

[5] 86 Fed. Reg. 14,484, 14,484 (Mar. 16, 2021).

[6] 85 Fed. Reg. at 80,476/3.

[7] *Id*. at 80,477/3.

[8] Also attached to these comments as Exhibit C is a spreadsheet summarizing just the studies cited by Nasdaq.

A. Academic Research Does Not Show That the Female Director Rule Will Improve Corporate Performance or Investor Protections.

1. Academic research does not show that board gender diversity improves corporate performance.

Confidently asserting that "the evidence is in,"[9] Nasdaq cites twelve sources in its academic research review[10] to support its claim "that there is a compelling body of credible research on the association between economic performance and board diversity."[11] Indeed, it asserts that "the overwhelming majority of studies" shows a positive correlation between gender diversity and corporate financial performance.[12]

Nasdaq's "compelling body of credible research" consists largely of promotional materials prepared by self-interested investment firms and advocacy groups that lack any scientific or statistical rigor. More troubling, Nasdaq misrepresents other studies to bolster its claims. An examination of Nasdaq's sources—along with the many sources Nasdaq fails to cite—shows that the impact of boardroom gender diversity on firm performance is inconclusive. The consensus is clear: the academic research has not established a positive correlation between female board directors and firm performance. Even the "mixed" studies finding a correlation are not strong evidence that having one or more women directors *causes* better financial performance, which is what Nasdaq needs to prove.[13]

Correlations are not proof of causation.[14] To reasonably infer causation from a

---

[9] *Id*. at 80,475/3 (quoting SEC Commissioner Allison Herren Lee).

[10] *Id*. at 80,475–77, Part II.A.1.II.a.

[11] *Id*. at 80,476/3.

[12] *Id*. at 80,477/2.

[13] *See Bus. Roundtable v. SEC*, 647 F.3d 1144, 1151 (D.C. Cir. 2011) (*Bus. Roundtable II*) ("In view of the admittedly (and at best) 'mixed' empirical evidence, we think the Commission has not sufficiently supported its conclusion that increasing the potential for election of directors nominated by shareholders will result in improved board and company performance and shareholder value.").

[14] Exhibit A; Daniel L. Rubinfeld, *Reference Guide on Multiple Regression*, Reference Manual on Scientific Evidence 309 (3rd ed. 2011) ("A correlation between two variables does not imply that one event causes the second"); *Norfolk & W. Ry. Co. v. Ayers*, 538 U.S. 135, 173 (2003) (Kennedy, J., concurring in part and dissenting in part) ("correlation is not causation").

correlation, and even assuming the underlying data sample is appropriate for the population and free of measurement error, Nasdaq would need to demonstrate that the studies are well designed, and all relevant variables are accounted for. One common threat to valid inferences of causation from correlation is the risk of omitted variable bias. Omitted variable bias in this context would arise if variables excluded from the board diversity regression models are correlated with both the relevant firm performance outcomes and with firm board diversity. If an excluded variable meets these conditions, then firm board diversity would "be credited with an effect that actually is caused by the excluded variable."[15] For example, if technology companies have performed better over the past decade because of factors unrelated to boardroom diversity, and technology firm boards also happen to be more diverse than average firm boards, a model that fails to control for differences between technology firms and other firms would be biased—the performance effects of being a technology firm would be falsely attributed to having a diverse board. While this omitted variable bias can often be fixed by including the variable in the model, in many cases, the identity of the omitted variable is not known, or data related to the omitted variable is not available.

A related form of error is simultaneous causality bias, which could occur if, for example, boardroom diversity causes better (or worse) firm performance, and better (or worse) firm performance also causes boardroom diversity. Simultaneous causality cannot be addressed by simply adding variables to a regression, but requires the use of more advanced techniques. One of these techniques is known as "instrumental variables" regression, which, in this case, would use a separate variable ("instrument") to try to isolate the effect of boardroom diversity from any errors caused by omitted variable or simultaneous causality bias.[16] But effectively designing instrumental variables is often very difficult, and the use of weak instruments can

---

[15] Rubinfeld, *supra* note 14, at 314.

[16] For a more detailed explanation see James H. Stock & Mark W. Watson, Introduction to Econometrics 419 (3rd ed. 2011).

also lead to misleading results.[17]

Nasdaq's studies suffer from serious design flaws, making any causal inferences unreasonable. As Professor Klick explains in greater detail in his report, most or all the studies asserting the correlations Nasdaq highlights fail to include adequate controls to isolate causal effects—and some include no controls at all.[18] Even the studies that try to isolate causation through "instrumental variables" likely suffer from serious defects.[19]

Even if the statistical evidence allowed causal inferences—and it does not—Nasdaq would still need to posit a plausible causal theory that explains why gender diversity causes better corporate performance.[20] This is important because even if there is a correlation, causality may well run in the opposite direction: it may be that firms that are doing well have more resources to hire a diverse board. The best Nasdaq can do is assert that women somehow inherently bring "fresh perspectives" or avoid "groupthink" in the boardroom.[21] But these assertions are shopworn sex stereotypes, not a testable theory of causation.[22]

a. Does it matter that most of Nasdaq's statistical sources are academically substandard? "The answer to this question is an emphatic yes."

Of the twelve sources cited by Nasdaq as "suggesting a positive association between diversity and shareholder value,"[23] only two were subject to peer review.[24]

---

[17] *Id.* at 438–39.

[18] Exhibit. A.

[19] *Id.*

[20] Rubinfeld, *supra* note 14, at 310.

[21] 85 Fed. Reg. at 80,472/2, 80,479.

[22] Karl R. Popper, Conjectures and Refutations: The Growth of Scientific Knowledge 37 (5th ed. 1989) ("[T]he criterion of the scientific status of a theory is its falsifiability, or refutability, or testability").

[23] 85 Fed. Reg. at 80,475/3.

[24] David A. Carter et al., *Corporate Governance, Board Diversity, and Firm Value*, 38 Fin. Rev. 33 (2003) ("Carter 2003"), *cited at* 85 Fed. Reg. at 80,476 n.27; Bernile et al., *Board Diversity, Firm*

The remainder of Nasdaq's "studies" include: one report from an investor ratings agency,[25] seven surveys from investment groups or consulting firms,[26] and two publications from gender and LGBTQ+ advocacy groups.[27]

These self-interested studies are unreliable. As noted gender diversity scholar Alice Eagly of Northwestern has observed:

> Advocates are often ideologically polarized players who eagerly invoke social scientific data that support their objectives but whose use of science can be selective and thus unrepresentative of the available scientific knowledge. . . . [Relying on] reports from advocacy and consulting organizations [that compare] groups of firms that differ[] in the gender diversity of their corporate boards . . . [is problematic, in part] because of the elementary form of their data presentations. Such group comparisons do not reveal the strength of the relation between the participation of women and financial success [of the firm]. [Such] analyses lack[] even correlations relating the percentages of women on corporate boards to corporate outcomes or simple scatter plots of these relationships. Such studies do not meet the standards of the relevant academic disciplines, which are economics and management. Does it

---

Risk, and Corporate Policies (Mar. 2017), *cited at* 85 Fed. Reg. at 80,476 n.28. Though Nasdaq cites Bernile's unpublished white paper, the white paper was published in substantially similar form in a peer-reviewed journal. Bernile et al., *Board diversity, firm risk, and corporate policies*, 127 J. Fin. Econ. 588 (2018).

[25] Moody's Investors Service, *Gender Diversity is Correlated with Higher Ratings, but Mandates Pose Short-Term Risk* (Sept. 11, 2019), *cited at* 85 Fed. Reg. at 80,476 n.37.

[26] Jason M. Thomas & Megan Starr, *From Impact Investing to Investing for Impact*, The Carlyle Group (Feb. 2019), *cited at* 85 Fed. Reg. at 80,475 n.23; Ariel F. Babcock et al., *The Long-term Habits of a Highly Effective Corporate Board*, FCLT Global (Mar. 2019), *cited at* 85 Fed. Reg. at 80,475 n.25; Vivian Hunt et. al, *Diversity Matters*, McKinsey & Company (Feb. 2015) ("2015 McKinsey Report"), *cited at* 85 Fed. Reg. at 80,476 n.26; Richard Kerlsley et al., *The CS Gender 3000: Women in Senior Management*, Credit Suisse (Sept. 2014), *cited at* 85 Fed. Reg. at 80,476 n.30; Meggin Thwing Eastman et al., *The Tipping Point: Women on Boards and Financial Performance*, MCSI (Dec. 2016), *cited at* 85 Fed. Reg. at 80,476 n.31; Credit Suisse ESG Research, *LGBT: The Value of Diversity* (Apr. 2016), *cited at* 85 Fed. Reg. at 80,476 n.33; Vivian Hunt et al., *Diversity Wins: How Inclusion Matters*, McKinsey & Company (May 2020) ("2020 McKinsey Report"), *cited at* 85 Fed. Reg. at 80,476 n.37.

[27] Nancy M. Carter & Harvey M. Wagner, *The Bottom Line: Corporate Performance and Women's Representation on Boards (2004-2008)*, Catalyst (2011) ("Catalyst Report"), *cited at* 85 Fed. Reg. at 80,476 n.32; Quorum, *Out Leadership's LGBT+ Board Diversity and Disclosure Guidelines (2019)*, *cited at* 85 Fed. Reg. at 80,476 n.35.

> matter that the studies are academically substandard? The answer to this question is an emphatic yes.[28]

Of the eleven sources we accessed,[29] fewer than half (five) performed even the most basic statistical analysis—a determination whether their results were "statistically significant"—the minimum necessary to assert that the results did not arise purely by chance.[30] Determining that an effect is "statistically significant" does not mean that the correlation is strong or causal, but merely that, based on a statistical analysis of the collected data, it is unlikely to have arisen by random chance.

To be clear, statistical significance is just one very basic test of statistical rigor, and the threshold of statistical significance does not suffice to draw any reasonable causal inferences from a study. Statistical significance does not tell you whether an observational study is well designed, or well controlled for, or if the results have been cherry-picked. But it at least allows one to assert that the observed correlations are likely not random. The sources that do not evaluate statistical significance cannot reasonably be used as evidence of any correlation between firm performance and gender diversity, since the correlation may result from pure chance. Nasdaq's reliance

---

[28] Alice H. Eagly, *When Passionate Advocates Meet Research on Diversity, Does the Honest Broker Stand a Chance?* 72 J. Social Issues 199, 200–01 (2016).

[29] The Moody's Investment Services report, cited at 85 Fed. Reg. at 80,476 n.37, appears to be available only to subscribers. Because Moody's secret science is not available for public examination, it is not appropriately considered as evidence in the record. *Am. Radio Relay League, Inc. v. FCC*, 524 F.3d 227, 237 (D.C. Cir. 2008) ("It would appear to be a fairly obvious proposition that studies upon which an agency relies in promulgating a rule must be made available during the rulemaking in order to afford interested persons meaningful notice and an opportunity for comment.").

[30] "Statistical significance" refers to the probability that the results could have arisen by random chance. David H. Kaye & David A. Freedman, *Reference Guide on Statistics*, Reference Manual on Scientific Evidence 249–50 (3rd ed. 2011). The statistical significance of an observed effect is often measured by calculating the effect's "p-value." "Large p-values indicate that a disparity can easily be explained by the play of chance: The data fall within the range likely to be produced by chance variation. On the other hand, if p is very small, something other than chance must be involved." *Id.* at 250. Commonly, a threshold of 0.05 (5%) is used (i.e., if an effect has a p-value < 0.05, it is considered statistically significant). *Id.* at 251. The six sources that did not report the statistical significance of their findings are: Thomas, *supra* note 26; Babcock, *supra* note 26; Kerlsley, *supra* note 26; Eastman, *supra* note 26; Credit Suisse ESG Research, *supra* note 26; Quorum, *supra* note 27.

on these studies is misplaced.

The 2019 Wall Street Journal study Nasdaq cites in its response to comments similarly falls short.[31] The study rates companies using a complex composite diversity score—of which board gender diversity is only a small component. The study provides no analysis of the statistical significance of its results, and it fails to establish any causal link between diversity and firm performance.[32]

b. Nasdaq mischaracterizes study results, omitting findings that show boardroom gender diversity does not improve firm performance.

Many of the remaining studies Nasdaq relies on have significant defects, like failing to control for firm differences, that render any causal conclusions entirely unreliable.[33] Even if one accepts these study's correlations as credible—and they are often not—Nasdaq's selective reporting of their findings obscures an unavoidable conclusion: the evidence in the literature simply does not establish whether board gender diversity causes any change in firm performance. It remains equally plausible to believe that the correlations highlighted by Nasdaq are spurious or that causality runs in the opposite direction.

Nasdaq cites the 2003 study by Carter et al. for its contention that board diversity improves shareholder value, quoting that study as finding a "statistically significant positive relationship[] between the presence of women . . . on the board and firm value."[34] But that study's finding is counterbalanced by a later 2010 report by the same authors that comes to a different conclusion.[35] Examining data from 641 unique S&P 500 firms, the 2010 study found "no evidence of a significant link between

---

[31] Nasdaq Response to Comments 9.

[32] *See* Dieter Holger, *The Business Case for More Diversity*, WSJ (Oct. 26, 2019); *How the WSJ Research Analysts' Diversity and Inclusion Rankings Were Compiled*, WSJ (Oct. 26, 2019).

[33] *See* Exhibit A.

[34] 85 Fed. Reg. at 80,476/1.

[35] David A. Carter, et al., *The Gender and Ethnic Diversity of US Boards and Board Committees and Firm Financial Performance*, 18 Corp. Governance 396 (2010) ("Carter 2010").

Tobin's Q [a measure of firm value] and the number of women directors."[36] Nor do any of the authors' "regression models indicate a significant relationship between Tobin's Q and the number of women directors on a board committee."[37] This is in contrast to their observation of a positive link "between the number of women on the board and [return on assets]," another measure of firm performance.[38] Summarizing the mixed results, the 2010 study concludes, "[o]ur statistical analysis supports the theoretical position of no effect, either positive or negative," of gender diversity on firm financial performance.[39]

Nasdaq goes on to cite the 2017 white paper by Bernile et al. as finding that board diversity "is associated with increased operating performance, higher asset valuation multiples, lower stock return volatility, reduced financial leverage, increased dividend payouts to shareholders, higher investment in R&D and better innovation."[40] But that white paper measures "diversity" using a custom composite index based on six director characteristics—age, gender, ethnicity, financial expertise, number of directorships, and educational background.[41] The white paper's authors are unable to isolate a statistically significant beneficial association between any particular index characteristic and firm performance and instead conclude that it is "the joint effect of different aspects of board diversity that matters for firm risk, as opposed to any single aspect."[42] Nasdaq cannot disentangle any "joint effect," so its assertion that a director improves firm performance merely as a result of her gender, race, or sexual orientation is not supported by the Bernile results.

Nasdaq also fails to note that Bernile further concludes that board diversity—as measured by the composite diversity index—is not beneficial to all firms in all

[36] *Id*. at 407. Tobin's Q "is the market value of the firm's assets divided by the replacement value of the firm's assets." *Id*. at 403.

[37] *Id*. at 407.

[38] *Id*. at 408.

[39] *Id*. at 396.

[40] 85 Fed. Reg. at 80,476/1.

[41] Bernile, *supra* note 24, at 2–3.

[42] *Id*. at 21–24.

circumstances. Instead, the authors observe that board diversity may be detrimental to firms operating in more volatile markets,[43] suggesting that listing rules aimed at pressuring firms into adopting certain kinds of diversity practices may be detrimental to some firms' performance.

Nasdaq also cites two reports by consulting firm McKinsey as evidence that diverse boards improve firm performance. While Nasdaq describes a 2015 McKinsey Report's results on racial diversity,[44] it fails to note that report's finding that board gender diversity does not have a statistically significant impact on firm financial returns.[45] And Nasdaq quotes a later 2020 McKinsey Report as showing "a positive, statistically significant correlation between company financial outperformance and [board] diversity on the dimensions of both gender and ethnicity."[46] This is, however, the first time across several years of studies that McKinsey has found the correlation to be statistically significant.[47] And McKinsey qualifies its results by cautioning: "Correlation is not causation. There are real limitations, and we are not asserting a causal link."[48] Given the mixed and inconclusive results of these studies, more data is needed before any reasonable inferences can be drawn regarding the causal effect of gender board diversity on firm performance.[49]

Finally, Nasdaq cites a 2011 report from women's advocacy group Catalyst as finding "that the [return on equity] of Fortune 500 companies with at least three women on the board (in at least four of five years) was 46% higher than companies with no women on the board, and the return on sales and return on invested capital

---

[43] *Id.* at 24 (writing that their results "indicate that board diversity exacerbates the effects of market-wide volatility on firm risk").

[44] 85 Fed. Reg. at 80,476/1.

[45] 2015 McKinsey Report, *supra* note 26, at 4, Ex. 3. For all firms, the p-value for the effect of gender board diversity is 0.11. For North American firms, the p-value is 0.69. Both are above even the relaxed threshold of $p < 0.10$ for determining statistical significance. *Id.*

[46] 85 Fed. Reg. at 80,476/3.

[47] 2020 McKinsey Report, *supra* note 26, at 13, Box 2.

[48] *Id.* at 51.

[49] Exhibit A (reviewing McKinsey study and concluding that correlations do not allow causal inferences).

was 84% and 60% higher, respectively." But Nasdaq fails to note that Catalyst found that the difference in return on equity was "no[t] statistically significant," that the differences in return on sales and returns on invested capital were only marginally significant, and that the study did not include controls for relevant firm characteristics that may obscure the real effect of board diversity.[50] In any event, the Catalyst study lacks even basic controls and is therefore entirely unreliable as evidence of causation.[51]

c. Nasdaq downplays the substantial—and scientifically rigorous—body of peer-reviewed research that shows board gender diversity does *not* improve firm performance.

Nasdaq also downplays the robustness of the studies that show "mixed" results and fails to report numerous additional peer-reviewed studies that counter its core claim that board gender diversity improves firm performance. An objective evaluation would conclude that the body of literature showing that board gender diversity has little to no impact on firm performance is far more substantial than the sources Nasdaq cites to support its diversity rule.

All six studies that Nasdaq cites as showing "mixed" results are published in peer-reviewed, academic journals and perform—or review—research that applied rigorous statistical methods.[52] Two of the six are meta-analyses that examine the

---

[50] Catalyst Report, *supra* note 27, at 2. The differences in return on sales and return on invested capital had p-values of 0.06 and 0.07, respectively. *Id.* While Catalyst finds these effects to be statistically significant under the less rigorous p-value < 0.10 threshold, under standard analyses with p-value < 0.05 as the threshold, the differences Catalyst finds in return on sales and return on invested capital would not be considered significant. *See also* Exhibit A at 10.

[51] Exhibit A.

[52] Nasdaq cites the following six studies as showing "mixed" results: Jan Luca Pletzer et al. *Does Gender Matter? Female Representation on Corporate Boards and Firm Financial Performance—A Meta-Analysis*, 10 PLOS ONE (2015), *cited in* 85 Fed. Reg. at 85,476 n.38; Eagly, *supra* note 28, *cited in* 85 Fed. Reg. at 85,476 n.38; Corinne Post & Kris Byron, *Women on Boards and Firm Financial Performance: A Meta-Analysis*, 58 Acad. of Mgmt. J. 1546 (2015), *cited at* 85 Fed. Reg. at 80,477 n.39; Carter 2010, *supra* note 24, *cited at* 85 Fed. Reg. at 80,477 n.40; Kevin Campbell & Antonio Minguez-Vera, *Gender Diversity in the Boardroom and Financial Performance*, 83 J. Bus. Ethics 13 (2008), *cited at* 85 Fed. Reg. at 80,477 n.41; Renee B. Adams & Daniel Ferreira, *Women in the Boardroom and their Impact on Governance and Performance*, 94 J. Fin. Econ. 291 (2009), *cited at* 85 Fed. Reg. at 80,477 n.42.

literature in aggregate—one (Pletzer) evaluated twenty peer-reviewed, published academic studies, and the other (Post) evaluated 146 published and unpublished studies. While meta-analyses are not without limitation, appropriately conducted meta-analyses are generally considered more informative than single studies or narrative reviews because they can "powerfully test hypotheses that cannot be answered clearly with one or a few studies and [can] eliminate[] the ambiguity" that may result from narrative reviews.[53] In the social sciences, meta-analyses can be particularly useful "to clarify the state of a field of research," to "determine whether an effect is constant across studies," and "to discover what study-level or sample characteristics have an effect on the phenomenon being studied."[54] Meta-analyses thus can bear considerably more persuasive weight than individual studies or informal surveys.

Both the Pletzer and Post meta-analyses perform systematic statistical evaluations of relevant studies, and both conclude that gender-diverse boards have little to no impact on firm performance. Pletzer observes that "the relationship between the percentage of female directors on corporate boards and firm financial performance is consistently small and non-significant" and that its meta-analysis results "show that a higher representation of females on corporate boards is neither related to a decrease, nor to an increase in firm financial performance. . . . These results do not support the business case for diversity."[55] Post similarly observes that its meta-analysis "suggest[s] that firms with greater female board representation tend to have [slightly] higher accounting returns," but that, "in general, female board representation is not significantly related to market performance."[56] The Post authors reiterate the mixed nature of their findings, emphasizing that their "results suggest that board diversity is neither wholly detrimental nor wholly beneficial to

[53] Bruce E. Wampold et al., *Meta-analysis in the Social Sciences: A Useful Way to Make Sense of a Series of Findings from a Large Number of Studies*, 1 Asia Pacific Educ. Rev. 67, 67 (2000).

[54] Jacqueline Davis et al., *Viewing Systematic Reviews and Meta-Analysis in Social Research Through Different Lenses*, 3 SpringerPlus 511, 511 (2014).

[55] Pletzer, *supra* note 52, at 13.

[56] Post, *supra* note 52, at 1557.

firm financial performance."[57]

The conclusions of these meta-analyses are consistent with expert reviews. Wharton Professor Katherine Klein, an avowed proponent of gender diversity in the boardroom, candidly summarizes the statistical evidence on gender diversity and corporate performance as follows:

> Rigorous, peer-reviewed studies suggest that companies do not perform better when they have women on the board. Nor do they perform worse. Depending on which meta-analysis you read, board gender diversity either has a very weak relationship with board performance or no relationship at all.[58]

Nasdaq acknowledges that the 2010 Carter paper, described above, shows no statistically significant effect of boardroom gender diversity on firm performance when measured by Tobin's Q,[59] but then glosses over the findings of a 2008 study by Campbell et al. by stating only that the study "suggests, at a minimum, that increased gender diversity can be achieved without destroying shareholder value."[60] Campbell, however, goes beyond that milquetoast assessment, asserting that its "findings demonstrate that the presence of women on the board of directors does not, in itself, affect firm value."[61]

Nasdaq similarly acknowledges that the 2009 study by Adams and Ferreira "found that 'gender diversity has beneficial effects in companies with weak shareholder rights, where additional board monitoring could enhance firm value, but detrimental effects in companies with strong shareholder rights.'"[62] But Nasdaq fails

---

[57] *Id*. at 1563.

[58] Social Impact, Does Gender Diversity on Boards Really Boost Company Performance (May 18, 2017), https://knowledge.wharton.upenn.edu/article/will-gender-diversity-boards-really-boost-company-performance/.

[59] 85 Fed. Reg. at 80,477/1.

[60] *Id*.

[61] Campbell, *supra* note 52, at 447. The study authors go on to report, however, that they "find that the diversity of the board (measured by the percentage of women . . .) has a positive impact on firm value," underscoring the contradictory and inconclusive nature of the results in this field. *Id*.

[62] 85 Fed. Reg. at 80,477/1.

to note that study's relevant finding "that, on average, firms perform worse the greater is the gender diversity of the board."[63]

In addition to downplaying the significance of "mixed" result reports, Nasdaq omits from its academic review many peer-reviewed sources that show board gender diversity has no—or even a negative—impact on firm performance.[64] Highlighting results from just a few of these sources: a 1997 study of large U.S. firms found that the "[p]ercentage of women on the board [actually] decreases [firm] performance," whether performance is measured by return on sales, return on assets, return on investment, or return on equity;[65] a 2005 study found that "there is no wealth effect [in market returns] associated" with announcements adding women to boards of Fortune 500 companies and no discernible "link [between] increased representation of women on corporate boards [and] expectations of enhanced firm performance;"[66] and a 2009 study of Fortune 500 companies found no statistically significant effect of board gender diversity on firm performance, where performance was measured by a composite metric.[67] Countless other studies have similarly been unable to establish a robust link between board gender diversity and improved firm performance.[68]

---

[63] Adams, *supra* note 52, at 292.

[64] Many of the studies showing no or negative correlation between board diversity and firm performance are cited in and described by the sources that Nasdaq selectively includes, suggesting that Nasdaq was, or should have been, aware of these negative studies. *See, e.g.,* Carter 2010, *supra* note 24, at 399–400.

[65] Charles B. Shrader et al., *Women in Management and Firm Financial Performance: An Exploratory Study*, 9 J. of Managerial Issues 355, 364 (1997).

[66] Kathleen A. Farrell et al., *Additions to Corporate Boards: The Effect of Gender*, 11 J. of Corp. Fin. 85, 104 (2005).

[67] Toyah Miller & Mira del Carmen Triana, *Demographic Diversity in the Boardroom: Mediators of the Board Diversity-Firm Performance Relationship*, 46 J. of Mgmt. Stud. 755, 770, Tbl. I. The same study found a positive statistically significant correlation between board racial diversity and firm performance. *Id*.

[68] *See, e.g.,* Amit Kumar Singh, et al., *Do Women on Boards affect Firm's Financial Performance? Evidence from Indian IPO Firms*, 13 Australasian Acct. Bus. & Fin. J. 53, 64 (2019) (finding that "[t]he presence of women on boards [of 41 Indian companies that recently went through IPOs] does not influence Tobin's Q and hence the performance" of the firm); Ian Gregory-Smith et al., *Appointments, Pay and Performance in UK Boardrooms by Gender*, 124 Econ. J. F109, F122–23 (2014) (finding that "there is no significant link between [firm performance as measured by

2. Academic research does not show that board gender diversity promotes investor protections.

Nasdaq further claims, in both its academic research review and its defense of its statutory authority to impose the diversity rule, "that board diversity is positively associated with more transparent public disclosures and higher quality financial reporting"[69] and thus promotes investor protections because it "may reduce the likelihood of . . . fraudulent and manipulative acts and practices."[70] But this claim is also uncorroborated by the available empirical evidence. Nasdaq again relies on unrepresentative sources—here, studies of firms based outside the United States—and selective reporting of results to mask the weakness of the support.

---

shareholder return, return on assets, return on equity and the price to book ratio] and the extent of boardroom gender diversity" in a study of UK companies listed on the FTSE350); Kenneth R. Ahern & Amy K. Dittmar, *The Changing of the Boards: The Impact on Firm Valuation of Mandated Female Board Representation,* 127 Q. J. Econ. 137, 139 (2012) (evaluating the effect of a 2003 Norwegian law mandating at least 40% female board representation and finding "a large negative impact of the mandated board changes on firm value" of 248 Norwegian firms); Yi Wang & Bob Clift, *Is There a "Business Case" for Board Diversity?*, 21 Pac. Acct. Rev. 88, 95 (2009) (finding "no statistically significant association between [return on assets, return on equity] and shareholder return, and the percentage of female members on the board" or the proportion of minority directors of large Australian companies); Claude Francoeur et al., *Gender Diversity in Corporate Governance and Top Management,* 81 J. of Bus. Ethics 83, 93 (2007) (analyzing large Canadian firms and finding that "having more women on corporate boards . . . does not seem to generate significant excess returns"); Caspar Rose, *Does female board representation influence firm performance? The Danish evidence*, 15 Corp. Governance 404, 411 (2007) (finding "that gender in relation to board composition does not influence firm performance" among Danish companies); Nina Smith, *Do women in top management affect firm performance? A panel study of 2,500 Danish firms*, 55 Int'l J. of Productivity and Performance Mgmt., 569, 579, 581, tbl. IV (2006) (finding a "significantly negative" correlation between the presence of female directors and firm performance in a study of 2,500 large Danish firms when unobserved variables are controlled for); *see also* Suheer Reddy & Aditya Mohan Jadjav, *Gender Diversity in Boardrooms—A Literature* Review, 7 Cogent Econ. & Fin. 1644703, 1 (2019) (reviewing the available literature and concluding that "[s]tudies on the impact of board gender diversity on firm performance present inconclusive results"); Deborah L. Rhode & Amanda K. Packel, *Diversity on Corporate Boards: How Much Difference Does Difference Make*, 39 Del. J. Corp. L. 377, 383 (2014) ("Despite increasing references to acceptance of the business case for diversity, empirical evidence on the issue is mixed."); Frank Dobbin & Jiwook Jung, *Corporate Board Gender Diversity and Stock Performance: The Competence Gap or Institutional Investor Bias*, 89 N.C. L. Rev. 809, 817 (2011) (reviewing the available board gender diversity literature and concluding, "[t]he overall pattern of findings across the several dozen studies that have been published to date tends to support the view that gender diversity inhibits performance").

