The Market-Essential Role of Corporate Climate Disclosure

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This Article focuses on capital market efficiency as an often-downplayed legal rationale for mandating corporate climate disclosure, and explores it alongside the notion of investor demand, which has assumed a prominent and, increasingly, contested role in debates on climate disclosure. Because market efficiency (encompassing both securities price accuracy and overall capital market allocative efficiency) is generally unobservable, many commentators have instead emphasized the highly visible investor demand for climate-related disclosure as evidenced by shareholder proposals, voting behavior, stewardship policies, and public statements. Unfortunately, investor demand can be disputed, sometimes fairly but most often unfairly, because investor preferences are heterogeneous, dynamic, and difficult to aggregate. This Article argues that while investor demand can be a helpful datapoint, a proper and sufficient legal justification for mandating climate-related disclosure lies in the need to ensure that firms' securities prices accurately reflect relevant information, which, in turn, will help maintain the overall integrity of the capital markets. This argument is supported by the statutory text, legislative history, Securities and Exchange Commission ("SEC") rulemaking practice, and judicial doctrine. In short, the role of

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corporate climate disclosure is "market-essential" and need not hinge on evidence of investor demand.

The Article's analysis has implications for ongoing debates about regulatory efforts on corporate climate disclosure, including the propriety of the SEC's climate disclosure project, the viability of an "investor-optional" approach to disclosure, and objections based on "major questions" theories. Indeed, once it becomes clear that the SEC's disclosure rule is about basic market efficiency — and not about "regulating climate change" — such objections begin to fall away. More broadly, the Article also highlights the enduring importance of market efficiency as an objective justification for mandatory disclosure in an era of highly visible and sometimes controversial stewardship by asset managers and other investors.

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INTRODUCTION

Deep, liquid, and efficient capital markets have long been a central and vaunted feature of the U.S. economy. Politicians of all stripes consistently emphasize the global primacy of U.S. capital markets as well as their efficiency and importance for U.S. competitiveness and economic growth.[1] Key provisions of state corporate law and federal securities law hinge on market efficiency and provide more favorable treatment to firms whose securities trade in efficient markets.[2] Market efficiency is also part of the core mission of the Securities and Exchange Commission ("SEC"), a long-established agency with broad delegated authority under the securities laws.[3] Notably, market efficiency is closely linked to market transparency, with information often hailed as "the lifeblood of strong, vibrant markets."[4] Market transparency, in turn, has long been a product of the SEC's system for corporate disclosure, which one recent SEC chair described as "powerful, far reaching, dynamic and ever evolving."[5]

This Article is about the nexus between the all-important goal of market efficiency and the content of the SEC disclosure system in an area of undisputed economic and business significance: climate change. Climate change is a business risk and the transitions it necessitates have been

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[1] *See, e.g.*, Press Release, U.S. Dept. of the Treasury, Remarks by Treasury Secretary Henry M. Paulson (Nov. 20, 2006), https://bit.ly/40LqXK7 (noting that "[c]apital markets are the lifeblood of our economy" and that "[U.S.] capital markets are the deepest, most efficient, and most transparent in the world"); Press Release, U.S. Senate Comm. on Banking, Hous., & Urb. Affs., Prepared Remarks of Senator Dodd to the U.S. Chamber of Commerce "First Annual Capital Markets Summit: Securing America's Competitiveness" (Mar. 14, 2007), https://bit.ly/3n8s2hm ("[T]he U.S. capital markets remain the largest, most liquid, most innovative, most resilient, and most lucrative in the world."); Press Release, U.S. House Fin. Servs. Comm., McHenry Slams Gensler's Proposed Equity Market Structure Overhaul (Dec. 14, 2022), https://bit.ly/41LtuFE (noting that "[t]he U.S. has the most liquid and efficient capital markets in the world").

[2] *See infra* Part II.B.

[3] *See What We Do*, U.S. SEC. & EXCH. COMM'N, http://bit.ly/3x7yaIe (last visited Feb. 25, 2023) (describing SEC mission as "protecting investors, maintaining fair, orderly, and efficient markets, and facilitating capital formation").

[4] Arthur Levitt, Chairman, U.S. Sec. & Exch. Comm'n, Speech by SEC Chairman: Quality Information: The Lifeblood of Our Markets (Oct. 18, 1999), https://bit.ly/40P3VSy.