[69] 85 Fed. Reg. at 80,498/3.

[70] *Id.* at. 80,497/1; *see also* Academic Research on Diversity and Investor Protection, *id*. at 80,477–79 (Part II.A.1.II.b); Statutory Basis for the Diverse Board Representation or Explanation, Prevent Fraudulent and Manipulative Acts and Practices, *id*. at 80,497–98 (Part II.A.2.II.b).

a. Nasdaq cannot apply results of studies of foreign firms to predict effects on the U.S. companies subject to the proposed diversity rule.

In its academic research review, Nasdaq cites thirteen studies as "substantial evidence that board diversity enhances the quality of a company's financial reporting, internal controls, public disclosures and management oversight."[71] However, at least five of these studies analyze only foreign firms that operate in legal and cultural environments that differ substantially from the United States.[72]

Three of Nasdaq's sources (Pucheta-Martinez, Abad, and Lucas-Perez) analyze only Spanish companies,[73] one (Gull) analyzes only French companies,[74] and another (Cumming) analyzes only Chinese companies.[75] The authors of these reports emphasize the unique country-specific features that prevent extrapolation of

---

[71] 85 Fed. Reg. at 80,477–79. The thirteen studies cited by Nasdaq are: Adams, *supra* note 52, *cited at* 85 Fed. Reg. at 80,477 n.49; Bin Srinidhi et al. *Female Directors and Earnings Quality*, 28 Contemporary Acct. Research 1610 (2011), *cited at* 85 Fed. Rev. at 80,477 n.50; Maria Consuelo Pucheta-Martinez et al., *Corporate Governance, Female Directors and Quality of Financial Information*, 25 Bus. Ethics: A European Rev. 363 (2016), *cited at* 85 Fed. Reg. at 80,478 n.52; Ammar Gull et al., *Beyond Gender Diversity: How Specific Attributes of Female Directors Affect Earnings Management*, 50 British Acct. Rev. 255 (Sept. 2017), *cited at* 85 Fed. Reg. at 80,478 n.55; Francisco Bravo and Maria Dolores Alcaide-Ruiz, *The Disclosure of Financial Forward-Looking Information, 34 Gender in Management* 140, 147 (2019), *cited at* 85 Fed. Reg. at 80,478 n.56; Lawrence J. Abbott et al., *Female Board Presence and the Likelihood of Financial Restatement*, 26 Acct. Horizons 607 (2012), *cited at* 85 Fed. Reg. at 80,478 n.58; Aida Sijamic Wahid, *The Effects and the Mechanisms of Board Gender Diversity: Evidence from Financial Manipulation*, 159 J. Bus. Ethics 705 (2019), *cited at* 85 Fed. Reg. at 80,478 n.59; Douglas J. Cumming et al., *Gender Diversity and Securities Fraud*, 58 Acad. of Mgmt. J. 1572 (2015), *cited at* 85 Fed. Reg. at 80,478 n.62; Yu Chen et al., *Board Gender Diversity and Internal Control Weaknesses*, 33 Advances in Acct. 11 (2016), *cited at* 85 Fed. Reg. at 80478 n.64; Ferdinand Gul et al., *Does Board Gender Diversity Improve the Informativeness of Stock Prices?*, 51 J. Acct. & Econ. 314 (2011), *cited at* 85 Fed. Reg. at 80,478 n.66; David Abad et al., *Does Gender Diversity on Corporate Boards Reduce Information Asymmetry in Equity Markets?* 20 Bus. Res. Q. 192 (2017), *cited at* 85 Fed. Reg. at 80,479 n.67; Maria Encarnacion Lucas-Perez et al., *Women on the Board and Managers' Pay: Evidence from Spain*, 129 J. Bus. Ethics 285 (2014), *cited at* 85 Fed. Reg. at 80,479 n.69; James D. Westphal & Edward J. Zajac, *Who Shall Govern? CEO/Board Power, Demographic Similarity, and New Director Selection*, 40 Admin. Sci. Q. 60 (1995), *cited at* 85 Fed. Reg. at 80,479 n.71.

[72] Pucheta-Martinez, *supra* note 71; Gull, *supra* note 71; Cumming, *supra* note 71; Abad, *supra* note 71; Lucas-Perez, *supra* note 71.

[73] Pucheta-Martinez, *supra* note 71; Abad, *supra* note 71; Lucas-Perez, *supra* note 71.

[74] Gull, *supra* note 71.

[75] Cumming, *supra* note 71.

corporate trends across borders. Pucheta-Martinez observes that the business context in Spain is "characterized by less developed capital markets," considerably greater "ownership concentration[,] . . . lower level[s] of protection for minority investors and a stronger presence of majority shareholders" than in Anglo-Saxon countries, factors which could be expected to influence corporate response to board composition.[76] Abad observes that "the separation between owners and managers is much less clear [in Spain] than in the US or UK," which could "give rise to a lack of independence and supervisory effectiveness of the board" that varies with board diversity.[77] Cumming notes that, "[u]nlike U.S. companies, . . . Chinese and European companies have a two-tiered board structure consisting of a supervisory board and a board of directors" and fewer independent directors, which may be expected to affect the board's influence on corporate practices.[78] Even in countries as similar as the U.K. and the U.S., board gender diversity has been shown to have significantly different effects: the 2015 McKinsey Report observes that "UK companies experience more than ten times the impact for their efforts in gender diversity than US companies do."[79]

Conclusions based on data from firms in countries with widely different corporate and legal cultures cannot be used to support inferences about effects in U.S. firms. But to support its claim that "including diverse directors . . . may help detect and prevent fraudulent and manipulative acts and practices,"[80] Nasdaq relies *primarily* on foreign-firm data, citing extensively from a case study of Norwegian directors,[81] an analysis of Spanish-listed firms,[82] and a study of Chinese companies.[83] Nasdaq fails to explain why these foreign studies can be reliably used to make useful

[76] Pucheta-Martinez, *supra* note 71, at 365.

[77] Abad, *supra* note 71, at 193–94.

[78] Cumming, *supra* note 71, at 1577.

[79] 2015 McKinsey Report, *supra* note 26, at 4.

[80] 85 Fed. Reg. at 80,497/1.

[81] *Id*. at 80,497/2 (citing Aaron A. Dhir, *Challenging Boardroom Diversity: Corporate Law, Governance, and Diversity* (2015)).

[82] *Id*. at 80,497/2 (citing Pucheta-Martinez, *supra* note 71).

[83] *Id*. at. 80,497/3 (citing Cumming, *supra* note 71).

predictions about U.S. issuers.

b. Nasdaq selectively omits results that show board gender diversity has little to no effect on investor protections.

Nasdaq further masks the weakness of its claim by selectively omitting results that show that board diversity has little to no effect on the quality of corporate reporting. When all study results are considered, the evidence that a board's gender composition improves investor protections is weak at best.

To support its claim that the diversity rule "may help detect and prevent fraudulent and manipulative practices,"[84] Nasdaq describes results from two studies, Wahid and Abbott, that evaluated U.S.-based firms.[85] But Nasdaq failed to describe other results from those same studies that show the effects of board gender diversity are complex and limited, making it unreasonable to assume that the proposed rule is likely to have a causal effect on fraud.

Nasdaq quotes Wahid as concluding that "gender-diverse boards commit fewer financial reporting mistakes and engage in less fraud" and as finding "that companies with female directors have 'fewer irregularity-type [financial] restatements, which tend to be indicative of financial manipulation.'"[86] But Nasdaq fails to report that Wahid also observes that "[a]s the number of female directors increases, the benefit of diversity reverses,"[87] meaning that the quality of financial reporting actually *decreases* when more than two women are on the board.[88] This contradiction is difficult to explain if the diversity correlations observed in the study have some causal explanation. Moreover, while Wahid attempts to isolate causation through instrumental variables, Professor Klick cautions that the instrumental variables

---

[84] *Id.* at 80,497/1.

[85] 85 Fed. Reg. at 80,497–98 (citing Wahid, *supra* note 71, and Abbott, *supra* note 71).

[86] *Id.* at 80,497/3.

[87] Wahid, *supra* note 71, at 706.

[88] *Id.* at 718–20.

chosen may be weak, "leaving the estimates without credibility."[89] Nasdaq, though, just ignores the problem.

Similarly, Nasdaq states that Abbott finds "a significant association between the presence of at least one woman on the board and a lower likelihood of [a material financial] restatement,"[90] but fails to note that Abbott, like Wahid, finds no benefit to adding more than one female director.[91] And as Professor Klick explains, the study's methodology does not adequately address the risk of omitted variable bias, so the correlations cannot be deemed causal.[92] The complex and contradictory correlations on board gender composition, and the design flaws in the studies cited by Nasdaq, highlight the infirmity of Nasdaq's claim that adding directors based on gender, racial, and sexual orientation characteristics will mystically improve corporate reporting or protect investors.

Nasdaq similarly fails to provide important context for the other findings it reports in its academic research review, context that significantly weakens its argument that gender-diverse boards improve corporate governance. For example, Nasdaq notes that the 2009 Adams and Ferreira study "found that women are 'more likely to sit on'" audit committees[93] and that boards with more women directors "are more likely to hold CEOs accountable for poor stock price performance" and result in "CEO turnover [that] is more sensitive to stock return performance."[94] But that same study states that, though their "results suggest that gender-diverse boards are tougher monitors,"[95] their results also "imply that, on average, tough boards do not improve firm value."[96] The authors warn that "mandating gender quotas in the

[89] Exhibit A.

[90] 85 Fed. Reg. at 80,499/3.

[91] Abbott, *supra* note 71, at 626.

[92] Exhibit A.

[93] 85 Fed. Reg. at 80,477/3.

[94] *Id.* at 80,479/1.

[95] Adams, *supra* note 52, at 293.

[96] *Id.* at 306.

boardroom could harm well-governed firms in which additional monitoring is counterproductive."[97]

Nasdaq suggests that a 1995 study by Westphal and Zajac supports its claim that boards with more diverse gender, racial, and LGBTQ+ membership are better corporate stewards, quoting that study's finding "that 'increased demographic similarity between CEOs and the board is likely to result in more generous CEO compensation contracts.'"[98] But Westphal's "demographic similarity" consists of functional background, educational background, insider/outsider status, and age;[99] it does not include any of the demographic categories—gender, race, and LGBTQ+ identity—that Nasdaq includes in its diversity rule. And, despite its hints and implications, Nasdaq provides no evidence that trends related to diverse experiential and educational backgrounds can be extended to diverse gender, race, or LGBTQ+ identity characteristics. Intimation cannot cover category error.

Nasdaq also suggests that a 2019 study by Bravo and Alcaide-Ruiz supports the diversity rule because it "found a positive association between women on the audit committee with financial or accounting expertise and the voluntary disclosure of forward-looking information."[100] But that study's critical finding is that women directors have no effect *unless they have financial expertise*; a director's gender alone, is inconsequential: "gender diversity on the [audit committee] does not make a difference in the disclosure of financial forward-looking information."[101] Indeed, the Bravo authors observe that their "results fail to find an association between the presence of women in the [audit committee] and the disclosure of financial forward-looking information" and that it is "the financial expertise of women in the [audit committee that] appears to be determinant for disclosure strategies," not the mere

[97] *Id.* at 293. The authors also observe that "gender diversity has beneficial effects in companies with weak shareholder rights, where additional board monitoring could enhance firm value, but detrimental effects in companies with strong shareholder rights." *Id.* at 292.

[98] 85 Fed. Reg. at 80,479/1.

[99] Westphal, *supra* note 71, at 69–70.

[100] 85 Fed. Reg. at 80,499/1.

[101] Bravo, *supra* note 71, at 147.

fact of the board members' gender.[102] They reiterate that their "findings suggest that intrinsic characteristics linked to women appear to be insufficient for [audit committees] that include women to enhance voluntary disclosures on financial forward-looking information . . . *gender per se seems to be not enough to have an effect on particular reporting policies*."[103]

B. Academic Research Does Not Show That the Minority Director Rule Will Improve Firm Performance or Promote Investor Protections.

Nasdaq lumps gender, racial, and LGBTQ+ differences into the single term "board diversity" to mask the fact that the empirical evidence to support racial and LGBTQ+ board diversity quotas is non-existent. The reports Nasdaq cites overwhelmingly investigate gender diversity alone, with only a handful examining racial diversity and not a single report studying LGBTQ+ board diversity. Nasdaq provides no empirical basis for concluding that correlations for female directors would hold true for race or LGBTQ+ identity.

1. Academic research has not even examined the impact of LGBTQ+ board members.

Nasdaq fails to present any evidence that LGBTQ+ board diversity improves firm performance, reporting, or governance.

Not one of Nasdaq's sources examined the performance or governance of firms with LGBTQ+ board members. Nasdaq cites only two sources related to LGBTQ+ diversity. The first is an investment group's evaluation of companies it deemed to be LGBT diverse—those "that have either openly LGBT leaders and senior management," have been "voted leading LGBT employers" in various surveys, or "whose employees are openly members of local LGBT business networks."[104] None of the evaluated companies was identified as having even a single LGBTQ+ board

[102] *Id*. at 141.

[103] *Id*. at 147 (emphasis added).

[104] Credit Suisse ESG Research, *supra* note 26, at 2.

member, so the report's findings are irrelevant to Nasdaq's diversity rule. The second is not a study at all, but a set of recommendations from an advocacy organization whose mission is "to increas[e] LGBT+ representation and inclusion at the corporate board level."[105] The recommendations of an advocacy group—even if well-intentioned—are not evidence at all, let alone substantial evidence.

Nasdaq concedes that "there is a lack of published research on the issue of LGBTQ+ representation on boards."[106] It instead points to the Supreme Court's recent opinion in *Bostock v. Clayton County* to argue that the literature on *gender* diversity also justifies an LGBTQ+ quota.[107] It asserts that "the U.S. Supreme Court in *Bostock v. Clayton County* has established that sexual orientation and gender identity are 'inextricably' intertwined."[108]

But *Bostock* is not empirical evidence, nor does it bear on the question of whether gender diversity and LGBTQ+ diversity can be expected to have similar effects on business performance. *Bostock* is a statutory interpretation case about the meaning of the phrase "because of sex" in Title VII. *Bostock* holds that sexual-orientation discrimination and transgender discrimination constitute discrimination "because of sex" because such discrimination is possible only if the employer takes the employee's sex into account.[109] It is in this sense only that the Court held that "homosexuality and transgender status are inextricably bound up with sex. Not because homosexuality or transgender status is related to sex in some vague sense or because discrimination on these bases has some disparate impact on one sex or another, but because to discriminate on these grounds requires an employer to

[105] Quorum, *supra* note 26, at 2.

[106] 85 Fed. Reg. at 80,476/2, 80,494.

[107] *Id.* at 80,494/1 ("Nonetheless, Nasdaq believes it is reasonable and in the public interest to include a reporting category for LGBTQ+ in recognition of the U.S. Supreme Court's recent affirmation that sexual orientation and gender identity are 'inextricably' intertwined with sex, and based on studies demonstrating a positive association between board diversity and decision making, company performance and investor protections.").

[108] Nasdaq Response to Comments at 10.

[109] *Bostock v. Clayton Cty., Georgia*, 140 S. Ct. 1731, 1742 (2020).

intentionally treat individual employees differently because of their sex."[110] This holding in no way supports Nasdaq's wooden assertion that for example, a gay man will bring the same or even analogous "cognitive diversity" contributions to the boardroom as a woman would. Nasdaq's talismanic citation to *Bostock* only confirms that Nasdaq lacks any non-speculative evidence to support an LGBTQ+ quota.

2. Academic research does not show that board racial diversity improves firm performance or promotes investor protections.

Nasdaq similarly fails to establish any link between a board's racial composition and firm performance or investor protections.

None of the thirteen sources Nasdaq cites as "substantial evidence that board diversity enhances the quality of a company's financial reporting, internal controls, public disclosures and management oversight," examine racial diversity.[111] The strongest support that Nasdaq can muster is to note "the assertions by some academics that [] findings [related to gender diversity] *may* extend to other forms of diversity, including racial and ethnic diversity."[112] But the few academics who have published studies on board racial composition disagree: "we believe that gender diversity and ethnic diversity are not the same phenomenon and will not affect the firm in identical ways."[113] And at any rate, Nasdaq must reference more than the musings of academics to establish that board diversity improves investor protections. It has not done so.

Nasdaq cites the 2003 Carter study as finding a positive relationship between racially diverse boards and firm performance.[114] But when that study accounts for independent factors like firm size and industry, it finds minority directors have *no*

---

[110] *Id.*

[111] *Id.* at 80,477/3; *see also supra* note 71 (citing sources).

[112] 85 Fed. Reg. at 80,477/3 (emphasis added).

[113] Carter 2010, *supra* note 24, at 397.

[114] 85 Fed. Reg. at 80,476/1.

statistically significant effect on firm value.[115] A later 2010 study by the same authors similarly finds scant support for a relationship between diverse boards and firm performance: though observing that the presence of ethnic minority directors has a marginally significant positive correlation with one measure of firm value (return on assets), it finds no statistically significant effect on another commonly-used measure of firm value (Tobin's Q).[116] This latter study also finds "no evidence of a significant relationship between the numbers of ethnic minority directors [on board committees] and financial performance as measured by either [return on assets] or Tobin's Q."[117]

Nasdaq further cites the Bernile white paper as supporting the premise that racially diverse boards improve firm performance.[118] But, as described above, that study includes ethnicity as one component of a composite diversity index and explains that no diversity characteristic alone—including ethnicity—is responsible for any benefit it measures.[119]

The only other sources Nasdaq cites that examine board racial diversity are the previously discussed promotional reports authored by investment groups and consulting firms, none of which provide reliable evidence that board racial diversity improves firm performance.

For example, the 2019 report from investment firm The Carlyle Group cited by Nasdaq claims that the Group's "portfolio companies with two or more diverse board members" had higher average earnings growth than "companies that lack diversity."[120] But the report's diversity metric included both gender and race, so the effect of race cannot be isolated, and the authors provide no statistical significance

---

[115] Carter 2003, *supra* note 24, at 46, 49–50 (showing that, when matched-pair analysis is used to control for firm size and industry, minority representation on boards does not have a statistically significant effect on Tobin's Q).

[116] Carter 2010, *supra* note 24, at 406, Tbl. 3.

[117] *Id*. at 408.

[118] 85 Fed. Reg. at 80,476/1.

[119] Bernile, *supra* note 24, at 22.

[120] Thomas, *supra* note 26, at 5.

analysis of their results, so we cannot know whether their observed effect is statistically robust or arises by chance.[121]

Nasdaq also quotes the executive summary of the 2015 McKinsey Report as stating that "companies in the top quartile for racial/ethnic diversity were 35 percent more likely to have financial returns above their national industry median."[122] But that report's data shows that the impact of ethnic board diversity for North American firms—those most relevant for Nasdaq's diversity rule—is not statistically significant at standard thresholds.[123]

Nasdaq quotes the 2020 McKinsey Report as showing "a positive, statistically significant correlation between company financial outperformance and [board] diversity on the dimensions of both gender and ethnicity."[124] But this, again, is misleading. The statements that Nasdaq cites relate to gender—not racial—diversity.[125] The report's ethnic diversity analysis is limited to *executive teams*, not corporate boards.[126] Executive teams, which are responsible for day-to-day management, operate differently than boards, which deal with corporate governance.[127] Nasdaq provides no reason for why statistical correlations in executive teams extend to directors.

---

[121] *Id.*

[122] 85 Fed. Reg. at 80,476/1.

[123] 2015 McKinsey Report, *supra* note 26, at 4, Ex. 3. Exhibit 3 states that the *p*-value for the effect of ethnic board diversity on firm financial performance for North American firms, which comprise 51% (186/366) of the firms surveyed, is 0.10, which fails to satisfy even the relaxed significance threshold of p-value < 0.10. The effect only reaches a statistically significant threshold in McKinsey's analysis when data from Latin American and U.K. firms is added, which lowers the *p*-value to the marginally-significant 0.08. *Id.*

[124] 85 Fed. Reg. at 80,476/3.

[125] 2020 McKinsey Report, *supra* note 26, at 13, Box 2. The report refers readers to "Box 2" for evidence that "[t]he business case for ethnic and cultural diversity on boards remained significant in 2019," however, Box 2 describes the effect of gender board diversity, not ethnic or racial board diversity. *Id.* at 13.

[126] *Id.* at 20–21.

[127] *See id.* at 48 (describing executive teams as typically including the CEO and up to two levels of executives below the CEO).

This is the evidence Nasdaq presents that board racial diversity improves firm value and performance. It is hardly substantial.

II. NASDAQ'S DIVERSITY RULE IS NOT A MERE "ASPIRATION," "OBJECTIVE," OR "OPPORTUNITY."

In Amendment 1, Nasdaq revised the label for the rule from "diversity requirement" to "diversity objective." In the accompanying response to comments, Nasdaq also repeatedly insists that the rule is not a "quota" or "mandate" and characterizes the rule as a "disclosure-based framework," an aspirational "objective," an "option," and even an "*opportunity*" for regulated firms.[128] Nasdaq's newspeak does not change the legal or practical analysis.

Nasdaq's diversity *rule* is no mere exhortation. Listed firms that fail to meet the comply-or-explain diversity requirement will have "180 days . . . to cure the deficiency."[129] Failure to cure a deficiency would result in a staff delisting determination, banishing a firm from the exchange.[130] These are severe consequences.

Nasdaq downplays these consequences by arguing that firms can "always describe their reasons for following a different path," including by publicly expressing a different philosophy each year in a proxy statement or on the firm's website.[131] Nasdaq promises it will not police the adequacy of the firm's proffered reasons for non-compliance, as long as the firm proffers reasons.[132] For example, Nasdaq says a company could simply choose to disclose that "it does not believe Nasdaq's listing rule

---

[128] Nasdaq Response to Comments at 6–8 (emphasis in original).

[129] 86 Fed. Reg. at 14,487/2.

[130] Nasdaq Response to Comments at 6.

[131] *Id.*

[132] *Id.* A mere assertion of non-compliance or gibberish would apparently not do. Ballard Spahr Response at 3 n.3.

is appropriate."[133]

As set forth in more detail in the expert affidavit of James Copland, attached as Exhibit B, this response ignores the real-world costs of denying firms the right to remain silent on their diversity policies. Dealing with "external pressure by investors and others" and having "more informed conversations" with activist investors and diversity advocates is no free lunch for listed firms.[134] Firms that publicly explain their reasons for non-compliance will generate a paper trail that makes them more likely to be targeted by negative media campaigns by activist groups or shareholder lawsuits alleging misrepresentations or breach of fiduciary duties like the ones brought against Gap, Oracle, Facebook, Micron, Monster, and Qualcomm.[135] Under the rule, firms will need to spend limited resources on lawyers and corporate communications consultants to assess the reputational and legal risks of a firm's explanation. Given these serious risks, the rule is functionally a discriminate-or-*else* rule: discriminate based on sex, race, or sexual orientation or else assume a serious risk of reputational and litigation harms.

The deterrence effects of "external pressures" and "progressive societal norms" are essential to Nasdaq's goals.[136] The diversity requirement, after all, is meant as a "regulatory impetus to drive meaningful and systemic change in board diversity."[137] As Nasdaq says, citing Acting Chair Lee, apart from informing, disclosure "can also drive corporate behavior" by creating "external pressure from investors and

---

[133] Nasdaq Response to Comments at 8. It is difficult to see how this empty response could "provide shareholders with sufficient information to make an informed voting or investment decision, or to facilitate informed discussions with companies." *Id.*

[134] 85 Fed. at 80,496/3, 80,497/1.

[135] *Id.* at 80,487; *see, e.g.*, *Foote v. Mehrotra*, 21-cv-00169 (D. Del.); Kevin LaCroix, *Micron Technology Hit with Board Diversity Law Suit* (Feb. 10, 2021), https://bit.ly/39vwT21.

[136] 85 Fed. Reg. at 80,496 n.233 (quoting article conclusion that external pressures from "progressive societal norms" and "regulations" "are needed to increase board diversity") (quoting Albertine d'Hoop-Azar et al., *Gender Parity on Boards Around the World*, Harv. L. Sch. Forum on Corp. Governance (Jan. 5, 2017)).

[137] 85 Fed. Reg. at 80,496/2.

others."[138] Indeed, Nasdaq cites empirical evidence showing that "comply-or-explain" rules have driven increased boardroom diversity in other countries because compelled explanations deter non-compliance.[139]

Nasdaq cannot have it both ways. If the explanation is not a functional penalty that deters firms from non-compliance, the comply-or-explain rule could not drive the "meaningful and systematic change in board diversity" that Nasdaq touts. There would also be no need for phase-in periods, grace periods, exceptions for smaller companies, companies with small boards, or foreign firms. And there would be no need for Nasdaq to *subsidize* listed firms with temporary "free access to a network of board-ready diverse candidates and a tool to support board evaluation, benchmarking, and refreshment."[140] All of these flexibilities and subsidies show that Nasdaq in fact *expects* (and intends) explanations will have serious negative consequences on firms. The "penalty" for failure to comply with diversity quotas may not amount to a gun to the head that will ensure complete fealty to the quota, but neither is the explanation likely to be an insignificant deterrent. Nasdaq's diversity rule is a quota that can be avoided, but only at a price.[141]

In the alternative, if the rule is truly a mere aspiration and the explanation has no deterrent effects at all, the rule must be disapproved. If Nasdaq's diversity "objectives" can be ignored with impunity through barebones explanations that provide no real information to investors, without any risk of reputational or legal consequences, then Nasdaq's diversity rule has no plausible benefits under the Exchange Act at all. A rule that no one feels any compulsion to seriously comply with at any margin cannot have any "public interest" benefits and should be disapproved as unreasonable on that ground alone.

---

[138] *Id.* at 80,496. In the Response to Comments, Nasdaq contradicts itself by asserting its proposal "will limit pressure campaigns by activist groups." Nasdaq Response to Comments at 30. It is hard to imagine how a rule that aims to give diversity activists the information they need to mount more effective diversity pressure campaigns could quell diversity pressure campaigns.

[139] 85 Fed. Reg. at 80,496/2; Nasdaq Response to Comments at 25–26.

[140] *Id.* at 80,487/3.

[141] Exhibit B.

III. NASDAQ'S DIVERSITY RULE IS INCONSISTENT WITH THE EXCHANGE ACT AND UNSUPPORTED BY SUBSTANTIAL EVIDENCE.

A. Statutory Background and Standard of Review.

Stock exchanges "serve, first of all, as an indispensable mechanism through which corporate securities can be bought and sold."[142] Because securities exchanges exercise substantial market power, have limited antitrust liability,[143] and are not accountable to voters or investors, exchanges are subject to government-imposed limits and significant government oversight.

Under the Exchange Act of 1934, as substantially amended in 1975, the SEC may approve a proposed exchange rule change only "if it finds that such proposed rule change is consistent with the requirements of [the Exchange Act] and the rules and regulations issued under the [Act] that are applicable to such organization."[144]

To be consistent with the Exchange Act, exchange rules must be

> designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in securities, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest; and are not designed to permit unfair discrimination between customers, issuers, brokers, or dealers, or to regulate by virtue of any authority conferred by this chapter matters not related to the purposes of this chapter or the administration of the exchange.[145]

Nasdaq's rules also may not "impose any burden on competition not necessary

[142] *Silver v. New York Stock Exch.*, 373 U.S. 341, 349 (1963).

[143] *Id.* at 360–61 (applying a flexible rule of reason analysis to reconcile the Sherman Act and the Exchange Act).

[144] 15 U.S.C. § 78s(b)(2)(C); *see also Bus. Roundtable v. SEC*, 905 F.2d 4, 414–15 (1990) (*Business Roundtable I*) (reviewing the legislative history); *Susquehanna Int'l Grp., LLP v. SEC*, 866 F.3d 442, 445 (D.C. Cir. 2017) (requiring consistency).

[145] 15 U.S.C. § 78f(b)(5).

or appropriate" to advance these purposes.[146] These requirements were enacted in the 1975 amendments to eliminate exchange rules that hampered efficient national capital markets.[147]

The SEC's findings supporting the rule must be "supported by substantial evidence,"[148] and the agency must engage in the "reasoned analysis" required by the Administrative Procedure Act.[149] The substantial evidence standard requires "(1) that the agency's decision be based upon the entire record, taking into account whatever in the record detracts from the weight of the agency's decision; and (2) that the agency's decision be what a reasonable mind might accept as adequate to support [its] conclusion."[150] Although this standard requires "something less than the weight of the evidence," it is "more rigorous than the arbitrary and capricious standard normally applied to informal rulemaking."[151] The test "imposes a considerable burden on the agency and limits its discretion in arriving at a factual predicate."[152] Under this standard of review, courts of appeal have not hesitated to reverse the SEC when it has relied on at best "mixed" observational studies to formulate corporate governance rules.[153]

Because Nasdaq is a private organization, not an executive agency charged with administering the Exchange Act, no deference is owed either to its findings of

---

[146] *Id.* § 78f(b)(8).

[147] *Bus. Roundtable I*, 905 F.2d at 416 (reviewing legislative history and concluding that the "cornerstone" of the 1975 amendments was the removal of anti-competitive rules from exchange markets); *see also* Pub. L. 94-29, § 6(b)(5) (1975), 89 Stat. 97, 104; S. Rep. 94-75, at 27, 1975 U.S.C.C.A.N. 179, 205 (focusing on eliminating barriers to perfect the national market system).

[148] 15 U.S.C. § 78y(a)(4).

[149] *Susquehanna Int'l Grp.*, 866 F.3d at 445 ("We review the Order under the Administrative Procedure Act").

[150] *Corrosion Proof Fittings v. EPA*, 947 F.2d 1201, 1213 (5th Cir. 1991) (internal quotation marks omitted).

[151] *Id.* at 1213–14.

[152] *Id.* at 1214.

[153] *See Bus. Roundtable II*, 647 F.3d at 1151 ("In view of the admittedly (and at best) 'mixed' empirical evidence, we think the Commission has not sufficiently supported its conclusion that increasing the potential for election of directors nominated by shareholders will result in improved board and company performance and shareholder value.").

fact or its interpretations of the law, and no presumption of regularity attaches to its actions. To the extent any deference is owed under the statute, it would be to the SEC's findings and legal conclusions in an approval or disapproval order. If an SEC order approving or disapproving Nasdaq's decision fails to comply with the reasoned decision-making requirements of the Administrative Procedure Act, courts must reverse the order.

B. Nasdaq Fails to Show That the Diversity Rule Is Consistent With the Purposes of the Exchange Act.

1. Nasdaq's diversity rule is not designed to prevent fraud and manipulative acts and practices.

An exchange rule may be permissible if it is "designed to prevent fraudulent and manipulative acts and practices."

Nasdaq argues that the diversity rule will indirectly prevent fraud. It asserts that the rule "is designed to reduce groupthink, and otherwise enhance the functioning of the boards, and thereby to prevent fraudulent and manipulative acts or practices."[154] To assert a causal connection between the diversity rule and fraud prevention, Nasdaq relies on studies asserting correlations between diversity and auditing practices that, in its view, "provide substantial evidence suggesting an association between gender-diverse boards or audit committees and a lower likelihood of fraud; a lower likelihood of receiving audit qualifications due to errors, non-compliance or omission of information; and a greater likelihood of disclosing audit reports with uncertainties and scope limitations."[155] It asserts that this evidence extends to the context of race and LGBTQ+ diversity.[156]

Nasdaq's anti-fraud rationale is a mere pretext. The SEC should reject this fig-leaf justification for the diversity rule.

---

[154] 85 Fed. Reg. at 80,498/1.

[155] *Id.*

[156] *Id.*

a. Nasdaq must show that the diversity rule will prevent fraud.

The phrase "fraudulent and manipulative acts or practices" in the Exchange Act has long been interpreted to refer to acts of "misrepresentation or nondisclosure" calculated to mislead investors by distorting the perceived value of a firm's securities.[157] The verb "designed to" means having "the goal or purpose" mentioned, namely, securities fraud prevention.[158] The verb "designed" is a strict and limited one.

Nasdaq says that the rule "is *designed to reduce groupthink*, and otherwise enhance the functioning of the boards, and *thereby to* prevent fraudulent and manipulative acts or practices."[159] Of course, reducing groupthink is not in itself a legitimate purpose. But Nasdaq relies on studies finding correlations between the purpose of board diversity and the proper goal of fraud prevention and suggesting this association may be caused by less "groupthink."

This misreads the law. In effect, Nasdaq's argument is that correlations are enough. This waters down the strict verb "designed to" to mean nothing more than "related to"—a capacious verb that means "to stand in some relation; to have bearing or concern; to pertain; refer; to bring into association with or connection with."[160] But the law's use of the stricter and more limited verb "designed to" required Nasdaq to show more than mere associations. Rather, to show the diversity rule has the "purpose or goal" of preventing securities fraud, an exchange must show evidence sufficient to infer a direct causal connection between the diversity rule and lower risks of fraud. Correlations in poorly designated studies and "groupthink" stereotypes are not enough.

[157] *Cf. Schreiber v. Burlington N., Inc.*, 472 U.S. 1, 8 (1985) ("We hold that the term 'manipulative' as used in § 14(e) requires misrepresentation or nondisclosure.").

[158] The American Heritage Dictionary of the English Language 357 (1969).

[159] 85 Fed. Reg. at 80,498/1 (emphasis added).

[160] *Morales v. Trans World Airlines, Inc.*, 504 U.S. 374, 383 (1992) (quoting Black's Law Dictionary 1158 (5th ed. 1979)).

Nasdaq's expansive reading of "designed to" would justify the practically unlimited pursuit of "social justice movement" causes favored by exchanges under the pretext of preventing fraud. Under Nasdaq's reading, exchanges could, based on (weak) correlations between diversity and fraud prevention, require that all corporate boards have a certain racial composition, as California has done, denying firms that refuse to discriminate access to national capital markets. Nor need exchanges stop there. If possibly spurious correlations between "cognitive diversity" (or rather, Nasdaq's arbitrary proxies for cognitive diversity) and fraud prevention are enough, exchanges could micromanage board composition in myriad other ways. Exchanges could mandate, for example, that board members have a minority of directors who identify as, say, practicing Protestants, limiting equal opportunities for Jewish, Catholic, Hindu, or atheist director candidates. All they would need is junk science asserting correlations between some—or any—metric of corporate governance and the Protestant ethic. A construction of "related to" that greenlights this kind of interference with internal corporate affairs must not be favored.[161]

Nasdaq's expansive reading of the anti-fraud authority also runs into the constitutional-avoidance canon. "Under the constitutional-avoidance canon, when statutory language is susceptible of multiple interpretations, a court may shun an interpretation that raises serious constitutional doubts and instead may adopt an alternative that avoids those problems."[162] As discussed in Part VI, Nasdaq's reading of "designed to" as authorizing discriminate-or-explain commands based on less than compelling evidence raises serious constitutional questions, questions that would be avoided if Nasdaq's expansive interpretation of "designed to" is rejected by the SEC.

The SEC should give "designed to" its fair meaning and require Nasdaq to demonstrate a clear causal connection between the asserted fraud justification and the diversity rule.

---

[161] *See Bus. Roundtable I*, 905 F.2d at 412–13 (rejecting broad SEC interpretation that would have legitimized exchange rules governing the voting rights of common stockholders).

[162] *Jennings v. Rodriguez*, 138 S. Ct. 830, 836 (2018).

b. Nasdaq lacks substantial evidence that the diversity rule will prevent fraud.

Nasdaq has failed to show substantial evidence that the diversity rule will prevent fraud.

To support an anti-fraud rationale for the female director requirement, Nasdaq cites (1) surveys of Norwegian directors, (2) one study of Spanish firms that the authors caution may not apply to U.S. firms, and (3) two studies of U.S. firms finding (internally) contradictory statistical correlations between gender diversity and certain auditing measures, which are (externally) contradicted by other studies that find no effects or detrimental effects on auditing practices.[163] As Professor Jon Klick's literature review and these comments demonstrate, the academic research on gender diversity and fraud prevention is not the kind of evidence a reasonable mind would find supports a conclusion that the diversity rule will prevent fraud.[164]

Nasdaq, meanwhile, provides no empirical support for the minority director requirement's relation to fraud. None exists. Nasdaq's sole justification is that "academics have suggested that other forms of diversity, including racial and ethnic diversity, may reduce fraud and mitigate groupthink."[165] Academic speculation is not evidence—let alone substantial evidence—that the minority director rule will prevent fraud.

Nasdaq has not shown substantial evidence that the diversity rule will prevent fraud.

2. Nasdaq's diversity rule is not designed to promote just and equitable principles of trade.

An exchange rule may be permissible if it is "designed . . . to promote just and equitable principles of trade." Nasdaq does not argue that its diversity rule will

---

[163] 85 Fed. Reg. at 80,497–98.

[164] Exhibit A.

[165] *Id.* at 80,497/3.

"promote just and equitable principles *of trade*."[166] Rightly so, as boardroom diversity does nothing to require that exchanges run just and equitable trading floors. Nasdaq has failed to raise this rationale in the proposal, so it has waived any arguments under this authority. The SEC may not approve the proposed diversity rule on this ground, at least in the absence of additional opportunity to comment.[167]

3. Nasdaq's diversity rule is not designed to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in securities.

An exchange rule may be permissible if it is "designed . . . to foster cooperation and coordination with persons engaged in regulating, clearing, settling, processing information with respect to, and facilitating transactions in securities."[168] Nasdaq has waived arguments under this authority, so the SEC may not approve the diversity rule on this ground, at least in the absence of additional opportunity to comment.

4. Nasdaq's diversity rule is not designed to remove impediments to and perfect the mechanism of a free and open market and national market system.

An exchange rule may be permissible if it is "designed . . . to remove impediments to and perfect the mechanism of a free and open market and a national market system."[169]

Nasdaq first argues that the diversity rule perfects securities markets because the rule will encourage companies to consider candidates "that otherwise may be overlooked due to the impediments of the traditional director recruitment process, which will thereby remove impediments to a free and open market and a national

---

[166] *Id.* at 80,499/1 (emphasis added).

[167] *Cf. Bus. Roundtable I*, 905 F.2d at 417 (courts may not consider grounds not raised by the SEC).

[168] 15 U.S.C. § 78f(b)(5).

[169] *Id*. at § 78f(b)(5).

market system."[170] Next, Nasdaq argues that the rule is justified because "studies suggest that diversity is positively associated with reduced stock volatility, more transparent public disclosures, and less information asymmetry."[171] Both arguments fail.

a. Nasdaq misreads the authority to perfect the national market system.

Alleged market failures in corporate recruiting practices are not legally within the ambit of Nasdaq's authority to "perfect" the national market system. The verb to "perfect" means to "bring to perfection or completion" and render something "without defect; flawless."[172] The "national market system" object is the national exchanges.[173] As the Court of Appeals for the Second Circuit has said, this authority means "to operate a fair and orderly exchange."[174] As Congress has described, operating a fair and orderly exchange includes rules "to assure—

(i) economically efficient execution of securities transactions;

(ii) fair competition among brokers and dealers, among exchange markets, and between exchange markets and markets other than exchange markets;

(iii) the availability to brokers, dealers, and investors of information with respect to quotations for and transactions in securities;

(iv) the practicability of brokers executing investors' orders in the best market; and

(v) an opportunity, consistent with the provisions of clauses (i) and (iv) of this subparagraph, for investors' orders to be executed without the participation of a dealer."[175]

---

[170] 85 Fed. Reg. at 80,496/3.

[171] *Id.* at 80,496/3.

[172] The American Heritage Dictionary of the English Language 973–74 (1969).

[173] 15 U.S.C. § 78k-1(a)(1)(A).

[174] *NASDAQ OMX Grp., Inc. v. UBS Sec., LLC*, 770 F.3d 1010, 1021 (2d Cir. 2014) (emphasis added).

[175] 15 U.S.C. § 78k-1(a)(1)(A).

This authority is limited to rules that pursue similar goals.[176] A rule must ultimately be designed to perfect *securities* transactions—it must have the "purpose" of solving a defect in securities markets, reducing transaction costs for investors and the like. This does not give exchanges carte blanche to solve perceived problems in a non-securities market: the market for corporate director recruitment. But that is the only "market" Nasdaq's diversity rule specifically seeks to "perfect."

The SEC must reject this argument as a matter of law.

b. Nasdaq lacks substantial evidence that the diversity rule will perfect the national market system.

Nasdaq must show more than a mere "association" to show that the diversity rule is "designed to" perfect securities markets. It must at least show enough evidence to infer that the diversity rule *will* achieve that legitimate end. That requires showing causation.

Nasdaq lacks substantial evidence that the diversity rule will solve a "market failure" in corporate recruiting, let alone in securities markets. Nasdaq posits a failure resulting from "existing directors' social networks."[177] But Nasdaq fails to substantiate this generalization about directors' social networks with any empirical evidence.

There is little reason to believe there is a market failure that harms investors. More likely, the demographic "diversity" Nasdaq calls "progress" has little material relevance to average investors. This makes sense, as there is no legitimate basis to assume that boardroom tokenism brings the "progress" investors generally do care about—increased share value. Indeed, statistical evidence suggests that if anything, investors punish boardroom diversity initiatives, as they send a negative signal that a firm's leadership is more focused on promoting its personal ideology or pleasing

[176] *Bus. Roundtable I*, 905 F.2d at 416.

[177] 85 Fed. Reg. at 80,496/1.

"social justice" activists than enhancing shareholder value.[178] To the extent corporations have incentives to focus on boardroom diversity, their focus may be driven by public relations, pressure from large institutional investors managing other people's money (e.g., government-operated pension funds or large institutional investors seeking to burnish their own image), or government mandates like California's recent legislation, all of which would tend to be adverse to average investor interests. Appeasing activists or catering to these interest groups is not the proper role of securities exchanges under the Exchange Act.

The available academic evidence also does not support Nasdaq's assertion that diverse directors are *even correlated* with, let alone cause, reduced volatility, more transparent public disclosures, and less information asymmetry. As to boards with at least one female director, the data is at best inconclusive on a correlation, and even more ambiguous as to causation. As observed above, Nasdaq's reliance on studies that survey only foreign firms is misplaced,[179] and studies of U.S. firms, in the aggregate, show mixed results.[180] Bravo's findings related to corporate disclosures are representative: "fail[ing] to find an association between the presence of women in the [board auditing committee] and the disclosure of financial forward-looking information," the study authors concluded that "gender per se seems to be not enough."[181]

As to boards with one minority director, the data is nil. As previously observed, Nasdaq fails to present a single empirical study that examines correlations between LGBTQ+ directors on any aspect of corporate performance.[182] Nasdaq cites only two peer-reviewed studies that isolate board racial representation, neither of which

---

[178] Isabelle Solal & Kaisa Snellman, *Women Don't Mean Business? Gender Penalty in Board Composition*, 30 Org. Sci. (Oct. 1, 2019); Isabelle Solal & Kaisa Snellman, *Why Investors React Negatively to Companies that Put Women on Their Boards*, Harvard Business Review (Nov. 25, 2019).

[179] *See supra* Section I.A.2.a.

[180] *See supra* Section I.A.2.b.

[181] Bravo, *supra* note 71, at 141, 147.

[182] *See supra* Section I.B.1.

established a link between director race and corporate reporting, transparency, or firm value.[183] As the most recent of these studies forthrightly concludes, "[t]he results . . . do not support the business case for inclusion of . . . ethnic minorities on corporate boards."[184]

5. Nasdaq's diversity rule is not designed to protect investors or the public interest.

An exchange rule may be permissible if it is "designed . . . in general, to protect investors and the public interest."[185]

Nasdaq asserts that its diversity rule "promotes investor protection and is in the public interest" because "*gender*-diverse boards are associated with more transparent public disclosures and less information asymmetry, leading to stock prices that better reflect public information."[186] This justification is wrong on the law and the evidence.

a. The catch-all authority to protect investors and the public interest is limited.

The catch-all "investor protection and the public interest" standard is open-ended. But "[t]his open-ended standard, however, is part of a larger list of more specific standards concerning the administration and operation of the self-regulatory organizations themselves, not the fairness of the issuers' corporate structures."[187] Under the canon of *ejusdem generis*, "the general standard at the end of this list should be construed to embrace only issues similar to the specific ones."[188] The term public interest "is never an unbounded term"—it must be understood in the context

---

[183] *See* Carter 2003, *supra* note 24 and discussion in Section I.B.2; Carter 2010, *supra* note 24, at 396 ("We do not find a significant relationship between the gender or ethnic diversity of the board, or important board committees, and financial performance for a sample of major US corporations.").

[184] Carter 2010, *supra* note 24, at 396.

[185] 15 U.S.C. § 78f(b)(5).

[186] 85 Fed. Reg. at 80,498/3 (emphasis added).

[187] *Bus. Roundtable I*, 905 F.2d at 413.

[188] *Id.*

of the Exchange Act.[189] It cannot include an "advance into an area not contemplated by Congress."[190] Moreover, the rule must both "promote[] investor protection" *and* be "in the public interest."

b. Nasdaq lacks substantial evidence that the diversity rule will protect investors.

Nasdaq lacks substantial evidence to support the claim that the diversity rule is designed to promote investor protection and is in the public interest.

First, Nasdaq provides zero empirical evidence that the minority director rule does anything to protect investors or protect the public interest in securities exchanges.[191] Academic musings and citations to *Bostock* are not evidence. Not even close.

Second, the evidence on gender diversity causal effects on investor protections is, as discussed in detail in Professor Klick's review and these comments, at best inconclusive and at worse negative on causal effects.[192] The most comprehensive studies—meta-analyses that evaluate the entire body of existing research—consistently conclude that there is insufficient data to infer any causal link between female board representation and corporate governance, findings echoed by gender diversity experts.[193] Numerous other studies uncited by Nasdaq similarly find no positive correlation—let alone a likelihood of any causation—between board gender diversity and investor protections.[194]

Ignoring the weight of the evidence and relying on Nasdaq's characterizations would be arbitrary. As the Court of Appeals for the D.C. Circuit has held, it is impermissible for the SEC to rely upon "relatively unpersuasive studies" while

---

189 *Id.*

190 *Id.*

191 *See supra* Sections I.B, III.B.4.b.

192 Exhibit A.

193 *See supra* Section I.A.1.c.

194 *See, e.g.*, *supra* note 68.

ignoring "the numerous studies submitted by commenters that reached the opposite result."[195] The SEC should not look the other way here.

c. Nasdaq's public interest justification is arbitrary.

Nasdaq's public interest justification is also arbitrary because it ignores relevant factors and fails to show that the advantages outweigh the disadvantages of the diversity rule.

When Congress uses "broad and all-encompassing" language like "the public interest," that "naturally and traditionally includes consideration of all the relevant factors," including "cost."[196]

The diversity rule imposes serious and concrete costs. Few firms appear to meet the diversity quotas, although Nasdaq claims it does not know how many.[197] Nasdaq acknowledges some direct costs for firms.[198] These include recurring director compensation costs, liability insurance costs, and a one-time "search cost" loss for firms and investors.[199]

Nasdaq attempts to downplay these director costs by asserting "that [m]ost, if not all, of these costs would be borne in any event in the search for new directors regardless of the proposed rule."[200] But Nasdaq fails to show the costs of the diversity rule will be borne "in any event." Firms may opt to add a new diverse director to the board instead of replacing an existing director. For these firms, the costs will not be

---

195 *Bus. Roundtable*, 647 F.3d at 1150–51.

196 *See Michigan v. EPA*, 576 U.S. 743, 752 (2015) (internal citation omitted).

197 *Nasdaq Seeks Board-Diversity Rule that Most Listed Firms Don't Meet*, WSJ (Dec. 1, 2020).

198 85 Fed. Reg. at 80,504 (citing cost estimates).

199 Nasdaq quotes one industry observer's estimates $75,000 to $150,000 per director, or about a third of a director's annual salary, in search costs. 85 Fed. Reg. 80,504/3. Director pay ranges depending on size, from about $100,000 or less to over $300,000 per year for S&P 500 firms. *Id.* Nasdaq's cost estimates likely underestimate costs because searching for a candidate that meets characteristics based on gender, race, or sexual orientation likely entails greater than average recruitment costs.

200 *Id.*

borne "in any event."

Nasdaq also asserts that enough qualified diverse candidates will be available to meet the new demand, but this claim is based on no evidence.[201] Indeed, if qualified diverse directors were easily available, there would be no need for Nasdaq to *subsidize* listed firms with temporary "free access to a network of board-ready diverse candidates and a tool to support board evaluation, benchmarking, and refreshment."[202] Nor would firms need exemptions, phase-ins, or grace periods to find qualified directors.

On the other side of the balance, there are no likely benefits. This is not a close call. No disinterested reviewer would conclude that the evidence allows a conclusion that the diversity requirements will cause any corporate governance changes that protect investors. Indeed, peer-reviewed empirical evidence suggests that gender diversity may hurt investors.[203] One could reasonably debate whether "academic and empirical studies support the conclusion that board diversity does not have adverse effects on companies."[204] But for a rule to further the public interest, more is needed than evidence that a rule will not destroy shareholder value. Nasdaq fails to provide more.

In any event, the public interest cannot be read to authorize intrusion into areas never contemplated by Congress in the Exchange Act. That certainly describes diversity rules aimed at prescribing the gender, racial, or sexual characteristics of directors serving in private firms.

6. Nasdaq's diversity rule permits unfair discrimination between issuers.

The proposed diversity rule discriminates between issuers by giving foreign issuers "flexibility" denied to domestic issuers. The diversity rule allows foreign

[201] Nasdaq Response to Comments at 26–27.

[202] 85 Fed. Reg. at 80,487/3.

[203] *See supra* note 178 and accompanying text.

[204] 86 Fed. Reg. at 14,490/1.

issuers, regardless of size or country of origin, to meet the diversity rule by adding a female instead of an underrepresented minority.[205] Nasdaq's justification for this disparate treatment is unfair and arbitrary.

Nasdaq asserts that disparate treatment for foreign issuers is justified because of "the unique demographic composition of the United States, and its historical marginalization of Underrepresented Minorities and the LGBTQ+ community, may not extend to all countries outside of the United States."[206]

It is unclear what "the unique demographic composition of the United States" and "historical marginalization" have to do with the rule. According to Nasdaq, the diversity rule is premised on the "cognitive diversity" benefits that mystically flow from having even one minority director. A desire to redress past discrimination or promote demographic balancing is not relevant to the cognitive diversity justification asserted by Nasdaq. Nasdaq does not explain why cognitive diversity benefits to investors from having a minority would not accrue to investors in foreign firms. Indeed, Nasdaq relies heavily on empirical evidence from foreign firms. While the foreign evidence is extraordinarily weak evidence of causation, it is no weaker than the evidence for U.S. firms. Nasdaq's arbitrary distinction makes little sense.

Even if redressing past societal discrimination or demographic balancing were permissible goals for Nasdaq under the Exchange Act, and they are not, that is no fair reason to give more flexibility to foreign firms. The political and economic marginalization of underrepresented minorities in many (indeed most) foreign countries around the world is significantly worse, not better, than in the United States. It is unlikely that Nasdaq's Chinese issuers, for example, have many non-Han Chinese minority directors on their boards. Indeed, the Chinese Communist Party to this day has a genocidal policy of Han racial supremacy, not just a legacy of "historical

[205] 85 Fed. Reg. at 80,501/1.

[206] *Id.*

marginalization."[207] Under Nasdaq's minority "marginalization" theory, the Chinese government's overt and pervasive policy of Han supremacism if anything demands more stringent treatment than applies to U.S. firms, not more "flexibility."

Nasdaq unfairly singles out foreign issuers for less restrictive rules, without reasonable justification.

7. Nasdaq's diversity rule regulates matters unrelated to the purposes of the Exchange Act.

Nasdaq's diversity rule "regulates matters unrelated to the purposes of the Exchange Act."[208] The actual and obvious goal of the rule, promoting diversity based on race, gender, or sexual orientation, is far removed from the purposes of the Exchange Act. As already demonstrated, every other legitimate purpose asserted by Nasdaq in the diversity rule is a mere pretext to justify Nasdaq's social justice agenda.

Nasdaq argues that "the proposal relates to the Exchange's corporate governance standards for listed companies."[209] Nasdaq's diversity rule, however, does not deal with matters of corporate governance analogous to prior exchange rules. "There are, of course, shadings within the notion" of corporate governance.[210] But diversity quotas are quite unlike anything ever attempted by exchanges. Prior governance standards control traditional corporate law matters, including the structure, processes, and procedures by which companies are directed and controlled. The diversity quota, however, does not set rules controlling the structure, processes, or procedures of corporations. Rather, it attempts to encourage recruiting *individual* directors with identity characteristics.

---

[207] *See* Anthony J. Blinken, Promoting Accountability for Human Rights Abuse with Our Partners (Mar. 22, 2021); Michael R. Pompeo, Determination of the Secretary of State on Atrocities in Xinjiang (Jan. 19, 2021); Jon M. Friend & Bradley A. Thayer, *The Rise of Han-Centrism and What it Means for International Politics*, 17 Studies in Ethnicity and Nationalism (2017).

[208] 15 U.S.C. § 78f(b)(5).

[209] 85 Fed. Reg. at 80,503/1.

[210] *Bus. Roundtable I*, 905 F.2d at 411.

Nasdaq relies by analogy on its independent director rules, but the analogy is a poor one. Independent director rules govern corporate structure by ensuring some structural separation between management and governance. Nothing in the independent director rules prescribes or encourages the recruiting of directors with particular personal identity characteristics. Nasdaq's rule is unprecedented.

C. Nasdaq's Diversity and Disclosure Rules Will Burden Competition and Harm Investors.

Nasdaq's rules may not "impose any burden on competition not necessary or appropriate" to advance the purposes of the Exchange Act.[211] When Congress uses words like "necessary or appropriate," such "broad and all-encompassing" language "naturally and traditionally includes consideration of all the relevant factors," including consideration of "cost."[212] And "[n]o regulation is 'appropriate' if it does significantly more harm than good."[213]

For the same reasons it fails to show the diversity rule is in the public interest, Nasdaq fails to show that the asserted benefits of the diversity rule outweigh the costs.