[5] Jay Clayton, Chairman, U.S. Sec. & Exch. Comm'n, Remarks at Meeting of the Investor Advisory Committee (Dec. 13, 2018), http://bit.ly/3wV4UnB.

compared in scale to the Industrial Revolution,[6] but the existing SEC disclosure regime still fails to elicit sufficient information about the effects of climate change on firms' operations, financial performance, and prospects, as well as about those firms' adaptive responses.[7] Irrespective of one's specific views on substantive governmental policy on climate change, these information gaps are a serious problem for the capital markets and for our market-based economy as a whole.

The SEC has now recognized this problem, even if many would have preferred it to act much sooner. In line with its longstanding philosophy of updating the disclosure system to reflect changing economic realities, in 2021, the agency sought preliminary public input on addressing some of the information gaps related to the effects of climate change on public companies.[8] Based on this input, in 2022, the SEC issued a rule proposal (the "rule" or "Proposal") that would require public companies to report detailed and standardized information about various climate-related matters.[9] These include: climate-related risks and their actual or likely material impacts on a firm's business, strategy, and outlook; governance of climate-related risks and relevant risk management processes; greenhouse gas emissions; certain climate-related financial statement metrics, and information about climate-related targets and goals, and transition plans, if any.[10] Since 2021, the SEC's project on corporate climate disclosure has generated an unprecedented level of engagement

[6] *See* Ben Geman & Andrew Freedman, *Climate Spending Is a Story of the Century*, AXIOS (Apr. 9, 2021), http://bit.ly/3PArEC6 (quoting U.S. government climate envoy John Kerry).

[7] *See, e.g.*, Emma Cox, *See Your Climate Blind Spots*, WORLD ECON. F. (May 25, 2022), https://bit.ly/40H5SSn (highlighting relevant evidence). Importantly, the economic effects of climate change and the need for economic adaptation do not depend on matters that may be subject to some controversy, including whether the environmental effects of climate change can be slowed or reversed, or the extent to which climate change is due to human activity. *See, e.g.*, Kevin Anderson & Jessica Jewell, *Debating the Bedrock of Climate-Change Mitigation Scenarios*, NATURE (Sept. 16, 2019), https://bit.ly/3BWxh80 (providing an overview of some of the debates and associated evidence).

[8] *See* Allison Lee, Comm'r, U.S. Sec. & Exch. Comm'n, Public Input Welcomed on Climate Change Disclosures (Mar. 15, 2021), https://bit.ly/3Vofm0T.

[9] *See SEC Proposes Rules to Enhance and Standardize Climate-Related Disclosures for Investors*, U.S. SEC. & EXCH. COMM'N (Mar. 21, 2022), http://bit.ly/3PMXpb4. I refer to "Proposal" when discussing specific aspects of the SEC's March 2022 proposal, and to "rule" when speaking broadly about general aspects of the SEC's March 2022 proposal that are likely to be featured in the SEC's final rule.

[10] *See* The Enhancement and Standardization of Climate-Related Disclosures for Investors, Securities Act Release No. 11,042, Exchange Act Release No. 94,478, 87 Fed. Reg. 21,334 (proposed Apr. 11, 2022) [hereinafter "Climate Disclosure Proposal"].

from investors, firms, industry associations, advisers, academics, NGOs, and other stakeholders.[11] The rule's opponents have developed a comprehensive and coordinated legal strategy relying on arguments that, upon close inspection, appear to misstate or misapply existing law and mischaracterize the SEC's initiative.[12] As of this writing, the SEC has stated that it plans to finalize the rule in 2023, and the SEC's critics have indicated that they plan to challenge the final rule in court.[13]

This Article focuses on the legal rationales for pursuing a mandatory corporate climate disclosure rule. The Article highlights the importance of climate disclosure to *market efficiency* and juxtaposes the market efficiency justification to justifications relating to *investor demand* (which are also legitimate but more vulnerable to attack). Because market efficiency is generally unobservable, many commentators have built the case for climate-related disclosure on the highly visible investor demand for disclosure as evidenced by shareholder proposals, voting behavior, stewardship policies, and public statements.[14] SEC leadership has also relied on the investor demand argument: for example, SEC Chair Gary Gensler's statement upon the Proposal's release noted that "investors with $130 trillion in assets under management have requested that companies disclose their climate risks."[15]

Evidence of investor demand is easy to muster, because a wide variety of investors do demand corporate climate disclosure, and such evidence is indeed compelling. Unfortunately, investor demand evidence is also easy to dispute, sometimes fairly but most often unfairly, because investor

[11] *See Comments for The Enhancement and Standardization of Climate-Related Disclosures for Investors*, U.S. SEC. & EXCH. COMM'N, https://bit.ly/3jolDfY (last visited Apr. 20, 2023).