Directly addressing costs to competition, Nasdaq argues that its rule will not impose competitive burdens because firms can always opt to explain non-compliance:

> Nasdaq believes that [its rule] will avoid imposing undue costs or burdens on companies that, for example, cannot afford to compensate an additional director or believe it is not appropriate, feasible or desirable to meet the diversity objectives of Rule 5605(f) based on the company's particular circumstances (for example, the company's size, operations or current board composition). Rather than requiring a company to divert

[211] 15 U.S.C. § 78f(b)(8). Congress expected the SEC would balance costs and benefits. S. Rep. 94-75, 13-14, 1975 U.S.C.C.A.N. 179, 192 ("[T]he Commission's responsibility would be to balance the perceived anti-competitive effects of the regulatory policy or decision at issue against the purposes of the Exchange Act that would be advanced thereby and the costs of doing so. Competition would not thereby become paramount to the great purposes of the Exchange Act, but the need for and effectiveness of regulatory actions in achieving those purposes would have to be weighed against any detrimental impact on competition.").

[212] *See Michigan v. EPA*, 576 U.S. at 752 (internal citation omitted).

[213] *Id.*

> resources to compensate an additional director, and place the company at a competitive disadvantage with its peers, the rule provides the flexibility for such company to explain why it does not meet the diversity objective.[214]

But as demonstrated in Part II, non-compliance explanations are not a free lunch. They will have (and are explicitly intended to have) real costs for firms and investors. Nasdaq asserts that its proposal "will limit pressure campaigns by activist groups," but this conclusory assertion contradicts Nasdaq's own statements and is arbitrary.[215] It is hard to imagine how a rule that aims to give diversity activists the information they need to have "more informed conversations" with corporations could quell diversity pressure campaigns, unless Nasdaq assumes that every firm will opt instead to comply with the illegal quotas.

Both the diversity rule and the diversity disclosure rule, rule 5606, will likely impose other costs. For example, one can easily imagine litigation over "fraudulent" uses of highly subjective self-identifications of race or ethnicity, resulting in wasteful class action litigation over, for example, whether a firm misrepresented having a "Native American" or "Black" minority director.[216] As discussed in Part IV, it is also easy to imagine firms being sued for discrimination. Nasdaq dismisses these risks because "there are legal risks in many aspects of operating a company" and companies can always purchase liability "insurance to protect against misrepresentations."[217] That is arbitrary. Nasdaq must show these increased risks and costs are *necessary and appropriate* at the margin, when compared to the benefits of the rule. It is not enough to say that the legal risks and insurance premiums will be small in comparison to the totality of all legal risks and costs faced by firms.

Nasdaq's failure to account for and balance the likely costs and benefits of the

---

[214] 85 Fed. Reg. at 80,503.

[215] Nasdaq Response to Comments at 29–31; *see supra* note 138 and accompanying text.

[216] *See, e.g.*, Antonia Noori Farzan, *A DNA test said a man was 4% black. Now he wants to qualify as a minority business owner*, Wash. Post (Sept. 25, 2018); Brooke Jarvis, *Who decides who counts as Native American?* N.Y. Times (Jan. 18, 2017).

[217] Nasdaq Response to Comments at 19.

diversity and the diversity disclosure rules when assessing the "competitive burden" prong is arbitrary. In *Business Roundtable*, the Court of Appeals for the D.C. Circuit held that an analogous failure by the SEC to adequately address the serious risk that a proxy disclosure rule would be exploited by agenda-driven investors—in that case, unions and pension funds—to the detriment of the general investing public was arbitrary and capricious.[218] The SEC should not make the same mistake again.

D. Nasdaq's Justification for the Disclosure Requirement Proves It Does Not Have Substantial Evidence to Support the Diversity Rule.

Considered as a whole, Nasdaq's proposal suffers from a fatal internal contradiction. Nasdaq admits it does not have enough consistent and reliable data to determine the "diversity"—as Nasdaq defines it—of its own member companies' boards. The lack of reliable and consistent data is the very reason for Nasdaq's desire to impose a uniform boardroom "diversity" disclosure mandate, proposed rule 5606.

This diversity disclosure requirement is in tension with the diversity quotas. Nasdaq cannot both confidently assert that the data demonstrates a relevant correlation between board diversity and corporate performance, and then simultaneously plead that the paucity and poor quality of the available data is a reason to mandate diversity disclosures. If Nasdaq believes current corporate diversity disclosures are "unreliable, unusable, and insufficient to inform investment and voting decisions," it is not clear why it also believes the academic data is sufficiently rigorous to infer a causal relationship between diversity and corporate performance.[219] If sophisticated investors and even Nasdaq lack enough consistent data to measure boardroom diversity, why would academics possess that kind of data? Nasdaq provides no answer. That is arbitrary.

---

[218] *Bus. Roundtable II,* 747 F.3d at 1152 ("The Commission failed to respond to comments arguing that investors with a special interest, such as unions and state and local governments whose interests in jobs may well be greater than their interest in share value, can be expected to pursue self-interested objectives rather than the goal of maximizing shareholder value, and will likely cause companies to incur costs even when their nominee is unlikely to be elected.").

[219] *Id.* at 80,483/2.

E. Nasdaq's Minority Director Rule Is Arbitrary and Capricious.

Nasdaq's justifications for a minority quota are also arbitrary and capricious.

First, Nasdaq fails to treat other similarly situated categories alike, a core requirement of reasoned decision-making under the Administrative Procedure Act. Nasdaq justifies its failure to require veteran or disabled directors based on "a dearth of empirical analysis on the relationship between investor protection or company performance and broader diversity characteristics such as veteran status or individuals with disabilities."[220] In the same breath, "Nasdaq acknowledges that there also is a lack of published research on the issue of LGBTQ+ representation on boards."[221] And yet it does not hesitate to include LGBTQ+ directors in the minority requirement. Nasdaq provides no non-arbitrary justification for this disparity in treatment.

Nasdaq's arbitrary reasoning is again fully on display in its counsel's response to comments. Nasdaq's counsel asserts that "[t]he relative paucity of studies relating to LGBTQ+ status and board performance may be due, in part, to the lack of consistent data on board demographics, which only further illustrates the need for the Proposed Rules."[222] In reality, the only thing this circular reasoning demonstrates is that Nasdaq has no legitimate basis to include LGBTQ+ directors as part of the diversity rule.

Second, the minority rule also relies on highly arbitrary classifications. It is unclear, for example, who qualifies as a "member of the queer community."[223] Does it mean anyone who is not heterosexual, or does it include heterosexuals who associate frequently with gays?

As Professor Bernstein also persuasively demonstrates in his manuscript, *The*

---

[220] *Id.* at 80,493/1.

[221] *Id.* at 80,493–94.

[222] Ballard Spahr Response at 23 n.54.

[223] 86 Fed. Reg. at 14,485.

American Law of Race, definitions of race and ethnicity like the ones used by Nasdaq are also entirely arbitrary, as is Nasdaq's reliance on self-identification.[224] It is unclear why, for example, a Spaniard qualifies as a "Hispanic" minority and magically adds to cognitive diversity while an Italian director with similar genetic lineage and experiences does not. As the Seventh Circuit has observed, there is "nothing to differentiate immigrants from Spain or Portugal from immigrants from Italy, Greece, or other southern European countries so far as a history of discrimination in the United States is concerned."[225] Nasdaq cannot explain why a "Hispanic" from Spain adds to "cognitive diversity" in any way that other white Europeans do not. Nasdaq also cannot explain why "persons having origins in any of the original peoples of "the Middle East or North Africa" should be classified as white.[226] Does Nasdaq believe that people originating in North Africa or the Middle East do not add any "cognitive diversity" to firms, while people originating in Spain do? Nasdaq does not explain. These are just some of the many arbitrary distinctions made in Nasdaq's definitions that are highlighted in Professor Bernstein's paper. The arbitrariness would almost be comical if it were not the case that firms will be subjected to an increased risk of abusive shareholder litigation over "false" director self-identifications. For the same reasons, these arbitrary classifications also doom the "diversity disclosure" rule.

F. Nasdaq's Diversity and Disclosure Rules Conflict With the SEC's Existing Regulatory Framework for Diversity Disclosures

By insisting on wooden and arbitrary definitions of diversity limited to gender, race, and sexual orientation, Nasdaq's diversity and diversity disclosure rules also directly conflict with the SEC's existing reporting framework, which expressly rejects Nasdaq's one-size-fits-all definition of diversity for corporate disclosures. That conflict alone is fatal to Nasdaq's proposal because proposed rule changes must be

---

[224] *Id.* n.16 (discussing the definitions); David Bernstein, The Modern American Law of Race (May 4, 2020) (discussing the arbitrariness of the definitions), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3592850.

[225] *Builders Ass'n of Greater Chi. v. Cook Cty.*, 256 F.3d 642, 647–48 (7th Cir. 2001).

[226] 86 Fed. Reg. at 14,485 n.16 (March 16, 2021).

"consistent with . . . the rules and regulations issued under [the Exchange Act]."[227]

In 2009, the SEC amended Regulation S-K to require companies to disclose the "specific experience, qualifications, attributes or skills" of each director or nominee that qualify that person for the board.[228] SEC considered directing disclosure of particular categories of information, but ultimately declined to do so, stating instead that it "believe[s] companies and other proponents should be afforded flexibility in determining the information about a director's or nominee's skills, qualifications or particular area of expertise that would benefit the company and should be disclosed to shareholders."[229] With regards to "self-identified diversity characteristics," such as "race, gender, ethnicity, religion, nationality, disability, sexual orientation, or cultural background," SEC guidance says that, "to the extent a board or nominating committee . . . considered" those characteristics—and only if "an individual consented to the company's disclosure"—the company should "identify those characteristics" and describe "how they were considered" along with other attributes to determine the individual's qualification.[230]

The 2009 amendments also require companies to disclose "whether, and if so how, the nominating committee (or the board) has a policy with regard to the consideration of diversity in identifying director nominees," and to "describe how this policy is implemented, as well as how the nominating committee (or the board) assess the effectiveness of its policy."[231]

As Nasdaq notes, however, neither SEC's 2009 regulations nor its updated 2019 guidance define "diversity."[232] This is not an oversight, but an intentional policy choice by SEC. As the commission explained its 2009 regulations: "We recognize that

---

[227] 15 U.S.C. § 78s(c)(i).

[228] 17 C.F.R. § 229.401(e).

[229] 74 Fed. Reg. 68,334, 68,343/1 (Dec. 23, 2009).

[230] SEC, *Compliance & Disclosure Interpretations for Regulation S-K*, Question 116.11, https://www.sec.gov/divisions/corpfin/guidance/regs-kinterp.htm (Feb. 6, 2019).

[231] 17 C.F.R. § 229.407(c)(2)(vi).

[232] 85 Fed. Reg. at 80,482/2,3.

companies may define diversity in various ways, reflecting different perspectives. For instance, some companies may conceptualize diversity expansively to include differences of viewpoint, professional experience, education, skill and other individual qualities and attributes that contribute to board heterogeneity, while others may focus on diversity concepts such as race, gender and national origin. We believe that for purposes of this disclosure requirement, companies should be allowed to define diversity in ways that they consider appropriate."[233]

By requiring its members to measure boardroom diversity solely in terms of arbitrary gender, race, and sexual orientation classifications, Nasdaq's diversity rule and diversity disclosure rule both conflict with the SEC's determination not to adopt a one-size-fits-all diversity definition, overriding the SEC's conclusion that companies should have flexibility to report board characteristics, qualifications, and diversity in the way that most benefits their particular shareholders. To preserve its carefully considered policy determinations, the SEC must reject Nasdaq's diversity rule.

IV. NASDAQ'S DIVERSITY RULE IS INCONSISTENT WITH TITLE VII OF THE CIVIL RIGHTS ACT AND § 1981.

Nasdaq's attempt to encourage member companies to recruit directors based on gender, race, and sexual orientation also increases the risk these firms will run afoul of federal anti-discrimination law, namely Title VII of the Civil Rights Act and the Civil Rights Act of 1866, as amended and codified in 42 U.S.C. § 1981.

Title VII prohibits an employer from, among other actions, "discriminat[ing] against any individual with respect to his compensation, terms, conditions, or privileges of employment . . . or limit[ing], segregat[ing], or classif[ing] his employees or applicants for employment in any way which would deprive or tend to deprive any individual of employment opportunities or otherwise adversely affect his status as an employee, because of such individual's race, color, religion, sex, or national origin."[234] But by demanding that member companies reserve board positions for individuals of

[233] 74 Fed. Reg. at 68,344/1.

[234] 42 U.S.C. § 2000e-2(a).

a particular self-identified gender, race, or sexual orientation, Nasdaq's rule encourages companies to do just that: deprive potential directors of the opportunity to compete for particular board positions simply because they do not possess Nasdaq's preferred sex, race, and sexual orientation traits.

Nasdaq responds that its diversity rule is acceptable because most directors are independent, and independent directors are excluded from Title VII coverage because "by definition, they are not employees of the companies on whose boards they sit."[235] But Nasdaq's characterization is overly broad. Whether an independent director is an employee under Title VII is an open question requiring an organization-specific inquiry.[236] And even if independent directors are excluded from Title VII coverage, directors selected from among the company's employees are not. The Supreme Court and the Equal Employment Opportunity Commission agree: "[e]ven if someone in a particular position is not covered, consideration by an employer of its own employees for such positions may constitute a term, condition, or privilege of employment."[237] A company employee who is denied a board position because he lacks a particular sex, race, or sexual orientation trait has a cognizable Title VII claim.[238] And under Title VII, the employee need only show that his sex, race, or sexual

---

[235] Ballard Spahr Response at 6.

[236] *See* EEOC Compliance Manual, Section 2 Threshold Issues, Section 2.A.1.d, https://www.eeoc.gov/laws/guidance/section-2-threshold-issues#2-III-A-1-d (May 12, 2000) (While "[in] most circumstances, individuals who are . . . members of boards of directors . . . will not qualify as employees[,] [a]n individual's title, [ ] does not determine whether the individual is a . . . member of a board of directors . . . as opposed to an employee."). The determination of whether a particular individual is an employee instead must be made by considering various position- and organization-specific factors. *Id*; *see also Clackamas Gastroenterology Assocs., P.C. v. Wells*, 538 U.S. 440, 449–51 (2003).

[237] EEOC Compliance Manual, Section 2 Threshold Issues, Section 2.A.1.d at n.77; *Hishon v. King & Spalding*, 467 U.S. 69, 75 (1984).

[238] EEOC Compliance Manual, Section 2 Threshold Issues, Section 2.A.1.d at n. 77 (observing that, in the context of a law firm partnership, "even if a partner is not protected, an employee who is denied partner status may have a claim covered by the EEO statutes") (citing *Hishon*). In *Hishon*, the Supreme Court found that the petitioner attorney had a cognizable Title VII claim that she was denied partnership on the basis of her sex, even though partners were not considered "employees." 467 U.S. at 78. The Court concluded that consideration for a partnership need not be part of an express or implied employment contract to be protected; any "benefits that comprise the 'incidents of employment' . . . or that form 'an aspect of the relationship between the employer and employees' . . . may not be afforded in a manner contrary to Title VII." *Id.* at 75.

orientation was a "motivating factor"—not the sole reason—for the challenged adverse action.[239]

Nasdaq's rule similarly places its member companies in jeopardy of violating 42 U.S.C. § 1981, which grants to "[a]ll persons . . . the same right . . . to make and enforce contracts" without regard to the person's race, where "the term 'make and enforce contracts' includes . . . the enjoyment of all benefits, privileges, terms, and conditions of the contractual relationship."[240] By pressuring its member companies to use race-based selection processes, Nasdaq not only interferes with an applicant's right to enter into board membership contracts on an equal footing with applicants of other races, but, as in the Title VII context, Nasdaq's diversity rule may also prevent employees of non-preferred races from enjoying a privilege of their employment contract—consideration for board positions—equally to employees of preferred races.

Because Nasdaq's diversity rule encourages member companies to violate federal anti-discrimination law, the SEC must reject it.

V. SECTION 342 OF THE DODD-FRANK ACT IS IRRELEVANT.

Nasdaq tries to argue that imposing diversity quotas on its member companies advances the purposes of Section 342 of the Dodd-Frank Act.[241] But that statute only ensures that agencies, like SEC, pursue diversity within the agency, and that they have non-binding standards for assessing the diversity of the firms, like Nasdaq, that they regulate.[242] The statute also clearly disclaims any delegation of the kind Nasdaq implies, saying that "[n]othing in [the relevant paragraph] may be construed to mandate any requirement or . . . to require any specific action on the findings of the

[239] *See* 42 U.S.C. § 2000e-2 (m).

[240] *Id.* § 1981(a), (b).

[241] 85 Fed. Reg. at 80,503/3, 80,474–75.

[242] 12 U.S.C. § 5452(b)(2)(C); *Final Interagency Policy Statement Establishing Joint Standards for Assessing the Diversity Policies and Practices of Entities Regulated by the Agencies*, 80 Fed. Reg. 33,016 (June 10, 2015).

assessment."[243]

Nor do the non-binding joint diversity standards issued by SEC and other agencies pursuant to Dodd-Frank authorize Nasdaq's proposed board diversity quotas. The joint statement merely suggests "a framework" that regulated entities like Nasdaq may use "to create and strengthen [their own internal] diversity policies and practices."[244] And unlike Nasdaq's diversity rule, the non-binding standards impose no diversity requirement—or aspirational target—on Nasdaq's board, nor do they require any reporting or compliance explanation by Nasdaq.[245] The standards do not direct, or even suggest, that Nasdaq's efforts to enhance the diversity of its own organization can legitimize its attempt to force listed firms to discriminate on the basis of sex, race, or sexual orientation or explain why they do not.

Accordingly, Section 342 of the Dodd-Frank Act does not support Nasdaq's attempt to mandate diversity in the boardroom of its listed companies.

VI. NASDAQ'S DIVERSITY RULE VIOLATES THE U.S. CONSTITUTION.

Even if the proposed quotas were consistent with the Exchange Act and supported by substantial evidence, and they are not, they would be unconstitutional for multiple, independent reasons.

A. Nasdaq's Diversity Rule Is Subject to Constitutional Scrutiny.

An SEC order approving Nasdaq's rule is subject to constitutional scrutiny. It does not matter that Nasdaq is a "private" securities exchange. Nasdaq may be a "private" organization, but the SEC is an agency of the United States, and any final order by the SEC is subject to constitutional scrutiny. Moreover, exchanges like Nasdaq are "subject to comprehensive SEC oversight and control."[246] Securities cannot be publicly traded in interstate commerce unless they are registered in an

---

[243] 12 U.S.C. § 5452(b)(4).

[244] 80 Fed. Reg. at 33,023/1.

[245] *See id*. at 33,023–24.

[246] *NetCoalition v. SEC*, 615 F.3d 525, 528 (D.C. Cir. 2010).

exchange, and an exchange cannot be registered unless it performs numerous regulatory functions like fraud prevention on behalf of the SEC to protect the public interest.[247] As Congress recognized in 1975, exchanges like Nasdaq "exercise governmental power" in ways that affect both the rights of exchange members and securities issuers:

> The self-regulatory organizations exercise government power, and they do so in basically three ways which may adversely affect the interests of particular persons: (1) by imposing a disciplinary sanction, broadly defined, on a member or person affiliated with a member, (2) by denying membership to an applicant, and (3) by requiring members to cease doing business entirely or in specified ways with a particular non-member *or with respect to a particular security.*[248]

Justice William O. Douglas, former chair of the SEC, put it more bluntly. The Act's intention was "letting the exchanges take the leadership with Government playing a residual role. Government would keep the shotgun, so to speak, behind the door, loaded, well oiled, cleaned, ready for use but with the hope it would never have to be used."[249] In other words, if Nasdaq fails to adequately exercise its delegated regulatory authority, the SEC will use its own regulatory shotgun. Pervasive government coercion is a feature of the Exchange Act's self-regulatory model.

As relevant here, Nasdaq's diversity rule change is only enforceable through an order by the SEC affirming that the rule adequately serves one or more of the Exchange Act's public functions, like fraud prevention. Nasdaq is also subject to the ongoing threat of SEC sanctions, including deregistration, suspension, or revocation, if it fails to enforce approved exchange listing rules.[250] Nasdaq, in other words, has a federally enforceable duty to delist issuers that do not comply with listing rules, subject to the SEC's shotgun.

---

[247] 15 U.S.C. §§ 78e, 78(f).

[248] S. Rep. 94-75, 24, 1975 U.S.C.C.A.N. 179, 202–03 (emphasis added).

[249] Douglas, Democracy and Finance 82 (1940), *quoted in Silver*, 373 U.S. at 352.

[250] 15 U.S.C. § 78s(e), (f), (g), (h); *see In re The Nasdaq Stock Market, LLC and Nasdaq Execution Services, LLC*, Admin. Proceeding File No. 3-15339 (May 29, 2013) (imposing sanctions on Nasdaq in part for failing to follow its rules in connection with Facebook's initial public offering).

Given the nature of the SEC's involvement in approving, superintending, and enforcing Nasdaq's exchange rules, an SEC order approving Nasdaq's diversity rule would be governmental action subject to the same constitutional scrutiny as any other reviewable agency action.[251] And under the Administrative Procedure Act, courts must "hold unlawful and set aside" any agency order that is "contrary to constitutional right, power, privilege, or immunity."[252] That is why the Court of Appeals for the Fifth Circuit has held that exchange rules approved by the SEC are government action subject to constitutional scrutiny under the Fifth Amendment, and has also rejected Nasdaq's contention here as "contrary to numerous court decisions."[253]

Nasdaq argues that the SEC's approval of the diversity rule would not be government action, citing *Blum v. Yaretski* and *Desiderio v. National Association of Securities Dealers.*[254] Nasdaq asserts that under *Blum*, the SEC's approval of the diversity rule is only subject to constitutional scrutiny if the SEC forced or encouraged Nasdaq's adoption of the diversity rule, and would be free from scrutiny otherwise.[255]

Nasdaq's test is wrong. Government coercion or even encouragement has never been a necessary element for fairly attributing private action to the state. As the Supreme Court held in *Brentwood Academy*, "[w]hat is fairly attributable is a matter of normative judgment, and the criteria lack rigid simplicity."[256] Instead, the Court

---

[251] *See Shelley v. Kraemer*, 334 U.S. 1, 19 (1948) (judicial enforcement of private racial covenants was state action); *Moose Lodge No. 107 v. Irvis*, 407 U.S. 163, 172 (1972) ("[T]he impetus for the forbidden discrimination need not originate with the State if it is state action that enforces privately originated discrimination").

[252] 5 U.S.C. § 706(2)(B).

[253] *Intercontinental Indus., Inc. v. Am. Stock Exch.*, 452 F.2d 935, 941 (5th Cir. 1971) ("The Exchange's position that constitutional due process is not required since the Exchange is not a governmental agency is clearly contrary to numerous court decisions.").

[254] 191 F.3d 198, 206 (2d Cir. 1999) ("NASD is a private actor, not a state actor); Ballard Spahr Response at 11.

[255] Ballard Spahr Response at 11.

[256] *Brentwood Academy v. Tennessee Secondary School Athletic Ass'n*, 531 U.S. 288, 289 (2001).

looks at a "host of facts."[257] For example, the Supreme Court has found state action "when a private actor operates as a willful participant on joint activity with the State and its agents," "when it is controlled by an agency of the state," "when it has been delegated a public function by the State," and "when it is entwined with governmental policies."[258]

In *Brentwood Academy*, the Supreme Court expressly rejected Nasdaq's argument that government coercion or encouragement are necessary to attribute state action to a private entity:

> [I]t avails the Association nothing to stress that the State neither coerced nor encouraged the actions complained of. "Coercion" and "encouragement" are like "entwinement" in referring to kinds of facts that can justify characterizing an ostensibly private action as public instead. Facts that address any of these criteria are significant, but no one criterion must necessarily be applied. When, therefore, the relevant facts show pervasive entwinement to the point of largely overlapping identity, the implication of state action is not affected by pointing out that the facts might not loom large under a different test.[259]

As in *Brentwood Academy*, it avails Nasdaq nothing to stress that the SEC neither coerced nor encouraged Nasdaq's diversity rule.

The SEC's approval of Nasdaq's rule is state action under longstanding precedent. Nasdaq's diversity rule is not enforceable without an SEC order, so an SEC order that makes its rule binding qualifies is state action under *Shelley v. Kraemer*'s prohibition of state enforcement of "private" racial covenants.[260] Moreover, Nasdaq downplays the role of the SEC in supervising the operation of exchanges. Apart from needing SEC approval for the rule to be effective at all, Nasdaq has an ongoing federal duty to enforce its exchange rules against listed companies, subject to SEC sanctions if it does not. Thus, even if the *proposal* of the rule is free from

---

[257] *Id.* at 296.

[258] *Id.* (quotation marks and citations omitted).

[259] *Id.* at 303.

[260] *Shelley*, 334 U.S. at 19.

government coercion or encouragement, the *enforcement* of the diversity rule is not. The SEC, in Justice Douglas' words, stands behind Nasdaq's exchange rules with a shotgun. This state-sanctioned and state-backed regime of private discrimination falls comfortably within the scope of the Supreme Court's state action doctrine.

Nasdaq further argues its "listing rules" are not state action because it is "part of a private compact between Nasdaq and its listed companies."[261] But this argument also contradicts Supreme Court precedent. In *Shelley v. Kraemer*, there was no evidence that the state coerced homeowners into adopting racially restrictive "private" covenants. But because the private covenants were only enforceable by order of a state court, the order enforcing the covenants was state action.[262] Here, as in *Shelley*, the rules are only enforceable by an order of the SEC. *Shelley* and its progeny control, and compel the conclusion that Nasdaq's diversity rule is state action.

Numerous other facts ignored by Nasdaq also suggest that Nasdaq's action is fairly attributable to the state under the applicable Supreme Court doctrine.

First, Nasdaq is exercising traditional public regulatory functions. Whether characterized as setting corporate governance rules to promote diversity, preventing fraud, protecting investors, or promoting the public interest under the Exchange Act, the rule regulates traditional areas controlled by states and the SEC. Indeed, Nasdaq cites to state legislation and congressional bills that propose similar diversity requirements for boardrooms. Nasdaq's exercise of traditional public functions is strong evidence of state action.[263]

Second, Nasdaq and the SEC have a deeply symbiotic relationship. Courts attribute state action to a private entity when a state has "so far insinuated itself into a position of interdependence" with a private entity that "it must be recognized as a

---

[261] *Id.* at 12.

[262] *Shelley*, 334 U.S. at 19.

[263] *Evans v. Newton*, 382 U.S. 296, 302 (1966).

joint participant in the challenged activity."[264] A high level of mutual interdependence exists between Nasdaq and the SEC. Nasdaq's very existence is attributable to an SEC registration order, which requires Nasdaq to perform numerous public regulatory functions on behalf of the public interest, subject to SEC review, and subject to SEC penalties if it does not. As the Court of Appeals for the Fifth Circuit has held, the "intimate involvement of the Exchange with the Securities and Exchange Commission brings it within the purview of the Fifth Amendment's controls over governmental due process."[265]

The SEC's approval order would therefore be subject to constitutional scrutiny.

B. Nasdaq's Diversity Rule Violates the Fifth Amendment.

1. The Proposed Female Director Rule Does Not Satisfy Heightened Scrutiny.

The diversity rule would violate core anti-discrimination and equal protection principles protected by the Fifth Amendment. As the Supreme Court has held, "[e]qual protection analysis in the Fifth Amendment area is the same as that under the Fourteenth Amendment."[266] Under the Fifth Amendment, sex discrimination is subject to "heightened scrutiny," which means it "requires an exceedingly persuasive justification."[267] Courts view with "suspicion laws that rely on 'overbroad generalizations about the different talents, capacities, or preferences of males and females.'"[268] The general classification must serve "important governmental objectives" through means "substantially related to" achieving those objectives.[269] Even if gender generalizations have "statistical support" and are "descriptive," the Supreme Court "reject[s] measures that classify unnecessarily and overbroadly by

[264] *Burton v. Wilmington Parking Auth.*, 365 U.S. 715, 725 (1961).

[265] *Intercontinental Indus., Inc..*, 452 F.2d at 941.