[12] *See* George S. Georgiev, *The SEC's Climate Disclosure Rule: Critiquing the Critics*, 50 RUTGERS L. REC. 101, 105-06 (2022) [hereinafter *Critiquing the Critics*] (summarizing the organized campaign against the SEC rule and the various arguments employed by the rule's critics).

[13] *See* Declan Harty, *SEC's Gensler Weighs Scaling Back Climate Rule as Lawsuits Loom*, POLITICO (Feb. 4, 2023), http://bit.ly/3K1bzTL (discussing the SEC's plans and noting that "[l]awsuits are expected to challenge both the content of the rule itself and the SEC's authority to pursue it").

[14] *See, e.g.*, Steven M. Rothstein, *Analysis Shows that Investors Strongly Support the SEC's Proposed Climate Disclosure Rule*, CERES (Oct. 11, 2022), https://bit.ly/3HmSElM ("Investors have spoken—they are strongly in favor of the disclosure rule proposed by the [SEC] to require companies to disclose climate risk information, whether physical or transitional.").

[15] Gary Gensler, Chair, U.S. Sec. & Exch. Comm'n, Statement on Proposed Mandatory Climate Risk Disclosures (Mar. 21, 2022), http://bit.ly/3xcVOmu.

preferences are heterogeneous, dynamic, and difficult to aggregate. If the SEC's climate disclosure project is premised primarily on investor demand, undermining the investor demand argument can undermine the entire project, either by cancelling it, as some have argued,[16] or by transforming it into an "investor optional" rule — an approach advocated by Professor Scott Hirst.[17] The market efficiency justification, by contrast, is both more abstract and more objective, and does not lead to such negative consequences. As this Article shows, market efficiency is firmly grounded in the statutory text, legislative history, SEC rulemaking practice, and judicial doctrine. This Article is not an attack on the investor demand justification. Rather, this Article highlights the market-essential role of corporate climate disclosure and calls for emphasizing market efficiency *alongside* investor demand arguments.

The market efficiency justification focuses on disclosure's role in ensuring the accuracy of firms' stock and bond prices on the capital markets. Climate change and climate change adaptation can influence firms' prospects through novel risks (physical risk, transition risk, and competitive risk) and novel opportunities created by government programs, including the 2022 Inflation Reduction Act.[18] As a result, relevant information about these matters needs to be disclosed — independent of specific investor demand — so that it can be reflected in the market prices of firms' securities.

This Article proceeds in four Parts. Part I examines "investor demand" as a complicated rationale for climate disclosure and describes the role of investor demand in the SEC's disclosure rulemaking project. Part II highlights the role of disclosure in capital markets as supported by economic theory, the text of the securities law statutes, legislative history, judicial precedent, and the SEC rulemaking practice. Part III discusses the market impacts of the physical and transition risks and the competitive and regulatory dynamics stemming from climate change and adaptation. Part IV considers the implications of this analysis for ongoing debates on climate-related disclosure.

[16] *See* Letter from Lawrence A. Cunningham, Professor of L., George Washington Univ., Corresponding Author, on Behalf of Twenty-Two Professors of Law and Finance, to U.S. Sec. & Exch. Comm'n 3-5 (Apr. 25, 2022), https://bit.ly/3WGj8nx [hereinafter Cunningham Letter] (noting and critiquing the Climate Disclosure Proposal's citation patterns).

[17] *See* Scott Hirst, *Saving Climate Disclosure*, 28 STAN. J.L. BUS. & FIN. 91 (2023).

[18] Inflation Reduction Act of 2022, Pub. L. No. 117-169, 136 Stat. 1818.

I. THE NOTION OF "INVESTOR DEMAND" AND ITS USES BY THE SEC

What is the role of "investor demand" arguments in the context of climate disclosure? Is "investor demand" a necessary rationale for mandating disclosure, the wrong rationale for disclosure, or neither? To answer these questions, Part I.A examines two types of indicators of investor demand — investor pronouncements and investor voting behavior — and assesses their probative significance. This analysis explains the appeal of investor demand arguments as well as their limits; it also highlights the difficulties in interpreting investor demand and the potential for manipulation stemming from it. Part I.B inquires into the SEC's use of investor demand in its rulemaking on climate disclosure. This analysis calls into question the narrative that the SEC has used investor demand as a central "rationale" or "justification" for mandating climate disclosure and reveals that, instead, the SEC has referred to *evidence* of investor demand, alongside various other types of evidence, in supporting the traditional investor protection rationales for disclosure. Ultimately, the complexity of relying on investor demand discussed in this Part weighs in favor of supplementing investor demand arguments with arguments focusing on investor protection by way of market efficiency, as will be discussed in Part II.