[266] *Adarand Constructors, Inc. v. Peña*, 515 U.S. 200, 224 (1995) (quoting *Buckley v. Valeo*, 424 U.S. 1, 93 (1976)).

[267] *Sessions v. Morales-Santana*, 137 S. Ct. 1678, 1690 (2017) (quoting *United States v. Virginia*, 518 U.S. 515, 555–56 (1996)).

[268] *Id.* (quoting *Virginia*, 518 U.S. at 533).

[269] *Virginia*, 518 U.S. at 533 (quoting *Miss. Univ. for Women v. Hogan*, 458 U.S. 718, 724 (1982)).

gender when more accurate and impartial lines can be drawn."[270] All sex discrimination is subject to the same stringent standard of review even if it is not motivated by "invidious" discrimination.[271]

Nasdaq's justification cannot survive the Supreme Court's "exceedingly persuasive justification" standard for sex discrimination under the Fifth Amendment.

First, Nasdaq contends that "there are important government interests in perfecting the mechanisms of a free and open market and promoting investor confidence through the promotion of diverse boards (to include female and LGBTQ+ directors)."[272] But Nasdaq attempts a sleight of hand, claiming that its proposed solution—promoting diverse boards—*is* the government interest. This cannot be correct; Nasdaq has no authority under the Exchange Act to advance social objectives like board diversity. The only legitimate government interests that Nasdaq may assert are improving securities markets and protecting investors; any promotion of board diversity is at most a means to achieve these interests. In any event, improving cognitive diversity in the boardroom is not among the very limited "important governmental objectives" that have ever justified government-sponsored sex discrimination.

Second, Nasdaq fails to show that its female director rule is "substantially related" to improving markets or protecting investors. As explained above, Nasdaq's justification for a female director rule relies on stereotypes drawn from at best mixed and weak statistical evidence.[273] Nasdaq's claim that it "did not make assumptions about how women or men think"[274] is absurd: a rule "designed to reduce groupthink"[275] simply by requiring the group to include at least one woman is necessarily based on "assumptions about how women or men think." To survive

[270] *Morales-Santana*, 137 S. Ct. at 1693 & n.13.

[271] *Free the Nipple-Fort Collins v. City of Fort Collins, Colorado*, 916 F.3d 792, 800 (10th Cir. 2019).

[272] Ballard Spahr Response at 22.

[273] *See* Exhibit A.

[274] *Id*. at 23.

[275] *See, e.g.,* 85 Fed. Reg. at 80,498/1.

heightened scrutiny, Nasdaq must do more than selectively cite a handful of preferred third-party "studies" and sex-based stereotypes, it must show that its gender-based classification substantially serves its asserted governmental objective. It has failed to do so.

Third, there are many more tailored, gender-neutral ways of promoting the cognitive diversity that Nasdaq allegedly seeks. Rules requiring directors with differences in educational attainment and background (e.g., financial auditing expertise), age, political affiliation, socioeconomic status, or any other number of gender-neutral criteria would seem to be better suited and impartial means of achieving genuine cognitive diversity in the boardroom—at least the kind of cognitive diversity that may improve corporate boardrooms' work. Nasdaq had many other direct and sex- and race-neutral means at its disposal to protect investors. It could have, for example, required that one or more independent directors with accounting or auditing expertise sit on the audit committee. Instead, the diversity rule mandates a token female and minority director, regardless of any difference in their skill, perspective, or experience relative to other directors, and regardless of whether they will even sit in an audit committee.[276] The availability of non-discriminatory alternatives to enhance auditing—and Nasdaq's refusal to consider them—undermines Nasdaq's purported justification of the rule as a narrowly tailored remedy.

Nasdaq provides no persuasive justification for its failure to consider viable and seemingly more accurate alternatives to achieve cognitive diversity.

Nasdaq's rule fails heightened scrutiny.

---

[276] Sarbanes-Oxley regulations require national exchanges, including Nasdaq, to have listing rules requiring independent audit committees, and prescribe certain other procedural requirements. 17 C.F.R. § 240.10A-3. But these rules do not require audit committee members to have any financial expertise.

2. Nasdaq's Proposed Minority Director Rule Does Not Satisfy Strict Scrutiny, Heightened Scrutiny, or Rational Basis Review.

"'Distinctions between citizens solely because of their ancestry are by their very nature odious to a free people.'"[277] There are no "benign" racial classifications; sorting people by race always "stimulate[s] our society's latent race consciousness,' "delay[s] the time when race will become . . . truly irrelevant," and "perpetuat[es] the very racial divisions the polity seeks to transcend."[278] For that reason, the Supreme Court has held that racial classifications "must be analyzed by a reviewing court under strict scrutiny. In other words, such classifications are constitutional only if they are narrowly tailored measures that further compelling governmental interests."[279]

There are few, if any, compelling governmental interests that justify racially discriminatory quotas. Remedying past invidious discrimination by a company may qualify as a compelling interest justifying discrimination, but the law remains unsettled.[280] In the unique context of higher education admissions practices, the Supreme Court has held that universities have a compelling interest in pursuing the educational benefits that may flow from racial diversity and may do so if race is narrowly used as no more than a flexible plus factor in the admissions process.[281] But even in this very limited context, the Supreme Court has held that racial quotas, automatic race "points," or any kind of inflexible admissions rules based on race are not permissible.

Improving the efficiency of securities markets or protecting investors are emphatically not compelling interests that could ever justify racial discrimination. Nor is Nasdaq's rule narrowly tailored. Nasdaq seeks to characterize its "comply-or-

---

[277] *Rice v. Cayetano*, 528 U.S. 495, 517 (2000).

[278] *Shaw v. Reno*, 509 U.S. 630, 643 (1993).

[279] *Adarand Constructors*, 515 U.S. at 227.

[280] *Id.* at 239 (Scalia, J., concurring in part and concurring in the judgment) ("In my view, government can never have a 'compelling interest' in discriminating on the basis of race in order to 'make up' for past racial discrimination in the opposite direction.").

[281] *Fisher v. University of Texas* (*Fisher II*), 136 S. Ct. 2198 (2016); *Grutter v. Bollinger*, 539 U.S. 306 (2003); *Regents of Univ. of Cal. v. Bakke*, 438 U.S. 265 (1978).

explain" mandate as a flexible disclosure-based information-enhancing requirement, but Nasdaq fully expects that the mandate will have the desired effect of forcing member companies to consider race as a criterion in hiring board members.[282] That is impermissible.

Because the minority director rule contains a racial classification, it is subject to strict scrutiny, which it fails.

But even if the minority director rule contained only a sexual-orientation classification, it would also fail.

Although the Supreme Court has not specified the standard of review that applies to discrimination based on sexual orientation,[283] the rule fails both heightened and rational basis scrutiny.

First, at least one circuit has held that heightened scrutiny applies to discrimination based on sexual orientation,[284] and the sexual orientation portion of the minority rule, like that based on gender, conspicuously lacks the "exceedingly persuasive justification" required by this demanding level of review. Indeed, as explained above, unlike for gender, Nasdaq readily concedes that it lacks any statistical support relating to the effect of LGBTQ+ directors on corporate performance.

Nasdaq contends, however, that a single, unreviewed survey from an investment firm indicating that a subset of "companies 'supporting and embracing LGBT employees' outperformed [a particular index] by an average of 3.0% per year over the past six years" "sufficiently establishes that there is an important government interest in promoting LGBTQ+ diversity on corporate boards."[285] But as

---

[282] 85 Fed. Reg. at 80,496/2.

[283] *See, e.g., Obergefell v. Hodges*, 576 U.S. 644 (2015) (holding that same-sex marriage was a fundamental liberty protected by the Fourteenth Amendment but not specifying the level of scrutiny for sexual orientation discrimination).

[284] *See SmithKline Beecham Corp. v. Abbott Labs.*, 740 F.3d 471, 481 (9th Cir. 2014).

[285] Nasdaq Response Comments at 23.

explained above, the government interest, if any exists, is in improving securities markets or protecting investors—not promoting diversity on boards. Moreover, limited data suggesting that LGBTQ+ employees and policies may improve corporate returns does not establish that LGBTQ+ directors improve overall market mechanisms or protect investors. Nasdaq's rule fails heightened scrutiny for the simple reason that it cites no evidence that LGBTQ+ board representation is "substantially related" to any legitimate government interest.

Nasdaq also argues that "sexual orientation and gender identity are 'inextricably' intertwined with sex" and thus extrapolates its conclusions on board gender diversity to board LGBTQ+ diversity.[286] The structure of Nasdaq's diversity rule belies this assertion of belief: rather than combining female and LGBTQ+ directors into a single quota, as would be appropriate were they so intertwined, Nasdaq separated them, lumping LGBTQ+ identity into a "catchall" minority diversity category.[287] Nasdaq cannot rely on studies of gender diversity to justify a separate LGBTQ+ diversity mandate.

Second, and in the alternative, a sexual orientation quota would also fail under rational basis review because there is no "rational relationship between the disparity of treatment and some legitimate governmental purpose."[288] No evidence in the record provides rational support for treating LGBTQ+ directors differently than any otherwise similarly situated directors.

The diversity rule would also both stigmatize minority directors with paternalistic tokenism and stigmatize non-minority directors with a badge of inferiority because of race or sexual orientation, "a stigma and injury of the kind prohibited by our basic charter."[289]

---

[286] *Id*. at 23–24.

[287] 85 Fed. Reg. at 80,472/1.

[288] *Armour v. City of Indianapolis, Ind.*, 566 U.S. 673, 680 (2012).

[289] *Obergefell*, 576 U.S. at 671.

The SEC must deny approval of the minority quota rule.

C. Nasdaq's Diversity and Disclosure Rules Violate the First Amendment.

The diversity and disclosure rules also violate the First Amendment impermissibly compelling directors and companies to speak, in the forms of (1) requiring companies to publicly comply with a diversity mandate or explain why they do not, and (2) requiring disclosure of board diversity data.

"[F]reedom of speech prohibits the government from telling people what they must say."[290] The Nasdaq quota rules inappropriately compel corporations to either adopt unconstitutional and controversial classifications based on gender, race, or sexual orientation when hiring directors or explain why they do not comply—a form of compelled apology.[291] This "comply-or-explain" requirement—as well as the requirement to disclose board diversity data—compels the disclosure of controversial information from companies without satisfying the strict scrutiny required by the First Amendment.

In *National Institute of Family & Life Advocates v. Becerra (NIFLA)*, the Supreme Court held that a compelled disclosure is subject to strict scrutiny unless it falls into one of two categories—"laws that require professionals to disclose factual, noncontroversial information in their 'commercial speech,'" and regulation of "professional conduct, even though that conduct incidentally involves speech."[292]

As in *NIFLA*, Nasdaq's discriminate-or-explain and disclosure data requirements do more than incidentally regulate speech. Under the diversity rule, a company that does not have at least two diverse directors must explain its reasons for not having these directors either "in the company's proxy statement or

---

[290] *Rumsfeld v. Forum for Academic and Institutional Rights, Inc.*, 547 U.S. 47, 61 (2006) (citing *West Virginia State Bd. of Ed. v. Barnette*, 319 U.S. 624, 642 (1943), and *Wooley v. Maynard*, 430 U.S. 705, 717 (1977)).

[291] 85 Fed. Reg. at 80,502/1.

[292] 138 S. Ct. at 2372 (2018).

information statement for its annual meeting of shareholders or, alternatively on the company's website."[293] The rule also requires that companies annually disclose their board diversity statistics, according to Nasdaq's preferred and arbitrary taxonomy of diversity categories.[294] These requirements are not forced disclosures of "factual, *noncontroversial* information in . . . 'commercial speech.' "[295] The compelled disclosure of a company's reasons for failing to recruit directors of certain racial, gender, and sexual orientation identities is palpably different from examples of required disclosures of noncontroversial information cited by the diversity rule, such as a requirement to disclose whether a company has at least one financial expert on its audit committee.[296] And as the SEC recognized in 2009 when it decided *against* endorsing a uniform definition of diversity, the very concept of boardroom diversity is itself highly controversial and contested. Nasdaq's rule requires disclosure of highly controversial information, and it is not a regulation of companies' commercial speech, as the speech is entirely rule-created. The rule is therefore subject to strict scrutiny.

Furthermore, the diversity and disclosure rules cannot survive strict scrutiny because these requirements serve no compelling governmental interest. The only interest advanced by the non-compliance explanation is a vague assertion that explanations would "enable more informed analysis of, and conversations with, companies."[297] The same is true for Nasdaq's diversity disclosure framework. But a vague interest in "more informed conversations" has never been held to be a compelling interest justifying speech commands.

Nasdaq's arguments to the contrary are unpersuasive. It does not matter that "there is no particular message prescribed by the Proposed Rules."[298] Simply "[m]andating speech that a speaker would not otherwise make necessarily alters the

---

[293] 85 Fed. Reg. 80,502/1.

[294] *Id.* at 80,486.

[295] 138 S. Ct. at 2372 (emphasis added).

[296] *See* 85 Fed. Reg. 80,502 (referencing Regulation S-K, Item 407).

[297] 85 Fed. Reg. at 80,492/2.

[298] Ballard Spahr Response at 27.

content of the speech."[299]

In *Riley v. National Federation of the Blind of North Carolina, Inc.*, the Supreme Court held that a state "requirement that professional fundraisers disclose to potential donors, before an appeal for funds, the percentage of charitable contributions collected during the previous 12 months that were actually turned over to charity" was a "content-based regulation of speech" even though it accepted the state's characterization that its regulation was "compelled statements of 'fact'" that did not dictate the content of any particular disclosure.[300] This holding was based on numerous precedents. For example, the *Riley* court cited *Miami Herald Pub. Co. v. Tornillo*, where the Supreme Court held that it did not matter that the "statute in question here has not prevented the Miami Herald from saying anything it wished."[301] "Compelling editors or publishers to publish"—regardless of whether the speaker can choose the content of the publication—was a content-based restriction.[302]

Thus, the diversity rule impermissibly compels speech.

D. Default Approval of Nasdaq's Diversity Rule Would Violate the Private Non-Delegation Doctrine and the Appointments Clause.

If the SEC fails to act, at least in theory the diversity rule may be approved by default.[303] Such a means of approval may be convenient for Nasdaq, but approval by default would violate the private non-delegation doctrine and the Appointments Clause.

The Exchange Act provides that a proposed rule change shall be deemed to have been approved by the SEC if the SEC does not approve or disapprove the

[299] *Riley v. Nat'l Fed'n of the Blind of N. Carolina, Inc.*, 487 U.S. 781, 795 (1988).

[300] *Id.* at 796-98.

[301] 418 U.S. 241, 256 (1974).

[302] *Id.*

[303] *See* 15 U.S.C. 78s(b)(2)(D)(i) (providing that a proposed rule change shall be deemed to have been approved by the SEC if the SEC does not approve or disapprove the proposed rule change within 45 days after the date of publication).

proposed rule change within 45 days after the date of publication.[304] This raises constitutional concerns under the private non-delegation doctrine. Under that doctrine, agency delegation to a private entity is only lawful on the condition that "the entities function subordinately to the federal agency and the federal agency has authority and surveillance over their activities."[305] When an agency delegates a statutory duty, the agency may not "reflexively rubber stamp[]" a rule prepared by a private entity but instead must "independently perform its reviewing, analytical and judgmental function and participate actively and significantly in the preparation and drafting process."[306]

The diversity rule setting diversity quotas for corporate boards is a legislative rule that governs "private conduct."[307] If the SEC does not review and affirmatively approve or disapprove this diversity rule, the SEC will not have exercised the necessary "authority and surveillance" over Nasdaq's regulatory activities, as required by the non-delegation doctrine. Thus, an automatic approval by the SEC of the diversity rule after the 45-day window would amount to an unconstitutional "rubber stamp" of a legislative rule prepared by a private entity.[308]

For similar reasons, an SEC rubber stamp would also violate the Appointments Clause. Article II of the Constitution demands that the President generally appoint all "Officers of the United States" with the Senate's advice and consent.[309] This provision ensures that those who exercise the power of the United States are

---

[304] *Id.*

[305] *Texas v. Rettig*, 968 F.3d 402, 414 (5th Cir. 2020) (internal quotation marks omitted); *see also Dep't of Transp. v. Ass'n of Am. Railroads*, 575 U.S. 43, 61 (2015) (Alito, J., concurring); *id.* at 87 (Thomas, J., concurring in the judgment).

[306] *See Sierra Club v. Lynn*, 502 F.2d 43, 59 (5th Cir. 1974).

[307] *See Ass'n of Am. Railroads*, 575 U.S. at 70 (Alito, J., concurring) ("[T]he formulation of generally applicable rules of private conduct . . . requires the exercise of legislative power.").

[308] Even if the SEC approved the rule, the statute may be an unlawful delegation of authority to the SEC, as Congress itself must regulate important subjects like boardroom diversity or at least supply an intelligible principle for regulation. *See Gundy v. United States*, 139 S. Ct. 2116, 2123 (2019).

[309] Art. II, § 2, cl. 2.

accountable to the President, who himself is accountable to the people.[310] The Supreme Court has held that someone who exercises "significant authority pursuant to the laws of the United States" is an officer.[311]

The power to promulgate legislative rules governing the internal affairs of public corporations pursuant to the Exchange Act would certainly qualify as "significant authority" under federal law. Such significant rules must be adopted or at least properly ratified by lawfully appointed executive officers, not by Nasdaq's politically unelected President and CEO, who has never been appointed to federal office. As Justice Alito has noted, "nothing final should appear in the Federal Register unless a Presidential appointee has at least signed off on it."[312]

E. Approval by the Acting Director of Markets and Trading Would Violate the Appointments Clause.

The Acting Director of Markets and Trading lacks authority to approve the rule under the U.S. Constitution.

Under the Appointments Clause of the U.S. Constitution, only the President, "Courts of Law," or "Heads of Departments" can appoint "Officers." Art. II, § 2, cl. 2. A federal official is an "Officer[]" under the appointments clause if the official occupies "a continuing office established by law," and possesses "significant discretion" when carrying out "important functions."[313]

The Director of Markets and Trading is a paradigmatic example of such an "Officer." The Director occupies a continuous office defined by law, and exercises significant discretion over important functions.[314] Indeed, the Commission has fully delegated its power to administer the Exchange Act to the Director of Market and

---

310 See *Free Enterprise Fund v. PCAOB,* 561 U.S. 477, 497–498 (2010) (citing The Federalist No. 72, p. 487 (J. Cooke ed. 1961) (A. Hamilton)).

311 *Lucia v. SEC*, 138 S. Ct. 2044, 2051 (2018) (quoting *Buckley v. Valeo*, 424 U.S. 1, 126 n.162 (1976) (per curiam).

312 *Ass'n of Am. Railroads*, 575 U.S. at 64 (Alito, J.).

313 *Lucia v. SEC*, 138 S. Ct. 2044, 2052–53 (2018).

314 15 U.S.C. § 78d(h)(1); 17 C.F.R. § 200.19a.

Trading, subject to six enumerated exceptions.[315] The Director can even express views in federal court independent of the SEC.[316]

However, no validly appointed officer currently occupies this office. Instead, a career deputy has assumed the role of Acting Director of Markets and Trading.[317] Therefore any official actions by the Acting Director would be the unconstitutional actions of an unappointed "Officer[]" under Art. II, § 2, clause 2, unless the full SEC reviews and affirmatively ratifies those official actions.[318] Should the Acting Director alone purport to approve Nasdaq's diversity rule, that approval would be void and unlawful as carried out by an unappointed officer.

F. Commissioners Lee and Crenshaw Have Prejudged Nasdaq's Diversity Rule and Must Recuse to Preserve Due Process.

While the proposed rule is in front of the Director of Trading Markets, should the Commission become involved, Commissioners Lee and Crenshaw would have to be recused because they have prejudged the diversity rule.

The principle that due process of law requires a neutral decisionmaker stretches back at least as far back as seventeenth English common law.[319] Under that longstanding principle of due process, an agency official in an adjudication must be disqualified if "a disinterested observer may conclude that the agency [official] has in some measure adjudged the facts as well as the law of a particular case in advance of hearing it."[320]

---

[315] 17 C.F.R. § 200.19a(a)(1)-(6).

[316] *See, e.g.*, *City of Providence, Rhode Island v. BATS Glob. Markets*, No. 14-CV-2811 (JMF), 2020 WL 582461, at *2 n. 2 (S.D.N.Y. Feb. 6, 2020).

[317] *See* SEC Press Release 2020-317, *Brett W. Redfearn to Conclude Transformative Tenure as SEC Trading and Markets Director* (Dec. 15, 2020) ("Upon Mr. Redfearn's departure, Christian Sabella, currently a deputy director of the Division, will assume the role of Acting Director.").

[318] 15 U.S.C. § 78d-1(b)-(c).

[319] *Bonham's Case*, 77 Eng. Rep. 646, 652 (1610).

[320] *Cinderella Career & Finishing Sch., Inc. v. FTC*, 425 F.2d 583, 591 (D.C. Cir. 1970) (cleaned up). This standard is distinct and less demanding than the standard for an agency engaged in legislative rulemaking, as opposed to adjudicating the approval or disapproval of Nasdaq's proposal, as

That standard for recusal has been met here. Indeed, in a matter "critical to the disposition" of this case—whether substantial evidence supports Nasdaq's claimed Exchange Act justifications for its proposed diversity rule—Commissioner Lee is quoted by Nasdaq as having "adjudged" the facts: "to the extent one seeks economic support for diversity and inclusion (instead of requiring economic support for the lack of diversity and exclusion), *the evidence is in*."[321] Commissioner Lee's statement prejudged the evidence Nasdaq seeks to rely upon in this adjudication in more than "some measure" before any of that evidence was actually "in" the record.

Similarly, Commissioner Lee has prejudged the law when she demeaned the adequacy of the current legal regime that Nasdaq's proposed diversity disclosure rule seeks to replace. She stated that current SEC disclosure requirements have "led to spotty information that is not standardized, not consistent period to period, not comparable across companies, and not necessarily reliable. . . And the current state of disclosure reveals the shortcomings of a principles-based materiality regime in this area."[322] Because of these judgments, Nasdaq favorably quotes Commissioner Lee as calling for the very proposed diversity disclosure rule that Nasdaq now has pending before her and the SEC: "it's time to consider how to get investors the diversity information they need to allocate their capital wisely."[323] Indeed, Commissioner Lee has emphasized that a heavy-handed rule like Nasdaq's diversity disclosure proposal "creates external pressure" to "drive corporate behavior."[324] A disinterested observer would conclude that Commissioner Lee has "adjudged the facts as well as the law" for Nasdaq's particular case.

---

articulated in *United Steelworkers of Am., AFL-CIO-CLC v. Marshall*, 647 F.2d 1189, 1209 (D.C. Cir. 1980) (holding that an official's recusal in rulemaking is required "when there has been a clear and convincing showing that (she) has an unalterably closed mind on matters critical to the disposition of the proceeding." (alteration in original)).

[321] Commissioner Allison Herren Lee, Diversity Matters, Disclosure Works, and the SEC Can Do More: Remarks at the Council of Institutional Investors Fall 2020 Conference (September 22, 2020), https://www.sec.gov/news/speech/lee-cii-2020-conference-20200922 (emphasis added).

[322] *Id.*

[323] *Id.*

[324] *Id.*

Likewise, Commissioner Crenshaw is cited throughout the Nasdaq proposal as similarly in favor of Nasdaq's diversity rule.[325] Indeed, Nasdaq notes that Commissioner Crenshaw "expressed disappointment with the Commission's silence on diversity."[326] Criticizing the current SEC disclosure rules as "silent on diversity," Commissioner Crenshaw described the matter now pending before the SEC as "extremely important to investors and to the national conversation. The failure to grapple with these issues is, quite simply, a failure to modernize."[327] A disinterested observer would conclude that Commissioner Crenshaw has adjudged Nasdaq's proposal before hearing it.

Commissioners Lee and Crenshaw should recuse from adjudicating Nasdaq's proposed rules.

G. The SEC is Unconstitutionally Insulated from the President's Removal Power.

Any action to approve Nasdaq's diversity rule would also be unconstitutional because SEC commissioners are unlawfully insulated from presidential control.

SEC Commissioners have some degree of legal independence from presidential oversight because they may not be removed by the President except for good cause, meaning inefficiency, neglect of duty, or malfeasance in office.[328] That is the same standard of tenure protection that the Supreme Court recently held unconstitutional under the separation of powers in *Seila Law v. CFPB*.[329] The only difference here is that the SEC is a multimember commission.

That is irrelevant. The limited Supreme Court exception for "multimember expert agencies that do not wield substantial executive power" does not apply to the

[325] Commissioner Caroline Crenshaw, Statement on the "Modernization" of Regulation S-K Items 101, 103, and 105 (August 26, 2020), https://www.sec.gov/news/public-statement/crenshaw-statementmodernization-regulation-s-k.

[326] 85 Fed. Reg. 80,472/1 n.146.

[327] Crenshaw, *supra* note 325.

[328] *PCAOB*, 561 U.S. at 496 (assuming good cause tenure protections apply to SEC Commissioners).

[329] 140 S. Ct. 2183, 2197 (2020).

SEC, which has enormous executive power to implement statutes "in a major segment of the U.S. economy" and exercises regulatory and adjudicative powers that are almost a carbon copy of the CFPB's executive powers under Title X of the Dodd-Frank Act, which the Supreme Court deemed "substantial executive power" in *Seila Law*.[330] The SEC is therefore unconstitutionally insulated from presidential control.

CONCLUSION

Nasdaq's diversity rule is unlawful, unconstitutional, and procedurally defective. The SEC must disapprove the rule.

[330] *Id*. at 2199–200.

EXHIBIT
A

Review of the Literature on Diversity on Corporate Boards

Jonathan Klick

APRIL 2021

AMERICAN ENTERPRISE INSTITUTE

Executive Summary

Despite large increases in the representation of women and people from other minority groups on corporate boards, public and private regulators are pushing for more. California already passed mandates requiring firms headquartered in the state to meet quotas for women and members of other underrepresented groups on their corporate boards. The Nasdaq stock exchange proposed a similar mandate. To support this forced injection of diversity, the regulators point to a wealth of citations claiming diversity improves a firm's value.

Upon examination, though, the research base does not hold up. Many citations come from consulting firm position papers that lack credibility. These reports imply that, because higher-value firms tend to have more-diverse boards, diversity causes the increase in value, without even attempting to adjust for other differences across firms. The academic literature noted in the Nasdaq proposal is not much better. Reliable causal inferences require methods that ensure one is comparing apples to apples, whereas most of the cited literature does little more than add a few control variables to get to an apples-to-bananas comparison, at best.

It also appears that the Nasdaq proposal selectively surveyed the literature on board diversity. When meta-analyses are consulted, the literature as a whole finds little relationship between board diversity and firm value. This systematic review of the literature aligns with numerous other literature reviews, even those performed by individuals predisposed to favor diversity mandates, finding that the evidence is weak for a business case for diversity.

The Nasdaq proposal ignores many studies that are much more reliable methodologically. For example, studies examined the enactment of diversity requirements in Norway, using it as a natural experiment that would provide insight into what happens when firms are forced to diversify their boards. Findings from the Norwegian experience indicate, at best, that diversity mandates do not improve firm value, and some studies find the quotas harmed firm performance. Additionally, many firms chose to go private to avoid the regulation.

There is no credible evidence that diversity requirements systematically improve firm performance.

Review of the Literature on Diversity on Corporate Boards

Jonathan Klick

Women are better represented on US corporate boards than ever before. According to data from the proxy advisory firm Institutional Shareholder Services (ISS), by 2019, women held more than one-fourth of board seats in S&P 500 firms and about one-fifth of seats among the Russell 3000.[1] This represents a substantial increase compared to the preceding decade. ISS data also portend even more growth, with women composing almost half of new directors appointed in 2019 in the S&P 500 and the Russell 3000, a more than threefold increase since 2008.[2] In this same period, there was also growth in the inclusion on boards of individuals self-identifying as ethnic minorities.[3]

Despite this organic growth and signs of continued gains in the future, entities such as California[4] and the Nasdaq stock exchange[5] have passed or proposed regulations mandating that firms add women and minority group members to their boards or, in the case of the Nasdaq proposal, provide an explanation for not meeting the requirement.

The California regulation and Nasdaq rule proposal are premised on findings that female board members improve firm performance. For example, California S.B. 826 indicates, "Numerous independent studies have concluded that publicly held companies perform better when women serve on their boards of directors," before summarizing numerous studies from consulting firms such as McKinsey & Company and a few academic studies.[6] Likewise, citing many of the same studies, the Nasdaq proposal asserts, "There is a significant body of research suggesting a positive association between diversity and shareholder value."[7]

As firms are pushed to change their practices to accelerate the already swift trend toward more diversity on boards, it is useful to review the findings of the literature, both those studies cited and more broadly. One concern with the cited literature is its reliance on nonacademic reports from consulting firms that may be influenced by branding considerations and, at minimum, have never been subjected to peer review. With the handful of peer-reviewed studies California and the Nasdaq proposal relied on, it is important to examine whether those studies are representative of the academic literature or cherry-picked.

In this report, I start with a brief, relatively nontechnical primer on empirical work in general, with a focus on causality. As many of the consulting reports admit, their findings cannot answer whether any claimed relationship between firm performance and board makeup represents a causal relationship. While firms with more-diverse boards might perform better than they would with less-diverse boards, the findings could also reflect that more-successful firms might choose diverse board members without the diversity actually affecting performance. Diverse boards might also be concentrated in industries that have happened to do well over the past decade, independently of any contribution by the board. Similarly, almost none of the studies cited explores whether it may be more costly or difficult for some firms to comply with the diversity mandates. A one-size-fits-all approach, as opposed to allowing organic diversity gains, could harm many firms even if the effect on average is positive.

To sort this out, it is necessary to focus on studies that credibly identify the causal impact of board diversity on firm performance. The vast majority of the studies used to support the diversity regulations do not identify causal effects and, therefore, do not constitute reliable evidence. Among the few studies that provide valid insights into the causal effects of mandating diversity, the evidence is mixed at best. Overall, the literature suggests that such mandates will do little to improve firm performance and may generate losses for shareholders.

Correlation Is Not Necessarily Causation

The evidence (discussed below) regarding how increasing diversity affects corporate boards either compares an average outcome (e.g., market return) across two or more groups of firms broken down according to the degree of diversity of the firms' boards or uses more-sophisticated techniques (e.g., regression analysis) to compare the relationship between board diversity and outcomes, adjusting for other firm characteristics.

The FCLTGlobal report Nasdaq cited used the general comparison approach.[8] It indicated,

> Looking at MSCI ACWI firms between 2010 and 2017 and using a diversity metric that compasses [*sic*] both age and gender, we found that the most diverse boards (top 20 percent) added 3.3 percentage points to ROIC [return on invested capital], as compared to their least diverse peers (bottom 20 percent).[9]

There are many problems with relying on this approach to support the claim that the Nasdaq proposal will generate firm value. First, there is a relevance problem with taking a claim about a composite diversity index that confounds age and sex and using it as a basis for a regulation focused on sex and minority status. While the FCLTGlobal analysis says gender diversity drives much of the effect (2.6 percent[10]), there is no analysis of minority-status diversity.

Perhaps more importantly, the FCLTGlobal comparison does not account for other potential differences across the companies with the most- and least-diverse boards. For example, during the past decade, the auto industry suffered a slight loss in market return, whereas internet and direct-marketing retail saw growth exceeding 1,000 percent.[11] The primary underlying causes of these diverging prospects obviously have nothing to do with who makes up the company boards in those industries. Car sales are suffering from shifting generational preferences[12] and changing environmental concerns, whereas internet-based retail is a relatively young industry that has benefited from changing technology and other exogenous factors. If car companies have mostly men on their boards and internet-based retail firms have more women on theirs, then a comparison will mechanically generate something like the FCLTGlobal result. At minimum, any such comparison would need to be made on a within-industry basis, to say nothing of needing to adjust for other differences across the firms. Without such adjustments, it is impossible to say anything meaningful about how increasing female participation affects corporate boards.

To isolate the causal effect of board diversity on outcomes, one needs to compare apples to apples.

Unfortunately, making the required adjustments is easier said than done. To isolate the causal effect of board diversity on outcomes, one needs to compare apples to apples. Conceptually, the purest test would involve two otherwise identical companies in which one had an all-white, all-male board and the other had a more diverse board. If one were certain the two companies were truly identical, except for their board composition, any differences in outcomes would be either due to random chance or caused by the board differences. Statistically, if the sample size were large enough (many identical firms, some with nondiverse and some with diverse boards), the random component becomes relatively small on average (and can be bounded), leaving just the board-induced differences.

Of course, it is not possible to examine identical companies since real-life firms differ. If those differences happen to be correlated with board composition (such as the example above positing that boards may differ across industries), determining whether observed outcome differences are due to board composition or these other distinctions will not generally be possible. In statistics, this is called an omitted variable bias. In such a situation, the other differences will confound any estimate of board effects.

To guard against this omitted variable bias, researchers attempt to account for differences across firms. In group-based comparisons, such as the FCLTGlobal example, instead of comparing companies with the most-diverse boards to companies with the least-diverse boards, as suggested, one might make the comparisons in a particular industry. Beyond the industry comparison, one might also try comparing firms with similar corporate governance mechanisms (e.g., comparing firms with staggered boards to other such firms or firms operating under Delaware law with other firms operating this way). This matching or grouping process gets complicated quickly. First, the more attributes an analyst matches on, the smaller the sample gets on which the comparison is performed. Smaller sample sizes increase the influence of random variation in the comparison. In the extreme, it might not be possible to distinguish even large outcome differences among the groups from random noise.

Second, the intuition above is conceptually clear for discrete categories (e.g., firm industry or a particular corporate governance attribute), but grouping by continuous variables is necessary too. If a firm's vintage relates to the outcome metric and the board's diversity, an adjustment is needed. Should the analyst compare only firms that started in the same year? If market capitalization relates to board composition and performance, how close is close enough for grouping purposes? Is the arbitrary distinction between mid- and large-cap firms enough for matching purposes, or should more fine-grained distinctions be made?

These complications must be addressed for FCLTGlobal-type analyses to be taken seriously. Unfortunately, the bulk of these studies, which the Nasdaq proposal relied on, ignore this issue altogether, making their conclusions scientifically unreliable. This leaves the possibility that the studies are vastly overestimating (or underestimating) the causal effect of board diversity on firm outcomes.

Some of the more sophisticated studies use regression techniques to adjust for differences across firms when attempting to isolate how diversity affects corporate outcomes. Generally understood, regression methods "fit" a linear function, relating the control variables (in the current case, the chosen board diversity metric and whatever firm attributes that are to be accounted for) to the outcome variable in an optimal way.[13] For example, if a firm's age is found to have a certain relationship, on average, with the outcome variable and a firm's market capitalization has an estimated relationship with the outcome, then two firms of different ages and market caps can be adjusted to yield an after-adjustment comparison wherein the firms are now conditionally similar, except for their board compositions. After these effects have been accounted for and there are no other differences among the firms, any leftover difference in the firms' outcomes must be due to either random variation or the differing levels of diversity on their boards. Again, if this regression is estimated over many firms, the random component will become relatively less important,[14] and it may be possible to make probabilistic statements about the causal effect of board diversity on the outcome examined.

Although regression techniques are widely used, there is a well-known problem: Regression estimates can be interpreted only as causal effects if the model does not suffer from omitted variable bias. That is, if the model fails to include a control variable (or numerous control variables) that affects the outcome and is correlated with the control variables included in the model, the estimates will not represent the causal effect of a variable on the outcome. For example, even in a regression framework, if one did not account for the industry effects noted above and board diversity differed systematically by industry, the estimated coefficient on the board diversity variable will include both the true causal effect of board diversity on the outcome and some portion of the industry effects on the outcome. If the regression happens to estimate the true causal effect, it will be entirely accidental, and it is impossible for the researcher to know whether the actual causal effect is bigger, smaller, or the same as the estimated effect is. The researcher cannot even reliably know the sign (i.e., the direction) of the true causal effect.

Although regression techniques are widely used, there is a well-known problem: Regression estimates can be interpreted only as causal effects if the model does not suffer from omitted variable bias.

In the example of omitting the industry effects, a simple solution is to adjust by industry. How specifically to define the industry is problematic, as the bias problem could arise if board diversity and outcomes vary at the subindustry—say, four-digit North American Industry Classification System (NAICS)—level, while the researcher adjusts for industry only at the two-digit NAICS level. But conceptually, this is manageable.

The bigger problem is that board diversity and outcomes may be associated with factors the researcher is entirely unaware of, or, sometimes, he or she might be aware of the factor but has no data to make the adjustment. Unobserved heterogeneity is a ubiquitous problem in empirical work, but solving it is crucial to reliably estimating effects.

When Is Correlation Causation?

Although almost everyone nods in the direction of the causality concerns noted above, many researchers mention it but then progress without taking the implications seriously. For example, the McKinsey report cited in the Nasdaq proposal[15] touts,

> The analysis found a statistically significant relationship between a more diverse leadership team and better financial performance. The companies in the top quartile of gender diversity were 15 percent more likely to have financial returns that were above their national industry median. Companies in the top quartile of racial/ethnic diversity were 35 percent more likely to have financial returns above their national industry median. Companies in the bottom quartile for both gender and ethnicity/race were statistically less likely to achieve above average financial returns than the average companies in the dataset (that is, they were not just not leading, they were lagging). The results varied by country and industry. Companies with 10 percent higher gender and ethnic/racial diversity on management teams and boards in the US, for instance, had EBIT [earnings before interest and taxes] that was 1.1 percent higher; in the UK, companies with the same diversity level had EBIT that was 5.8 percent higher. Moreover, the unequal performance across companies in the same industry and same country implies that diversity is a competitive differentiator that shifts market share towards more diverse companies.[16]

The report notes, "The relationship between diversity and performance highlighted in the research is a correlation, not a causal link." Almost immediately, the study drops the caution and declares, "More diverse companies are better able to win top talent, and improve their customer orientation, employee satisfaction, and decision making, leading to a virtuous cycle of increasing returns."[17] It could just as likely be that high-performing firms are better able or more willing to seek out and attract more diverse board members, or there could be some other mediating factor unaccounted for in the analysis that leads to better performance and more diverse boards. Noting that correlation is not causation does not then free one to make such causal claims.

Noting that correlation is not causation does not then free one to make such causal claims.

How, then, are causal claims ever possible? Modern statistical and econometric techniques provide some insight.[18] Most modern methods of causal inference take their cue from randomized controlled trials or experiments. If omitted variable bias arises when variables are omitted that influence the outcome (e.g., firm performance) being studied and that are correlated with the "treatment" of interest (e.g., board diversity), one can try to include all the relevant variables. However, failure is guaranteed for the reasons described above. Instead, it makes more sense to ensure somehow that the omitted variables are not correlated with the treatment of interest.

Random assignment of the treatment in an experiment achieves this. If, metaphorically, a coin flip determines whether a firm receives a diverse board, then the existence of a diverse board cannot be associated with firm characteristics such as industry, age, and market cap. Maybe even more importantly, the board assignment will not be correlated with the unquantifiable (but still potentially important) variables such as how forward-looking or progressive a firm is, a firm's risk-taking propensity, and countless other unobservable firm characteristics. If, in this experiment, a firm's board diversity is unrelated to any of the firm's attributes and if one observes firms with more-diverse boards performing better than firms with nondiverse boards are, then the performance differential is either due to random variation (which, as noted earlier, becomes less important as the experiment's sample size grows) or is driven by the presence of the diverse board itself.

This experimental approach is used regularly to test the safety and efficacy of pharmaceuticals and vaccines and in developing other products. In these settings, there are few concerns about whether an observed effect is causal. Unfortunately, it is often impractical to implement this approach for economic policies and regulations. Equal protection constraints and practical considerations limit the extent to which governments can engage in this kind of experimentation in the real world. Lab experiments are sometimes used to examine how mixed-sex groups affect business decision-making,[19] but their artificial settings limit their external validity in extrapolating the results to infer how gender diversity might affect board decision-making in real-world settings with real-world stakes. For example, the stakes involved in the lab experiments are small, and the short duration of the team decision periods may obscure what would happen over longer periods as the decision makers grow more comfortable with each other.

Instead, modern empirical work focuses on quasi-experimental approaches, which mimic the randomization of the lab but in naturalistic settings. Since these are real decision-making settings with real-life stakes, the external validity concerns diminish. In the board diversity literature, there are two main quasi-experimental approaches that have been used to varying degrees of success. For reference when I later describe the studies, I briefly explain their intuition.

The first approach in some of the papers the Nasdaq proposal relied on is a so-called instrumental variables technique.[20] The idea behind instrumental variables is that one finds an instrument (or multiple instruments) that is correlated with the policy variable of interest (in the current case, board diversity) but is otherwise uncorrelated with anything else related to the outcome variable. The first of these conditions allows one to model the policy variable with regression techniques, exploiting that the instrument is highly related to the policy variable. Because, by assumption, this instrument is otherwise unrelated to the outcome variable, it (as distinct from the policy variable) will not be correlated with any of the unobservable characteristics we worried about above. In practice, the researcher first regresses the policy variable on the instrument (and any other control variables), yielding a model that can be used to predict the policy variable. This prediction of the policy variable is then used in the regression to model the outcome variable (e.g., firm performance). Since the instrument is uncorrelated with the firm's unobservable characteristics, the predicted policy variable (as distinct from the actual policy variable) will likewise be uncorrelated with the unobservable characteristics. Thus, the estimated relationship between the predicted policy variable and the outcome variable will not suffer from omitted variable bias and, therefore, can be interpreted causally.

Although the instrumental variables approach works in theory, practice is a different matter. For starters, the researcher must find a suitable instrument. This instrument needs to strongly correlate with the policy variable being studied, and it must otherwise be unrelated to the outcome variable being examined. The first requirement is testable. Unfortunately, the second criterion is not.[21] At best, the researcher provides an intuitive argument for why he or she believes the instrument is not otherwise related to the outcome variable (except through its effect on the policy variable). If someone can intuit why the instrument is not unrelated to the outcome (or even if he or she cannot, but a reason nonetheless exists), then the instrumental variables analysis should be viewed skeptically. For it to be credible, there should be strong intuitions for both why the instrument is strongly correlated with the policy variable of interest and why the instrument is not otherwise related to the outcome variable being studied. In practice, these intuitions are rarely strong enough to be compelling.

The second approach, not often used in the Nasdaq-cited studies but regularly used in other relevant papers, is more promising. This approach exploits natural experiments. That is, the researcher leverages some outside change in the world that is not initiated (or maybe not even expected) by those affected by it that imposes a change in the policy variable on some firms but not others, as if by random chance. In the current context, the most commonly used natural experiment is the passage of legislation affecting firms in a given jurisdiction as the treatment group, using firms outside the jurisdiction as the control or counterfactual comparison group. Sometimes, these natural experiments might even create within-jurisdiction treatment and control groups through policy exemptions (e.g., a size threshold) or because some firms already inadvertently complied with the rule (e.g., a policy requiring a certain number of women on a board will not affect companies that already have that many women on their boards).

When evaluating these natural experiments, it is important to focus on whether the imposition of the policy shock was random and whether the control group is a suitable counterfactual comparison. Unfortunately, here, too, no diagnostic tests are available to ensure these requirements are satisfied. Intuitively, the more unexpected and less targeted the policy shock is, the more credible the research design and the estimates arising from it are. Likewise, the more comparable the treatment and control groups are, the more confidence one has in the study's findings.

In the finance context, event studies are a common form of a natural experiment.[22] In the standard event study, the event is the policy shock, and the analyst compares how the stock return of a firm (or portfolio of firms) differs relative to what would be expected had the event not occurred. The expectation is estimated using a regression of the firm's returns on various variables (usually including a measure of the overall market return) in the period before the event. This predicted event day (or period) return is netted out of the actual return on the event day, generating the estimate of the event's effect (often called an abnormal or excess return). A similar procedure is used on comparison firms (that are not affected by the event) to rule out the possibility that something other than the event being studied generated the event day effect. In the current context, these event studies could be used to examine the market's reaction to proposed diversity mandates, providing a "wisdom of crowds"–type estimate of the likely effect of increased diversity on corporate boards.

Event studies could be used to examine the market's reaction to proposed diversity mandates, providing a "wisdom of crowds"–type estimate of the likely effect of increased diversity on corporate boards.

While I have simplified this primer for a nontechnical audience, it conveys the main intuitions that can be used to assess empirical analyses of how diverse boards affect firm performance. Conceptually, the closer an analysis is to an apples-to-apples comparison, the more reliable it is. If a study finds that firms having more-diverse boards leads to improved outcomes, then the relevant question is whether diversity actually drives the outcomes in a but-for sense. That is, in the counterfactual world in which the firms did not have diverse boards, would their outcomes be different? Because it is not possible to observe the counterfactual world, it is necessary to rely on comparisons with firms that do not have diverse boards. However, if those nondiverse firms differ along other dimensions, the comparison will not be informative. Omitted variable bias could lead the observed difference to over- or understate the true effect of board diversity on performance. Worse, it is impossible to know even the direction of the true relationship between board diversity and the outcomes being studied, much less the magnitude of the relationship.

To combat this bias, it is tempting to believe that one can adjust for the other differences across firms by either matching firms with diverse boards with similar counterparts whose boards are less diverse or using more-sophisticated regression techniques. However, it is not generally possible to know all the relevant differences. Beyond that, many of the relevant dimensions will not be quantifiable.

In what follows, I examine the studies the Nasdaq proposal relied on and other informative studies ignored in the proposal, categorizing them by how they attempt to address these issues of causal inference. In the first grouping, I look at the studies that make no attempt to address these problems. I do not spend much time on this set since it is wholly unreliable and provides no guidance on how board diversity affects firm outcomes. Next, I cover the studies that attempt to control or adjust for differences across firms. Given the discussion above, these studies are just as unreliable as are those that do nothing to ensure comparability between firms with and without diverse boards. Lastly, I examine the studies that attempt to use some quasi-experimental approach. Because these studies offer the most-credible approaches and, potentially, the most-reliable estimates of the causal effect of board diversity on firm performance, I examine them in detail. With the benefit of this literature review, I then offer general conclusions about the likely effects of the proposed Nasdaq board diversity mandate.

Studies with Merely Descriptive Comparisons

As discussed above, comparisons of firm outcomes based only on differences in board diversity metrics without adjustments for other differences across firms are not informative. Board diversity might differ coincidentally with many firm attributes that also affect firm outcomes. It is reasonable to suspect that diversity differs by industry, firm age, state of incorporation, and other firm characteristics that also affect market returns, accounting profits, sales, research and development, and almost everything else one might care to examine as a company outcome. In such a situation, while it may appear that outcomes vary systematically with board diversity, it is just as likely that the relationship is driven by these other variables that are unaccounted for. Any estimated difference will be subject to statistical bias.

As discussed above, the Nasdaq proposal relies on the FCLTGlobal report,[23] which accounts for no differences across firms beyond the diversity of their boards. If board diversity is not randomly distributed across industries (or any other firm characteristic), any difference related to diversity could be driven by these other characteristics. Further, the report provides no test of statistical significance of the reported board diversity effects. This omission is especially notable given that the report mentions a lack of statistical significance with its results regarding firm performance and board member tenure length.[24] It also mentions a lack of a statistically significant relationship between firm returns and whether the firm CEO was a board member.[25]

The MSCI study cited in the Nasdaq proposal[26] indicates that firms with at least three female board members experience gains in return on equity and earnings per share, while firms with no women on their boards saw losses in both metrics.[27] It does not attempt to adjust for any firm characteristics and admits that its small sample size should lead a reader to treat the results with caution.[28] These issues render the study's results wholly unreliable.

The Catalyst report that the Nasdaq proposal relied on proposes that having a sustained large female contingent (three or more board members for at least four of five years) is related to large increases in return on sales, invested capital, and equity.[29] This analysis makes no adjustments across firms, and, rather than examine the overall effect of female board participation, it compares firms with zero women on their boards to firms with three or more women on their boards. As stated earlier, throwing out such variation has little justification and indicates either a lack of statistical sophistication or potentially purposeful data mining.

Studies with Basic Controls

The Nasdaq proposal cites a 2020 report from the Carlyle Group[30] that indicates that companies in its portfolios with two or more female or minority group directors outperform companies with only one such director, which, in turn, outperform companies with no female or minority directors, controlling for "industry, fund, and vintage year."[31] Unfortunately, the report provides no details on these estimates, nor does it indicate whether these performance differentials are statistically significant. There is no basis to judge these estimates' reliability, even if one were willing to believe that the only variables important to adjust for are industry, fund, and firm age, which would be a largely unjustified assumption.

The McKinsey authors admit that the relationships observed are correlational, not causal, but they then discuss their results as if the performance metrics they examine can be tied to their board diversity indicators.

The McKinsey report likewise attempts to use a handful of controls such as firm nationality and a broad-based industry grouping. As noted above, the McKinsey authors admit that the relationships observed are correlational, not causal, but they then discuss their results as if the performance metrics they examine can be tied to their board diversity indicators. Their analysis has numerous oddities. First, rather than looking at the whole continuous relationship between their diversity indicator and firm performance, they repeatedly simply compare firms in the lowest quartile of diversity with firms in the highest quartile, as if intermediate levels of diversity provide no relevant information. Perhaps intermediate levels of diversity are much more beneficial (or maybe harmful), but it is not possible to know based on the McKinsey analysis.

In an equally odd way, rather than looking at diversity's effect on performance in general, the outcome they study is the likelihood a firm's performance exceeds its nation's industry average. Throwing out variation could obscure important limitations in their findings. For example, if firms with low diversity are trivially below the average and firms with high diversity are trivially above the average, the proper conclusion would be that diversity does not appear to have an effect, even if there is a statistically significant effect on whether a firm is above or below the average. How this analysis is presented makes it is impossible to rule out such a case.[32]

When the McKinsey report does look at a continuous outcome in Exhibit 3, in which EBIT is related to board diversity for the US and Canada, there is no statistically significant relationship between either gender or ethnic diversity of the corporate board and firm performance. This is surprising since the US sample is the largest one examined, which makes it the most reliable of the regions studied. (For the US and Canada, 186 companies were examined, while just 107 UK and 73 Latin American companies were studied.) If there were a robust relationship between board diversity and outcomes, one would have expected to observe it in the US and Canada sample. At best, this suggests that the McKinsey evidence most relevant to US firms does not establish a basis for mandating diverse boards and, at worse, that the statistically significant correlations elsewhere are spurious.

Credit Suisse's gender report cited in the Nasdaq proposal[33] suggests a positive relationship between firm performance and the presence of a woman on a firm's board, adjusting for the firm's sector.[34] The differentials noted in the report (e.g., the 12.2 percent return on equity for firms with at least one female board member vs. the 10.1 percent return for firms with no female directors), however, do not indicate whether they are statistically significant.[35] As with other studies in this section, the Credit Suisse report makes no effort to isolate causality in these relationships.

Studies That Attempt to Isolate Causation

The Nasdaq proposal frequently cites David A. Carter, Betty J. Simkins, and W. Gary Simpson's study for the proposition that there is a positive relationship between firm value and the presence of women or minorities on a firm's board.[36] Superficially, this study attempts to control for many differences across firms, including differences in total firm size and board size. Of course, since it is never possible to be sure one has made all the necessary adjustments, the authors note that something more is necessary.

> While board diversity could affect firm value, firm value could also affect board diversity. If this is the case, estimation of Equation (1) using OLS [ordinary least squares] can produce biased coefficient esti mates. To control for the possibility of endogeneity, we estimate the following system of equations using 2SLS.[37]

Endogeneity is a particular form of the omitted variable bias, and 2SLS is an implementation of the instrumental variables analysis discussed above. However, in implementing 2SLS, the authors do not even attempt to include the necessary instrument. Their Table 4 results illustrate this, as the only variables included in their diversity prediction that are not also included in their firm value equation are the log of the average age of the board (which, by the argument presented in the FCLTGlobal report, directly affects firm value and so is not unrelated to the outcome variable here), an indicator for whether there is a minority board member (in the female diversity model), and an indicator for whether there is a female board member (in the minority diversity model). Without getting into intuitive arguments about whether an instrument is good, if female board members affect firm value, then a variable capturing that cannot serve as a good instrument for the presence of minority board members and vice versa. That is, even by the logic of the authors' own estimation strategies, their instruments are bad, and therefore their results are not credible.

The Gennaro Bernile, Vineet Bhagwat, and Scott Yonker paper[38] cited in the Nasdaq proposal[39] that indicates board diversity improves many firm outcomes is potentially more credible. It also uses an instrumental variables strategy to account for omitted variable bias. Specifically, the authors use a metric of the diversity of potential directors (defined as people who are serving or have served as directors) who live more than 150 miles from their firms' headquarters but who live near an airport with a nonstop flight to an airport near their headquarters. The intuition is that people agree to be on boards only if it is convenient to participate, which will be a function of transportation ease. If the relevant pool of director candidates who can easily travel to the firm is more diverse, the firm will more successfully attract diverse board members. The data bear this out. The authors find a strong relationship between this pool variable and the diversity of the firms' boards. Through the instrumental variables technique, they show that diversity is associated with many positive firm outcomes.

While this instrument is clever, it does raise concerns. First, even if one assumes arguendo that the empirical strategy is valid, it does not say diverse board members lead to improved outcomes in general. It indicates that diverse candidates who have already served on boards can improve firm outcomes. While this distinction might appear slight, it does make a difference in the context of policies that mandate many firms all chase the existing pool of female and minority board members simultaneously. This research says nothing about how adding female and minority individuals affects a board when such individuals have no previous experience. Second, and more importantly, if firms' outcomes are influenced by factors in their local communities (e.g., agglomeration effects or shared labor markets) and if, all other things being equal, more dynamic and vibrant places attract more transportation linkages because more people want to be there, then the authors' instrument is necessarily capturing effects related to firm outcomes independent of the board member accessibility issue they focus on. If this or anything similar is occurring, then the authors' instrument is no good, and the estimates are not reliable.

In an alternative instrumental variables specification provided in an online appendix,[40] the authors use an instrument that captures average board diversity of a firm's competitors (defined as being a similar size and in the same industry) on the assumption that firms may learn from each other about the benefits of diversity. A first problem with this strategy is that, if a firm's performance is affected by competitors' performance and the existence of a more-diverse board (as is the conclusion of the paper), then, by definition, this instrument is no good. That is, more-diverse boards among competitors both change outcomes in the industry (affecting the firm in that industry) and the firm's likelihood of having a diverse board. Again, the results would be unreliable in this case. A second problem, as discussed above, is that if multiple instruments are available, they could be used simultaneously to allow for calculating the test of overidentifying restrictions, which would provide at least a weak diagnostic of whether the instruments were good. The authors not providing this diagnostic test is a red flag.

If one is skeptical of the authors' instrumental variables strategy but does not wish to throw out the research entirely on this basis, it would be more conservative to examine the authors' regular OLS regression results, which are uniformly much smaller in magnitude, often by a factor of 20 or 30. This suggests a questionable estimation strategy primarily drives the authors' results.

Carter et al.[41] use a fixed effects model to attempt to estimate a causal effect of board diversity on firm performance. A fixed effects model attempts to absorb all fixed unobservable aspects of a firm by including separate baselines for each firm (the so-called fixed effects). This approach works if all relevant unobservable characteristics are fixed or constant at the firm level. If the unobservable characteristics are changing in a way that is constant across firms in a given period, separate period effects will account for these changes. However, if the unobservable characteristics are changing differentially across firms, the omitted variable bias problem is still present.

The assumption that current performance is unrelated to previous performance defies belief.

The authors also attempt a simultaneous equations model (a variant of the instrumental variables technique) to further guard against omitted variable problems. However, as in the earlier Carter, Simkins, and Simpson paper, this approach has problems. Specifically, the authors use lagged outcome variables as their instruments. As with any instrument, if the lagged outcome is related to the current outcome, these instruments will be no good. The assumption that current performance is unrelated to previous performance defies belief. Given the implausibility of the assumptions of Carter et al., their finding that board diversity does not have a statistically significant effect on firm outcomes is not credible.

For similar reasons, Kevin Campbell and Antonio Mínguez-Vera's use of fixed effects models to examine how board diversity affects firm value in a Spanish sample is not credible.[42] As stated before, for the fixed effects model to avoid omitted variable bias, one must assume that either the unobservable heterogeneity across firms is constant or, to the extent it changes, it changes for all firms similarly over time. The authors also attempt an instrumental variables technique, but their instruments are not plausible. For example, one of their instruments is the size of the board of directors. If board size has any effect on firm performance, then their instrumental variables approach does not work. Thus, their mixed conclusions[43] about how women affect boards and other metrics of board diversity are not credible.

One of the better papers cited by the Nasdaq proposal, by Renée B. Adams and Daniel Ferreira, uses both fixed effects and a potentially more plausible instrument in the instrumental variables analysis.[44] The authors instrument the fraction of the firm's board composed of women with a measure of how many female connections male board members have for other boards they sit on. The idea is that knowing more female board members allows women to engage in more networking, leading to an increased likelihood of being on a firm's board. This instrument could be subjected to the concern raised with Bernile, Bhagwat, and Yonker's secondary instrument. Namely, if a competitor's performance affects the firm's performance and if more women on a board affect the competitor's performance, then the instrument would not be unrelated to the outcome being studied. However, Adams and Ferreira do not restrict attention to connections to women made through competitors' boards, so any concern of this type might be mitigated. This represents a reasonable strategy. While Adams and Ferreira show that increasing female board membership improves board attendance by all board members and improves other monitoring metrics, the ultimate effect on firm value appears detrimental, sometimes to a statistically significant degree.

Bin Srinidhi, Ferdinand A. Gul, and Judy Tsui use an instrumental variables technique (specifically a Heckman selection model) to examine how female directors affect the transparency or quality of a firm's earnings data, focusing on accruals estimation errors by the firm and indicators of manipulation or excessive management of earnings announcements.[45] As cited in the Nasdaq proposal, they find that female participation on a firm's board improves the indicators of earnings data quality.[46] As with much of this literature, the authors do little to discuss or justify why their identification strategy supposedly works. Most of the variables in the first stage of the analysis are explicitly related to firm performance and attributes.[47] Clearly, these variables can directly affect the outcome variable and therefore cannot serve as good instruments for identification purposes. The only plausible candidate is the inclusion of the percentage of women employed in the firm's industry. However, since women are not randomly distributed across industries and since firms in an industry likely mimic each other in many things related to earnings, earnings management, and earnings reporting (e.g., using the same outside auditor[48]), this candidate instrument also is likely related to the outcome variables examined in the paper. As I have repeatedly noted, this concern undercuts the reliability of the paper's empirical conclusions.

Of necessity, matching can be carried out using only observable characteristics, since it is impossible to know whether the firms are similar on unobserved dimensions.

María Consuelo Pucheta-Martínez, Immaculada Bel-Oms, and Gustau Olcina-Sempere's paper also looks at transparency metrics (specifically, measures of audit report quality).[49] Although the authors find that their measures of female board participation are associated with better audit quality metrics in Spanish data, they make no attempt to account for unobservable characteristics, merely controlling for observable firm characteristics. This leaves no confidence that their results represent causal effects.

Similarly, the Nasdaq proposal cites[50] Francisco Bravo and Maria Dolores Alcaide-Ruiz's finding that, although female participation on a firm's audit committee does not affect a firm's propensity to disclose forward-looking financial information, having women with financial expertise on the committee improves this propensity.[51] Once again, however, this analysis does nothing to account for omitted variable bias and lacks credibility.

Lawrence J. Abbott, Susan Parker, and Theresa J. Presley find that firms with at least one female director are less likely to issue financial restatements than firms with no women on their board are.[52] Their attempt to isolate causality involves matching each firm with a female board member with a comparable firm from the same industry (similar size, type of audit firm used, etc.) with no women on the board. Matching approaches such as this are similar to regression techniques but allow for a type of nonlinear modeling of the effect of the match or control variables. However, of necessity, matching can be carried out using only observable characteristics, since it is impossible to know whether the firms are similar on unobserved dimensions. Thus, generally, matching does not address omitted variable bias.

Aida Sijamic Wahid's article[53] also attempts to examine the transparency of firms with female representation on their boards by examining financial reporting mistakes and fraud indicators. The article uses instrumental variables techniques to isolate causality and finds that firms with women on their boards engage in less fraud and make fewer reporting mistakes. In addition to the instrumental variables approach, the article uses fixed effects models, though it never combines the fixed effects and instrumental variables approach, which would be the most rigorous approach. Wahid's instruments for female participation are the female population around the firm's headquarters and the longitude measurement at the firm's headquarters. While the first instrument has an intuitive explanation—namely, firms located where there are more women may find it easier to solicit female board members—the longitude instrument is not intuitive and smacks of data mining (i.e., opportunistically searching for an instrument that provides particular results). Because neither instrument is likely to vary much (or at all for longitude) at the firm level from year to year, it becomes obvious why Wahid does not estimate the instrumental variables regressions with fixed effects. That is, with no variation, estimation becomes impossible. Because of this, however, any firm characteristics related to a firm's location (e.g., more-talented CEOs may prefer to live in certain locations) will cause the instruments to fail, leaving the estimates without credibility.

Using Chinese firms, Douglas Cumming, T. Y. Leung, and Oliver Rui examine how gender diversity affects the likelihood that a firm engages in fraud.[54] They find that firms with a higher fraction of women on the board engage in less fraud, although the effects are smaller (and sometimes not statistically significant) in female-dominated industries. In an attempt to determine causality, their paper uses an instrumental variables technique but proceeds to use firm characteristics, including characteristics of the firm's chairperson and general manager, board, and ownership structure. Obviously, all these characteristics can directly affect the likelihood of fraud (e.g., one of the characteristics used is frequency of board meetings, which should help monitor fraud) and so provide no confidence in a causal interpretation. The paper also discusses that one would find similar results with other forms of diversity,[55] but since the authors do not study this, it is pure speculation.

Gul, Srinidhi, and Anthony C. Ng's 2011 paper also examines the informativeness of firms with greater female representation on boards.[56] It concludes that firms with more female representation on their boards have more informative stock prices, as measured by idiosyncratic volatility and "future earnings incremental explanatory power."[57] While this paper uses longitudinal data, it does not estimate fixed effects models for its regressions even though that would account for more unobservable characteristics of the firms studied. In addition to this bias point, because fixed effects absorb much of the variation in the data, many of the paper's borderline statistically significant effects (if not the others) would likely no longer be statistically significant (e.g., regressions 9, 10, and 12 in Table 4). It is puzzling why the authors did not examine the more standard (and credible) fixed effects regression specification given there appear to be no data limitations in doing so.

The paper does exploit a potentially interesting natural experiment involving Norwegian legislation that required firms to have more female directors. After examining how many additional female directors 75 Norwegian firms added between 2005 and 2009, the authors report that idiosyncratic volatility increased as more female directors were added and the effect was statistically significant. Once again, the authors choose not to examine the fixed effects model, which would be more credible. Further, they artificially focus only on Norwegian firms, when they could have easily used non-Norwegian firms in a more standard natural experiment framework wherein non-Norwegian firms serve as the comparison or control group. Such an analysis would be more informative and reliable.

Although ignored in the Nasdaq proposal, a 2019 paper by Philip Yang et al. offers a more thorough examination of the Norwegian experience.[58] It uses the natural experiment in Norway to compare the performance of Norwegian firms with a control group of firms in other Scandinavian countries. Paying close attention to whether the conditions for a natural experiment are met, the authors find that the regulation requiring more women on Norwegian boards led to worse firm performance and greater firm risk. These results are consistent with the findings of Kenneth R. Ahern and Amy K. Dittmar, who found that firms that were more affected by the Norwegian regulation (i.e., had to appoint more women) suffered statistically significant declines in stock price, firm value, and other measures of operating performance and exhibited greater risk after the adoption of the mandate.[59]

David A. Matsa and Amalia R. Miller provide additional support,[60] comparing Norwegian firms to firms in other Scandinavian countries and private Norwegian companies that were not subject to the rule. This variation allows the authors to rule out any possibility that a nonregulation-related event in Norway may have been affecting firms subjected to the regulation. Across many specifications, Matsa and Miller find robust evidence that the regulation led to declining profits and the effect was statistically significant. This decline was not observed among the unaffected Norwegian private firms nor among the unaffected firms from other countries.

Given this evidence of the bad effects of the Norwegian mandate, it is not surprising that Øyvind Bøhren and Siv Staubo found that about half of Norwegian firms that were going to be affected by the mandate changed their status (i.e., went private) to avoid the regulation.[61] In a more recent working paper, B. Espen Eckbo, Knut Nygaard, and Karin S. Thorburn make different modeling choices (e.g., looking at different time windows and examining the effect of heterogeneity) and find results that are more aligned with the conclusion that the Norwegian mandate did not affect stock returns or other measures of firm value in a statistically significant way.[62]

Taking these findings on transparency and informativeness, David Abad et al. examine information asymmetries via bid-ask spreads, the idea being that, if firms are more transparent, there is less concern of trading by relatively better-informed insiders.[63] When outsiders worry about information deficits, markets become less liquid, leading to larger bid-ask spreads. Analyzing Spanish data, the authors find that firms with better female representation on boards exhibit smaller bid-ask spreads, again suggesting that such firms are more transparent. The authors use a generalized method of moments (GMM) estimation technique to account for omitted variable bias. GMM is a variant of instrumental variables and requires good instruments. As is common in GMM approaches, the authors use lagged or differenced versions of their model's variables as instruments and (distinct from the other papers reviewed here) appropriately report the diagnostic test of overidentifying restrictions, which indicates the instruments are good.

However, as discussed in the empirical primer, this diagnostic test "works" only if one believes the various instruments are not subject to similar omitted variable effects. For example, if one believes the model's variables lags (i.e., the observation from the prior period) are subject to similar random shocks (or something related), the instruments will pass the diagnostic test but still not work as instruments that surmount the omitted variable bias. If there is unexplained persistence in the instruments that could be related to unobservable characteristics that also affect the outcome variable, the GMM approach does not solve the bias concern.

The Nasdaq proposal clearly cherry-picks studies based on whether they claim to find positive outcomes associated with an increase in female representation on boards and a smattering of articles looking at other kinds of diversity.

The same concern undercuts the conclusions of Maria Encarnación Lucas-Pérez et al., who relate female participation on boards with better controls on executive pay using a similar GMM approach with lagged variables as the instruments.[64] Unless one is willing to assume a firm's past characteristics are unrelated to the outcome variables, GMM's use of lagged variables as instruments does not overcome the omitted variable bias problem.

Meta-Analyses

The studies cited in the Nasdaq proposal are clearly not an exhaustive review of the literature, nor are they a random sampling. The Nasdaq proposal clearly cherry-picks studies based on whether they claim to find positive outcomes associated with an increase in female representation on boards and a smattering of articles looking at other kinds of diversity. As discussed above, the proposal also cannot claim to focus on methodologically sound studies, given the generally poor quality of the studies invoked.

Many other studies in the literature find no effect, or even a negative effect, from increased board diversity. For example, Kathleen A. Farrell and Philip L. Hersch find a negative, though statistically insignificant, effect of appointing a new female board member on firms' stock returns.[65] Interestingly, this paper also clearly demonstrates that adding a female board member is well predicted by firm outcomes. That is, better-performing firms are more likely to add a woman when a new board seat becomes available. This highlights the omitted variable concern raised above, suggesting that any study failing to account for the endogeneity of female board representation is destined to yield noncredible results.

In another example, Caspar Rose finds a negative (though statistically insignificant) relationship between female board representation and firm value in Danish data.[66] However, this is not done well because it, too, does not account for omitted variable bias. The methods are not substantially different from those used in many of the Nasdaq-cited studies described above. Even using Danish data cannot be cited as the reason for exclusion, given Nasdaq's repeated use of studies with international data (e.g., multiple studies cited use Spanish data).

One is left with the distinct impression that the proposal's statement "**Nasdaq reviewed dozens of empirical studies and found that an extensive body of academic research demonstrates that diverse boards are positively associated with improved corporate governance and financial performance**"[67] (emphasis in original) is not altogether accurate, since clearly Nasdaq ignored evidence that did not support (or even contradicted) its proposal. The review of the evidence on how women affect corporate boards by noted feminist scholar Deborah Rhode and Amanda K. Packel provides an interesting contrast: "After exploring the strengths and limitations of various methodological approaches and survey findings, [we conclude] that the relationship between diversity and financial performance has not been convincingly established."[68]

For a more comprehensive, aggregate view of the literature, one can examine what meta-analyses of the articles find. Meta-analyses attempt to define the literature according to certain criteria and then use the empirical findings as a dataset, providing average results across papers and sometimes providing what are essentially regression analyses of the other papers' regression results to see what factors appear to influence the findings in general. Meta-analyses are not without flaws, and there are reasonable grounds for criticisms. Choosing what articles constitute a literature can be arbitrary, though the better meta-analyses lay out specific criteria and document how they searched for articles that fit. A more substantive concern involves treating studies of widely differing methodological quality comparably (with each study counting as an equal data point). However, meta-analyses can provide a useful and somewhat more objective summary of a literature. Meta-analyses can also sometimes be used to identify publication biases, such as the tendency of journals to accept only articles with statistically significant or ideologically attractive results.

The Nasdaq proposal cites a few meta-analyses but does not appear to internalize the message that many of them suggest a different story from its selective review of the literature. For example, an analysis by Jan Luca Pletzer et al. of 20 studies finds that the average effect estimated by the studies regarding female participation on boards and firm performance is small and statistically insignificant.[69] Corrine Post and Kris Byron's 2015 meta-analysis of 140 studies (45 using US data) found that, on average, there was a small, positive, and highly variable (perhaps providing evidence of model mis-specification concerns) relationship between female board participation and accounting measure-based returns. But there was no relationship, on average, between female board members and market returns.[70] The authors also present a meta-analysis of the relationship between women on boards and the likelihood a firm engages in stakeholder facing, or so-called socially responsible business practices, finding a positive relationship on average.[71]

The mixed relationship, at best, between female board participation and firm outcomes that results from a less selective analysis of the literature contrasts with the overwhelmingly positive picture painted in the Nasdaq proposal. Alice H. Eagly chastises the ideologically motivated cherry-picking that seems to infect documents such as the Nasdaq proposal, writing, “Despite advocates’ insistence that women on boards enhance corporate performance and that diversity of task groups enhances their performance, research findings are mixed, and repeated meta-analyses have yielded average correlational findings that are null or extremely small.”[72]

Wishful Thinking

A more complete and nuanced view of the literature on female participation on corporate boards suggests that the literature provides no strong evidentiary basis for requiring firms to increase female participation. The papers purporting to find large gains to increasing gender diversity suffer from crippling methodological flaws. It is clear from the data that firms do not randomly decide to appoint women. Many performance-related characteristics predict whether a firm fills an open board seat with a woman. This requires an empirical researcher to take the omitted variable bias question seriously. Many of the attempts in the literature to use instrumental variables techniques to overcome selection and endogeneity problems are not well-thought-out. In some cases, the papers try to implement instrumental variables without using any instruments; in other cases, the papers use instruments that their own analyses suggest directly affect the outcome variable being studied. Therefore, they are invalid instruments.

Perhaps the better way forward is examining the handful of natural experiments that exist, such as the Norwegian experience. As discussed, the papers that do the most–methodologically sophisticated analyses of this experience, such as by Ahern and Dittmar and Matsa and Miller, demonstrate that the mandate worsened firm performance and value and that the effects are statistically significant and economically large. At best, Eckbo and Nygaard’s results indicate the Norwegian experiment had no systematic effect on firm performance. Further, Bøhren and Staubo’s analysis indicates firms are willing to make organizational changes rather than be forced to alter their boards. If this experience can be generalized to the United States, one might predict that mandates such as the Nasdaq proposal or California’s board diversity regulations will lead firms to switch exchanges or the location of their headquarters or go private. Organic growth in the numbers of women and people from other underrepresented groups likely is the best approach to achieving more-diverse corporate boards.

About the Author

Jonathan Klick is a professor of law at the University of Pennsylvania and the Erasmus Chair of Empirical Legal Studies at the Erasmus University Rotterdam. He has held visiting positions at Yale Law School, Columbia Law School, Northwestern Pritzker School of Law, and the University of Southern California Gould School of Law. He was the Jeffrey A. Stoops Professor of Law and Economics at Florida State University.

Notes

1. Kosmas Papadopoulos, "U.S. Board Diversity Trends in 2019," Institutional Shareholder Services, ISS Analytics, May 31, 2019, 4, https://www.issgovernance.com/file/publications/ISS US Board Diversity Trends 2019.pdf.

2. Papadopoulos, "U.S. Board Diversity Trends in 2019," 3.

3. Papadopoulos, "U.S. Board Diversity Trends in 2019," 4.

4 S.B. 826, 2017 18, Reg. Sess. (CA 2018), https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill id=201720180SB826; and A.B. 979, 2019 20, Reg. Sess. (CA 2020), https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill id=201920200AB979.

5. Nasdaq Stock Market LLC, "Proposed Rule Change to Adopt Listing Rules Related to Board Diversity" (Form 19b 4), Decem ber 1, 2020, https://listingcenter.nasdaq.com/assets/RuleBook/Nasdaq/filings/SR NASDAQ 2020 081.pdf.

6. S.B. 826, 2017 18, Reg. Sess. (CA 2018), § 1.

7. See Nasdaq Stock Market LLC, "Proposed Rule Change to Adopt Listing Rules Related to Board Diversity," 16.

8. Nasdaq Stock Market LLC, "Proposed Rule Change to Adopt Listing Rules Related to Board Diversity," 17.

9. FCLTGlobal, *The Long Term Habits of a Highly Effective Corporate Board*, March 29, 2019, 11, https://www.fcltglobal.org/resource/the long term habits of a highly effective corporate board/.

10. FCLTGlobal, *The Long Term Habits of a Highly Effective Corporate Board*, 12.

11. Fidelity Investments, "Sectors & Industries Performance," https://eresearch.fidelity.com/eresearch/markets sectors/sectors/si performance.jhtml?tab=siperformance.

12. See, for example, Adrienne Roberts, "Driving? The Kids Are So Over It," *Wall Street Journal*, April 20, 2019, https://www.wsj.com/articles/driving the kids are so over it 11555732810.

13. In the standard case of ordinary least squares regression, the parameters or coefficients for the control variables are chosen to minimize the sum of the squared errors, in which the errors are calculated as the difference between the regression's prediction and the actual outcome for each observation. By squaring the errors, the regression treats positive and negative errors of the same magni tude equivalently.

14. Under reasonable assumptions, it will be possible to engage in hypothesis testing in which a researcher can ask what the likeli hood is that he or she would observe the estimated relationship between board diversity and the studied outcome if, in reality, the rela tionship is zero. If this likelihood is low (conventionally, less than 5 percent), the researcher will conclude that the estimated difference is statistically significant; that is, the difference is too large to be explained by random variation alone. Alternatively, the researcher might provide an estimate of how unlikely it is that one would observe an estimated effect as large or larger in magnitude than the study's finding is, if the "true" effect were zero. This estimate of unlikeliness is referred to as a *p* value. Many of the results relied on in the Nasdaq proposal do not provide a *p* value or even statements about the statistical significance of their findings. These omissions make it impossible to know whether the reported outcome differences between diverse and nondiverse firms are anything but random noise.

15. Nasdaq Stock Market LLC, "Proposed Rule Change to Adopt Listing Rules Related to Board Diversity," 17.

16. Vivian Hunt, Dennis Layton, and Sara Prince, *Diversity Matters*, McKinsey & Company, February 2, 2015, 1, https://www.mckinsey.com/~/media/mckinsey/business%20functions/organization/our%20insights/why%20diversity%20matters/diversity%20matters.ashx.

17. Hunt, Layton, and Prince, *Diversity Matters*, 1.

18. For a more technical discussion of the details in this section, see Jonah B. Gelbach and Jonathan Klick, "Empirical Law and Eco nomics," in *The Oxford Handbook of Law and Economics, Volume I: Methodology and Concepts*, ed. Francesco Parisi (Oxford, UK: Oxford University Press, 2017).

19. See, for example, Vicki L. Bogan, David R. Just, and Chekitan S. Dev, "Team Gender Diversity and Investment Decision Making Behavior," *Review of Behavioral Finance* 5, no. 2 (February 2013): 134 52, https://www.researchgate.net/publication/228204293 Team Gender Diversity and Investment Decision Making Behavior. The authors show that increasing gender diversity in teams has

mixed effects on risk taking behavior.

20. For a technical discussion of instrumental variables, see Jeffrey M. Wooldridge, *Introductory Econometrics: A Modern Approach*, 4th ed. (Mason, OH: South Western Cengage Learning, 2009), chap. 15.

21. In principle, if one can identify many instruments, a test for overidentifying restrictions exists. The intuition for the test assumes that at least one of the instruments satisfies both conditions (related to the policy variable and otherwise unrelated to the outcome variable). The test examines the estimates from using each instrument separately and in each combination and then examines whether all the estimates are statistically equivalent. The idea is that, if one has found the "right" answer and all the instruments are good instruments, each should lead to the same outcome. If different outcomes are estimated, then at least one of the instruments (and maybe all) is bad. The problem, however, is that, if all the instruments are similarly correlated with the unobservable characteristics (a condition that cannot be tested since it is not possible to examine a correlation with an unobserved quantity), they will all lead to the same biased estimate, passing the test without validating the estimates.

22. For a relatively thorough but accessible overview of event studies, see Jill E. Fisch, Jonah B. Gelbach, and Jonathan Klick, "The Logic and Limits of Event Studies in Securities Fraud Litigation," *Texas Law Review* 96, no. 3 (February 2018): 553 618, https://texaslawreview.org/logic limits event studies securities fraud litigation/.

23. FCLTGlobal, *The Long Term Habits of a Highly Effective Corporate Board*, 11.

24. FCLTGlobal, *The Long Term Habits of a Highly Effective Corporate Board*, 12.

25. FCLTGlobal, *The Long Term Habits of a Highly Effective Corporate Board*, 10.

26. Nasdaq Stock Market LLC, "Proposed Rule Change to Adopt Listing Rules Related to Board Diversity," 18.

27. Meggin Thwing Eastman, Damion Rallis, and Gaia Mazzucchelli, *The Tipping Point: Women on Boards and Financial Perfor mance*, MSCI, December 2016, https://www.msci.com/documents/%2010199/fd1f8228 cc07 4789 acee 3f9ed97ee8bb.

28. Thwing Eastman, Rallis, and Mazzucchelli, *The Tipping Point*, 7.

29. Harvey M. Wagner and Nancy M. Carter, "The Bottom Line: Corporate Performance and Women's Representation on Boards (2004 2008)," Catalyst, March 1, 2011, https://www.catalyst.org/research/the bottom line corporate performance and womens representation on boards 2004 2008/.

30. Nasdaq Stock Market LLC, "Proposed Rule Change to Adopt Listing Rules Related to Board Diversity," 16, 144.

31. Jason M. Thomas and Megan Starr, *From Impact Investing to Investing for Impact*, Carlyle Group, February 24, 2020, 5, https://www.carlyle.com/global insights/invest with impact whitepaper thomas starr.

32. Hunt, Layton, and Prince, *Diversity Matters*, Exhibits 1 and 2. Similar criticisms apply to the updated analyses presented in Sun diatu Dixon Fyle et al., *Diversity Wins: How Inclusion Matters*, McKinsey & Company, May 19, 2020, 13, https://www.mckinsey.com/featured insights/diversity and inclusion/diversity wins how inclusion matters.

33. See, for example, Nasdaq Stock Market LLC, "Proposed Rule Change to Adopt Listing Rules Related to Board Diversity," 18.

34. Julia Dawson, Richard Kersley, and Stefano Natella, *The CS Gender 3000: Women in Senior Management*, Credit Suisse, Septem ber 2014.

35. Dawson, Kersley, and Natella, *The CS Gender 3000*, 16.

36. See, for example, Nasdaq Stock Market LLC, "Proposed Rule Change to Adopt Listing Rules Related to Board Diversity," 17.

37. David A. Carter, Betty J. Simkins, and W. Gary Simpson, "Corporate Governance, Board Diversity, and Firm Value," *Financial Review* 38, no. 1 (February 2003): 43, https://onlinelibrary.wiley.com/doi/10.1111/1540 6288.00034.

38. Note the paper cited is the working paper, which has since been published as Gennaro Bernile, Vineet Bhagwat, and Scott Yonker, "Board Diversity, Firm Risk, and Corporate Policies," *Journal of Financial Economics* 127, no. 3 (March 2018): 588 612, https://www.sciencedirect.com/science/article/abs/pii/S0304405X17303215.

39. See Nasdaq Stock Market LLC, "Proposed Rule Change to Adopt Listing Rules Related to Board Diversity," 17 18.

40. Gennaro Bernile, Vineet Bhagwat, and Scott Yonker, "Internet Appendix to 'Board Diversity, Firm Risk, and Corporate Policies,'" *Journal of Financial Economics* 127, no. 3 (March 2018), http://jfe.rochester.edu/Bernile Bhagwat Yonker app.pdf.

41. David A. Carter et al., "The Gender and Ethnic Diversity of US Boards and Board Committees and Firm Financial Performance," *Corporate Governance: An International Review* 18, no. 5 (September 2010): 396 414, https://onlinelibrary.wiley.com/doi/abs/

10.1111/j.1467 8683.2010.00809.x.

42. Kevin Campbell and Antonio Mínguez Vera, "Gender Diversity in the Boardroom and Firm Financial Performance," *Journal of Business Ethics* 83, no. 3 (December 2008): 435 51, https://link.springer.com/article/10.1007/s10551 007 9630 y.

43. The Nasdaq proposal cites the study's conclusion that "at a minimum . . . increased gender diversity can be achieved without destroying shareholder value," but given the methodological flaws, even this conclusion is too strong. Nasdaq Stock Market LLC, "Pro posed Rule Change to Adopt Listing Rules Related to Board Diversity," 148.

44. Renée B. Adams and Daniel Ferreira, "Women in the Boardroom and Their Impact on Governance and Performance," *Journal of Financial Economics* 94, no. 2 (November 2009): 291 309, https://personal.lse.ac.uk/ferreird/gender.pdf.

45. Bin Srinidhi, Ferdinand A. Gul, and Judy Tsui, "Female Directors and Earnings Quality," *Contemporary Accounting Research* 28, no. 5 (December 2011): 1610 44, https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1911 3846.2011.01071.x.

46. Nasdaq Stock Market LLC, "Proposed Rule Change to Adopt Listing Rules Related to Board Diversity," 151.

47. See Srinidhi, Gul, and Tsui, "Female Directors and Earnings Quality," 1617.

48. See, for example, Ahsan Habib, "Audit Firm Industry Specialization and Audit Outcomes: Insights from Academic Literature," *Research in Accounting Regulation* 23, no. 2 (October 2011): 114 29, https://www.sciencedirect.com/science/article/abs/pii/S1052045711000373.

49. María Consuelo Pucheta Martínez, Inmaculada Bel Oms, and Gustau Olcina Sempere, "Corporate Governance, Female Direc tors and Quality of Financial Information," *Business Ethics: A European Review* 25, no. 4 (October 2016): 363 85, https://papers.ssrn.com/sol3/papers.cfm?abstract id=2836230.

50. Among other places, see Nasdaq Stock Market LLC, "Proposed Rule Change to Adopt Listing Rules Related to Board Diversity," 25.

51. Francisco Bravo and Maria Dolores Alcaide Ruiz, "The Disclosure of Financial Forward Looking Information: Does the Financial Expertise of Female Directors Make a Difference?," *Gender in Management* 34, no. 2 (March 2019): 140 56, https://www.researchgate.net/publication/331744002 The disclosure of financial forward looking information Does the financial expertise of female directors make a difference.

52. Lawrence J. Abbott, Susan Parker, and Theresa J. Presley, "Female Board Presence and the Likelihood of Financial Restatement," *Accounting Horizons* 26, no. 4 (December 2012): 607 29, https://www.researchgate.net/publication/274429063 Female Board Presence and the Likelihood of Financial Restatement.

53. Aida Sijamic Wahid, "The Effects and the Mechanisms of Board Gender Diversity: Evidence from Financial Manipulation," *Jour nal of Business Ethics* 159, no. 3 (October 2019): 705 25, https://link.springer.com/article/10.1007/s10551 018 3785 6.

54. Douglas Cumming, T. Y. Leung, and Oliver Rui, "Gender Diversity and Securities Fraud," *Academy of Management Journal* 58, no. 5 (October 2015): 1572 93, https://journals.aom.org/doi/abs/10.5465/amj.2013.0750.

55. Nasdaq Stock Market LLC, "Proposed Rule Change to Adopt Listing Rules Related to Board Diversity," 154.

56. Ferdinand A. Gul, Bin Srinidhi, and Anthony C. Ng, "Does Board Gender Diversity Improve the Informativeness of Stock Prices?," *Journal of Accounting and Economics* 51, no. 3 (April 2011): 314 38, https://www.sciencedirect.com/science/article/abs/pii/S0165410111000176.

57. Essentially, this measures how much of an improvement one gets in the R squared of a firm's returns when future earnings terms are added to the regression. Gul, Srinidhi, and Ng, "Does Board Gender Diversity Improve the Informativeness of Stock Prices?"

58. Philip Yang et al., "Women Directors, Firm Performance, and Firm Risk: A Causal Perspective," *Leadership Quarterly* 30, no. 5 (October 2019), https://www.sciencedirect.com/science/article/pii/S1048984318303217.

59. Kenneth R. Ahern and Amy K. Dittmar, "The Changing of the Boards: The Impact on Firm Valuation of Mandated Female Board Representation," *Quarterly Journal of Economics* 127, no. 1 (February 2012): 137 97, https://papers.ssrn.com/sol3/papers.cfm?abstract id=1364470.

60. David A. Matsa and Amalia R. Miller, "A Female Style in Corporate Leadership? Evidence from Quotas," *American Economic Jour nal: Applied Economics* 5, no. 3 (July 2013): 136 69, https://www.aeaweb.org/articles?id=10.1257/app.5.3.136. https://papers.ssrn.com/sol3/papers.cfm?abstract id=1636047.

61. Øyvind Bøhren and Siv Staubo, "Does Mandatory Gender Balance Work? Changing Organizational Form to Avoid Board Upheaval," *Journal of Corporate Finance* 28 (October 2014): 152 68, https://www.sciencedirect.com/science/article/abs/pii/S0929119913001302.

62. B. Espen Eckbo, Knut Nygaard, and Karin S. Thorburn, "Valuation Effects of Norway's Board Gender Quota Law Revisited," *Management Science* (forthcoming), https://papers.ssrn.com/sol3/papers.cfm?abstract id=2746786.

63. David Abad et al., "Does Gender Diversity on Corporate Boards Reduce Information Asymmetry in Equity Markets?," *BRQ Busi ness Research Quarterly* 20, no. 3 (July September 2017): 192 205, https://www.sciencedirect.com/science/article/pii/S2340943617300142.

64. Maria Encarnación Lucas Pérez et al., "Women on the Board and Managers' Pay: Evidence from Spain," *Journal of Business Ethics* 129, no. 2 (June 2015): 265 80, https://link.springer.com/article/10.1007/s10551 014 2148 1.

65. Kathleen A. Farrell and Philip L. Hersch, "Additions to Corporate Boards: The Effect of Gender," *Journal of Corporate Finance* 11, nos. 1 2 (March 2005): 85 106, https://www.sciencedirect.com/science/article/abs/pii/S0929119904000264.

66. Caspar Rose, "Does Female Board Representation Influence Firm Performance? The Danish Evidence," *Corporate Governance: An International Review* 15, no. 2 (March 2007): 404 13, https://papers.ssrn.com/sol3/papers.cfm?abstract id=972533.

67. Nasdaq Stock Market LLC, "Proposed Rule Change to Adopt Listing Rules Related to Board Diversity," 9.

68. Deborah L. Rhode and Amanda K. Packel, "Diversity on Corporate Boards: How Much Difference Does Difference Make?," *Dela ware Journal of Corporate Law* 39, no. 2 (2014): 377 426, https://law.stanford.edu/publications/diversity on corporate boards how much difference does difference make 2/.

69. Jan Luca Pletzer et al., "Does Gender Matter? Female Representation on Corporate Boards and Firm Financial Performance A Meta Analysis," *PLOS ONE* 10, no. 6 (2015), https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0130005.

70. Corinne Post and Kris Byron, "Women on Boards and Firm Financial Performance: A Meta Analysis," *Academy of Management Journal* 58, no. 5 (October 2015): 1546 71, https://journals.aom.org/doi/10.5465/amj.2013.0319.

71. Kris Byron and Corinne Post, "Women on Boards of Directors and Corporate Social Performance: A Meta Analysis," *Corporate Governance: An International Review* 24, no. 4 (July 2016): 428 42, https://onlinelibrary.wiley.com/doi/10.1111/corg.12165.

72. Alice H. Eagly, "When Passionate Advocates Meet Research on Diversity, Does the Honest Broker Stand a Chance?," *Journal of Social Issues* 72, no. 1 (March 2016): 199, https://spssi.onlinelibrary.wiley.com/doi/abs/10.1111/josi.12163.

EXHIBIT
B

<u>**AFFIDAVIT OF JAMES R. COPLAND**</u>

1. My name is James R. Copland. I am over the age of 18 and am competent to make this declaration.

2. The facts set forth in this declaration are based on my personal knowledge and expertise and are submitted in my individual capacity.

3. I am a senior fellow at the Manhattan Institute and the Institute's director of Legal Policy. I received my J.D. and M.B.A. from Yale University, my M.Sc. from the London School of Economics, and my B.A. from the University of North Carolina at Chapel Hill.

4. I serve as a director and vice chairman of a privately held for-profit corporation and as a director of multiple nonprofit boards. I have previously served on many private-company, public and nonprofit boards. I also previously worked as a management consultant with McKinsey and Company and served as a law clerk to Hon. Ralph K. Winter on the U.S. Court of Appeals for the Second Circuit.

5. I have testified before Congress as well as state and municipal legislatures.

6. I am the author of *The Unelected: How an Unaccountable Elite Is Governing America* (Encounter 2020). I am also the author of many policy briefs, book chapters, articles, and opinion pieces in a variety of publications, including the *Harvard Business Law Review* and *Yale Journal on Regulation*.

7. In 2011 and 2012, I was named to the National Association of Corporate Directors "Directorship 100" list, which designates the individuals most influential over U.S. corporate governance.

8. A true and correct copy of my curriculum vitae, detailing my educational and professional experience, is attached to this declaration.

9. I understand that Nasdaq seeks the Securities and Exchange Commission's (SEC's) approval of proposed listing rule 5605(f), known as the diversity rule.

10. I understand that this proposed diversity rule would require Nasdaq-listed companies to have (A) "at least one director who self-identifies as female," and (B) "at least one director who self-identifies as Black or African American, Hispanic or Latinx, Asian, Native American or Alaska Native, two or more races or ethnicities, or as LGBTQ+." In the alternative, I understand Nasdaq would require listed companies to publicly "explain" in writing why

they do not comply with either or both diverse director requirements. Firms that fail to comply or explain after a warning would be delisted from the exchange.

11. As a director, management consultant, and academic, I have significant expertise in management, corporate communications, corporate law, and corporate litigation risk.

12. In my expert opinion, the diversity rule will likely result in increased director compensation costs, director liability insurance costs, and a one-time director "search cost" loss for firms and investors.

13. Compliance with the diversity rule will likely result in increased reputational and legal risks for firms because the proposed rule relies on highly arbitrary and subjective minority classifications that create opportunities for negative media coverage and an increased risk of misrepresentation lawsuits or government investigations.

14. For example, I cannot say for certain who will qualify as a "member of the queer community." This classification might mean anyone who is not heterosexual, or it might mean heterosexuals who associate frequently with or identify as allies of gay individuals.

15. This subjectivity might trigger lawsuits alleging misrepresentations about the minority status of members of a firm's board of directors.

16. For example, a firm may communicate that a director is Native American based on the self-identification of that individual director. But in doing so, a firm may incur legal risks should that director's self-identification be challenged as false by investors or regulators because the director lacks a "tribal affiliation" or "community recognition" needed to qualify under Nasdaq's definition.

17. As another example, a firm may communicate that a director is "black" based on the director's self-identification. But in doing so, the firm may include legal risks should that director's self-identification be challenged as false by investors or regulators if the director happens to have "origins in . . . North Africa" and is therefore "White" under Nasdaq's definition.

18. Compliance with the diversity rule would also increase the liability risk for some firms under federal or state non-discrimination laws, which generally prohibit making employment decisions based on race and often prohibit

making employment decisions based on other protected categories like sex and sexual orientation.

19. In order to avoid the legal risks of publicly classifying persons by sex, race, or sexual orientation, some firms may be compelled to explain their decision not to comply.

20. In my expert opinion, firms that opt to publicly explain their reasons for non-compliance with Nasdaq's diversity rule will be subject to an increased risk of reputational harm.

21. Negative news coverage and diversity activist campaigns highlighting a firm's statement of non-compliance with the diversity rule could impair a firm's reputation with its customer base or investors and result in a higher cost of capital, reduced profitability, and lower share prices, even if such effects might be mitigated in the long run.

22. Firms that publicly explain their reasons for non-compliance will also incur significant legal risk. Such public explanation statements may attract legal investigations or shareholder lawsuits alleging material misrepresentations or omissions.

23. A statement explaining a firm's reasons for non-compliance may also expose a firm to enforcement risks from state regulators. For example, the New York Martin Act only requires a plausible allegation that an exchange listed firm made (1) a misrepresentation or omission; (2) that is material. Under such open-ended standards, it is probable that exchange-listed firms may trigger state enforcement investigations or lawsuits based on statements explaining reasons for non-compliance with the diversity rule.

24. Indeed, shareholder lawsuits regarding corporate misrepresentations in statements about diversity have already been brought against firms such as Gap, Oracle, Facebook, Micron, Monster, and Qualcomm. A firm that makes a statement about its non-compliance with Nasdaq's proposed diversity rule is likely to face an increased risk of similar shareholder lawsuits.

25. The explanation, in effect, functions as a penalty for non-compliance with the diversity rule.

26. Given these serious risks, I believe the proposed rule is a double-edged sword requiring that firms discriminate based on sex, race, or sexual orientation in hiring directors, or else assume a serious risk of reputational and litigation harms.

27. Given these risks, the diversity rule pushes prudent directors and managers to spend more limited resources on corporate communications consultants and lawyers to assess and mitigate the costs, and the reputational and legal risks, of a firm's attempt to comply with the diversity rule or provide a public explanation for non-compliance.

28. I declare that the foregoing is a true and correct statement of my expert opinion and judgment.

Executed on: 9/5, 2021

James R. Copland

JAMES R. COPLAND IV

CURRENT POSITION

Manhattan Institute for Policy Research New York, NY
Director, Legal Policy 2003-Present
Senior Fellow 2010-Present

- Manage legal policy efforts for non-partisan 501(c)(3) think tank.
  - Legal policy efforts center on developing and communicating sound ideas for reforming America's civil and criminal justice systems.
  - Portfolio of projects and initiatives has included empirical analyses, policy development, and popular communications.
- Engage in written research and advocacy, as both an author and editor.
  - Have authored scores of policy white papers, book chapters, and articles in law journals.
  - Have edited papers written by leaders in the academy and private practice.
  - Have written more than 100 popular opinion pieces leading national periodicals including *The Wall Street Journal*, *The Washington Post*, *National Law Journal*, and *USA Today*.
- Speak regularly to specialized and popular audiences on legal-reform issues.
  - Have testified before both houses of Congress, state and municipal legislative bodies, and international government bodies.
  - Have been consulted by the U.S. Sentencing Commission, the Administrative Conference of the United States, and the Executive Office of the President.
  - Have made hundreds of media appearances in such outlets as PBS, Fox News, MSNBC, CNBC, Fox Business, Bloomberg, C-Span, and NPR.

Author: The Unelected: How an Unaccountable Elite Is Governing America (Encounter Books, 2020)

- "Copland argues persuasively . . . that quite a lot of our governance comes from people we didn't vote for, and whom we cannot vote out to hold them accountable for misrule."
  —Dan McLaughlin, *National Review*
- "The clearest and most succinct summary of these complicated subjects that I have ever seen."
  —Mark Pulliam, *Law and Liberty*
- "A masterful history."
  —Philip K. Howard, author, *The Death of Common Sense*; founder, Common Good
- "Valuable reading for anyone committed to a republican form of government."
  —Leonard Leo, Co-Chairman, Federalist Society for Law and Public Policy Studies
- "Ideas we should be discussing to get on a better path."
  —Thomas J. Donohue, Chief Executive Officer, U.S. Chamber of Commerce
- "Copland's insightful historical and legal analysis is a necessary precondition to any institutional solution."
  — Richard A. Epstein, Laurence A. Tisch Professor of Law, NYU Law School
- "Jim Copland knows more about this subject than almost anyone—and after you read this book, you will too."
  —Walter K. Olson, author, *The Litigation Explosion*; senior fellow, Cato Institute

Awards

Directorship 100: Published by the National Association of Corporate Directors, designating the individuals most influential over U.S. corporate governance (multiple occasions).

Legal Reform Champion: Research: Awarded by the U.S. Chamber of Commerce Institute for Legal Reform, for *Trial Lawyers, Inc.* series of publications on civil litigation in America.

PRIOR POSITIONS

McKinsey and Company — New York, NY
Associate — 2000-2002

- Worked on post-merger management for major pharmaceutical companies and banks and on high-net-worth client strategy for financial institutions.
- Assisted on development of McKinsey's internal electronic research platform.
- Assisted McKinsey's internal asset manager on firm's private and public equity portfolio.

United States Court of Appeals for the Second Circuit — New York, NY
Law Clerk, Chief Judge Ralph K. Winter — 1999-2000

Chase Securities, Inc. — New York, NY
Summer Associate, Investment Banking — Summer 1998

Moore & Van Allen — Charlotte, NC
Summer Associate, Corporate Law — Summer 1997

Robinson, Bradshaw & Hinson — Charlotte, NC
Summer Associate, Law — Summer 1997

EDUCATION

Yale University — New Haven, CT
Juris Doctor — 2003
Master of Business Administration — 1999

Awards: John M. Olin Fellow in Law and Economics
Coker Fellow in Constitutional Law
Leadership: Yale Federalist Society, Vice President
Yale Journal on Regulation, Articles Editor, Submissions Committee
Yale Skeet & Trap Team, Captain, ACUI AA American Skeet

London School of Economics and Political Science — London, UK
Master of Science in Politics of the World Economy — 1995

University of North Carolina at Chapel Hill — Chapel Hill, NC
Bachelor of Arts with Highest Distinction, Economics with Highest Honors — 1994

Awards: John Motley Morehead Scholar
National Merit Scholar
Honors Prize in Economics
Phi Beta Kappa
Leadership: Student Body President
Carolina Critic, Editor

BOARDS AND OTHER AFFILIATIONS

Tryon Palace Foundation, Director (2020-Present)
First Presbyterian Church (New Bern, NC), *Pastor Nominating Committee* (2020-Present)
African-American Heritage & Culture Center of New Bern, *Founding Director*, *Treasurer* (2019-Present)
Copland Fabrics, Inc. (Hopedale, NC), *Director* (1998-Present), *Vice Chairman* (2018-Present)
Government Justice Center (Albany, NY), *Director* (2018-Present)
Epiphany School of Global Studies (New Bern, NC), *Trustee* (2019-2020)
Copland Industries, Inc. (Hopedale, NC), *Director* (1997-2019), *Vice Chairman* (2018-2019)
Union Church of Pocantico Hills (Sleepy Hollow, NY), *Trustee* (2014-2019), *President* (2015-2016)
Fifth Avenue Presbyterian Church (New York, NY), *Elder* (2006-2009)
University of North Carolina at Chapel Hill (Chapel Hill, NC), *Trustee* (1993-1994) (*ex officio*)

EXHIBIT
C

Summary of Studies Cited by Nasdaq in its Review of the Academic Research, 85 Fed. Reg. 80,472, 80,475-80 (Dec. 11, 2020)

						Diversity Trait Examined				
Study No.	Study Authors (Date) *see sheet for full citation	Peer Reviewed	Includes Statistical Significance Analysis	Includes Control Variable Analysis N none; B basic; C controls	Only Non-U.S. Companies	Gender	Race	Sexual Orientation	Only Combined Diversity Metric	Comment
1	Thomas & Starr, Carlyle Group (2019)	N	N	B	N	Y	Y	N	Y	Combined diversity metric includes female, Black, Hispanic and Asian directors, does not separate effects due to race, gender (p. 5, n. 19)
2	Babcock et al, FCLT Global (2019)	N	N	N	N	Y	N	N	N	Diversity metric includes age and gender (p. 11), separate analyses address age and gender (p. 12)
3	Hunt et al, McKinsey (2015)	N	Y	B	N	Y	Y	N	N	
4	D. Carter et al (2003)	Y	Y	C	N	Y	Y	N	N	
5	Bernile et al (2017)	Y	Y	C	N	Y	Y	N	Y	Composite diversity metric includes age, gender, ethnicity, financial expertise, number of directorships, educational background, does not separate effects due to race, gender (p. 10)
6	Kerlsley et al, Credit Suisse (2014)	N	N	B	N	Y	N	N	N	
7	Eastman et al, MCSI (2016)	N	N	N	N	Y	N	N	N	
8	N. Carter et al, Catalyst (2011)	N	Y	N	N	Y	N	N	N	
9	Credit Suisse ESG Research (2016)	N	N	N	N	N	N	Y	N	
10	Quorum (2019)	N	N	N	N	N	N	Y	N	Not a study
11	Hunt et al, McKinsey (2020)	N	Y	B	N	Y	Y	N	N	
12	Moody's Investors Service (2019)	N								Unable to access without subscription
13	Pletzer et al (2015)	Y	Y	C	N	Y	N	N	N	Meta-analysis
14	Eagly (2016)	Y	N	N	N	Y	N	N	N	Narrative summary of literature
15	Post and Byron (2015)	Y	Y	C	N	Y	N	N	N	Meta-analysis
16	Byron and Post (2016)	Y	Y	C	N	Y	N	N	N	Meta-analysis, but related to corporate social performance--not relevant
17	D. Carter et al (2010)	Y	Y	C	N	Y	Y	N	N	
18	Campbell & Minguez-Vera	Y	Y	C	Y	Y	N	N	N	Only Spanish companies
19	Adams & Ferreira	Y	Y	C	N	Y	N	N	N	
20	Srinidhi et al (2011)	Y	Y	C	N	Y	N	N	N	
21	Pucheta-Martinez et al (2016)	Y	Y	C	Y	Y	N	N	N	Only Spanish companies
22	Gull et al (2017)	Y	Y	C	Y	Y	N	N	N	Only French companies
23	Bravo & Alcaide-Ruiz (2019)	Y	Y	C	N	Y	N	N	N	
24	Abbott et al (2012)	Y	Y	C	N	Y	N	N	N	
25	Wahid (2019)	Y	Y	C	N	Y	N	N	N	
26	Cumming et al (2015)	Y	Y	C	Y	Y	N	N	N	Only Chinese companies
27	Chen et al (2016)	Y	Y	C	N	Y	N	N	N	
28	Gul et al (2011)	Y	Y	C	N	Y	N	N	N	
29	Abad et al (2017)	Y	Y	C	Y	Y	N	N	N	Only Spanish companies
30	Lucas-Perez et al (2014)	Y	Y	C	Y	Y	N	N	N	Only Spanish companies
31	Westphal et al (1995)	Y	Y	C	N	N	N	N	Y	Combined diversity metric includes educational background, functional background, insider status, age; does not include gender, race, or sexual orientation
32	Forbes & Milliken (1999)	Y	N	N	N	N	N	N	N	Not a study
33	Dallas (2002)	Y	N	N	N	Y	Y	N	N	Not a study
34	Dhir (2015)	N	N	N	Y	Y	N	N	N	Only Norwegian companies, qualitative study

1 Jason M. Thomas and Megan Starr From Impact Investing to Investing for Impact The Carlyle Group (Feb. 2019) https://www.carlyle.com/global-insights/invest-with-impact-whitepaper-thomas-starr
2 Ariel F. Babcock et al. The Long-term Habits of a Highly Effective Corporate Board FCLT Global (Mar. 2019) https://www.fcltglobal.org/resource/the-long-term-habits-of-a-highly-effective-corporate-board/
3 Vivian Hunt et. al Diversity Matters McKinsey & Company (Feb. 2015) https://www.mckinsey.com/business-functions/organization/our-insights/ /media/2497d4ae4b534ee89d929cc6e3aea485.ashx
4 David A. Carter et al. Corporate Governance Board Diversity and Firm Value 38 Fin. Rev. 33 (2003).
5 Gennaro Bernile et al. Board Diversity Firm Risk and Corporate Policies (Mar. 2017) https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2733394 (whitepaper not peer reviewed)
6 Richard Kerlsley et al. The CS Gender 3000: Women in Senior Management Credit Suisse (Sept. 2014) https://directwomen.org/sites/default/files/news-pdfs/9.pdf
7 Meggin Thwing Eastman et al. The Tipping Point: Women on Boards and Financial Performance MCSI (Dec. 2016) https://www.msci.com/documents/10199/fd1f8228-cc07-4789-acee-3f9ed97ee8bb
8 Nancy M. Carter and Harvey M. Wagner The Bottom Line: Corporate Performance and Women's Representation on Boards (2004-2008) Catalyst (2011) https://www.catalyst.org/wp-content/uploads/2019/01/the_bottom_line_corporate_performance_and_womens_representation_on_boards_2004-2008.pdf
9 LGBT: the value of diversity Credit Suisse ESG Research (Apr. 2016) https://research-doc.credit-suisse.com/docView?language=ENG&source=emfromsendlink&format=PDF&document_id=807075590&extdocid=807075590_1_eng_pdf&serialid=evu4wNcHexx7kusNLaZQphUkT9naxi1PvptZQvPjr1k%3d
10 Quorum Out Leadership's LGBT   Board Diversity and Disclosure Guidelines (2019) http://www.insurance.ca.gov/diversity/41-ISDGBD/GBDExternal/upload/Quorum-Template-Board-Diversity-Guidelines-2019-Mar.pdf
11 Vivian Hunt et al. Diversity Wins: How inclusion matters McKinsey & Company (May 2020) https://www.mckinsey.com/ /media/McKinsey/Featured%20Insights/Diversity%20and%20Inclusion/Diversity%20wins%20How%20inclusion%20matters/Diversity-wins-How-inclusion-matters-vF.pd
12 Moody's Investors Service Gender diversity is correlated with higher ratings but mandates pose short-term risk (Sept. 2019) https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBC_1184245
13 Jan Luca Pletzer et al. Does Gender Matter? Female Representation on Corporate Boards and Firm Financial Performance—A Meta-Analysis 10 PLOS ONE (2015) doi:10.1371/journal.pone.0130005
14 Alice H. Eagly When Passionate Advocates Meet Research on Diversity Does the Honest Broker Stand a Chance? 72 J. Social Issues 199 (2016) doi: 10.1111/josi.12163
15 Corinne Post and Kris Byron Women on Boards and Firm Financial Performance: A Meta-Analysis 58 Academy Of Management J. 1546 (2015) https://doi.org/10.5465/amj.2013.0319
16 Kris Byron and Corinne Post Women on Boards of Directors and Corporate Social Performance: A Meta-Analysis 24 Corp. Governance: An Int'l Rev. 428 (2016) https://doi.org/10.1111/corg.12165
17 David A. Carter et al. The Gender and Ethnic Diversity of US Boards and Board Committees and Firm Financial Performance 18 Corp. Governance 396 (2010) https://wedc-online.wildapricot.org/Resources/WEDC-Documents/Women%20On%20Board/Gender%20Diversity%20and%20Boards.pdf
18 Kevin Campbe l and Antonio Minguez-Vera Gender Diversity in the Boardroom and Financial Performance 83 J. Bus. Ethics 13 (2008) https://link.springer.com/article/10.1007/s10551-007-9630-y
19 Renee B. Adams and Daniel Ferreira Women in the boardroom and their impact on governance and performance 94 J. Fin. Econ. 291 (2009) https://doi.org/10.1016/j.jfineco.2008.10.007
20 Bin Srinidhi et al. Female Directors and Earnings Quality 28 Contemporary Accounting Research 1610 (2011)
21 Maria Consuelo Pucheta-Martinez et al. Corporate governance female directors and quality of financial information 25 Bus. Ethics: A European Rev. 363 (2016).
22 Ammar Gul et al. Beyond gender diversity: How specific attributes of female directors affect earnings management 50 British Acct. Rev. 255 (Sept. 2017)
23 Francisco Bravo and Maria Dolores Alcaide-Ruiz The disclosure of financial forward-looking information 34 Gender in Management 140 (2019)
24 Lawrence J. Abbott et al. Female Board Presence and the Likel hood of Financial Restatement 26 Accounting Horizons 607 (2012)
25 Aida Sijamic Wahid The Effects and the Mechanisms of Board Gender Diversity: Evidence from Financial Manipulation 159 J. Bus. Ethics 705 (2019) https://doi.org/10.1007/s10551-018-3785-6
26 Douglas J. Cumming et al. Gender Diversity and Securities Fraud 58 Academy of Management Journal 1572 (2015) http://dx.doi.org/10.5465/amj.2013.0750
27 Yu Chen et al. Board Gender Diversity and Internal Control Weaknesses 33 Advances in Acct. 11 (2016)
28 Ferdinand A. Gul et al. Does board gender diversity improve the informativeness of stock prices? 51 J. Acct. & Econ. 314 (2011)
29 David Abad et al. Does Gender Diversity on Corporate Boards Reduce Information Asymmetry in Equity Markets? 20 Business Research Quarterly 192 (2017)
30 Maria Encarnacion Lucas-Perez et al. Women on the Board and Managers' Pay: Evidence from Spain 129 J. Bus. Ethics 285 (2014)
31 James D. Westphal and Edward J. Zajac Who Shall Govern? CEO/Board Power Demographic Similarity and New Director Selection 40 Admin. Sci. Q. 60 (1995)
32 Daniel P Forbes and Frances J. Milliken Cognition and Corporate Governance: Understanding Boards of Directors as Strategic Decision-Making Groups 24 Academy of Management Review 489 (1999)
33 Lynne L. Dallas Does Corporate Law Protect the Interests of Shareholders and Other Stakeholders?: The New Managerialism and Diversity on Corporate Boards of Directors 76 Tul. L. Rev. 1363 (2002)
34 Aaron A. Dhir "Lessons from Norway: Successes and Limitations of the Quota Model " in CHALLENGING BOARDROOM HOMOGENEITY: CORPORATE LAW GOVERNANCE AND DIVERSITY (2015) Cambridge University Press https://doi.org/10.1017/CBO9781139053327 https://www.cambridge.org/core/books/cha lenging-boardroom-homogeneity/A26334F8F5B99AF2A40DF5C869906D69