A. Deconstructing "Investor Demand"

When it engages in disclosure rulemaking pursuant to the broad authority delegated to it by Congress, the SEC must make a number of determinations. These include whether a new and specific disclosure requirement is warranted, what type of information should be disclosed, what format the required disclosures should take, and how to strike an appropriate balance between the benefits and costs of a specific disclosure rule. As an expert agency, the SEC is equipped to make these determinations through the notice-and-comment process, but a basic fact of disclosure rulemaking is that it involves regulatory prediction about future outcomes and future benefits. In this context, investor demand provides a useful source of evidence because the SEC can reference the views of investors, who are the ultimate audience for disclosure. Investor demand, in other words, provides a level of *immediate legitimacy*: the regulator is responding to the feedback of the putative beneficiaries of the regulatory regime and does not appear to substitute its own judgment for the judgment of market professionals.

The disadvantages of investor demand arguments also stem from the close nexus between the demands of the beneficiaries of regulation and the actions of the regulator. The role of the SEC is to formulate an optimal regulatory framework using its expertise, not simply to do the bidding of a set of market participants (i.e., investors). This is particularly true given the high degree of investor heterogeneity and the fact that the costs of providing disclosure are borne not by investors but by public firms.[19] When the SEC's actions mirror too closely the demands of particular investors, the SEC could be accused of capture. Capture is unobservable and the suggestion of capture can be damaging even in the absence of actual evidence. Yet, there is no evidence of capture here, and the extensive literature analyzing the SEC as an administrative agency contains no suggestion that the SEC has been captured, or is susceptible to capture, by special interest groups representing stakeholders.[20]

In the instant case, investor demand for climate-related disclosure has been highly visible for years and has manifested itself through shareholder proposals, voting behavior, stewardship policies, and public statements.[21] Unfortunately, this evidence could be easy to distort. Consider two prominent indicators of investor demand:

Investor Pronouncements: Investors are a highly heterogeneous group.[22] The coalition supporting enhanced climate disclosure reporting is broad; it does include primarily large institutional investors and it also includes a small but vocal share of investors who consider non-financial matters in

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[19] More precisely, investors bear those costs only indirectly, and they do not bear them in proportion to the intensity with which they demand disclosure.

[20] *See, e.g.*, Stephen J. Choi & A.C. Pritchard, *Behavioral Economics and the SEC*, 56 STAN. L. REV. 1 (2003) (discussing behavioral biases within the SEC); James D. Cox & Randall S. Thomas, *Revolving Elites: The Unexplored Risk of Capturing the SEC*, 107 GEO. L.J. 845, 899 (2019) (concluding that "it is unlikely that many of the alleged rent-seeking behaviors . . . actually occur"). Moreover, were this to be an effort to "regulate climate change," there should be a strong interest in generating information about the biggest polluters. Increasingly, however, the biggest polluters are private firms, which are not covered by the SEC rule proposal. *See* George S. Georgiev, *The Breakdown of the Public–Private Divide in Securities Law: Causes, Consequences, and Reforms*, 18 N.Y.U. J.L. & BUS. 221, 284-86 (2021); *see also* George S. Georgiev, *Is "Public Company" Still a Viable Regulatory Category?*, 13 HARV. BUS. L. REV. 1 (2023) (discussing the regulatory wedges between public and private companies).

[21] *See, e.g.*, Jason Halper, Sara Bussiere & Timbre Shriver, *Investors and Regulators Turning up the Heat on Climate-Change Disclosures*, HARV. L. SCH. F. ON CORP. GOVERNANCE (Oct. 4, 2021), https://bit.ly/3NgCP3Q (summarizing relevant evidence).

[22] *See, e.g.*, Tom C.W. Lin, *Reasonable Investor(s)*, 95 B.U. L. REV. 461 (2015) (presenting a typology of heterogeneous investors); Iman Anabtawi, *Some Skepticism About Increasing Shareholder Power*, 53 UCLA L. REV. 561 (2006) (discussing heterogeneity in investor profiles and interests).

addition to financial ones.[23] The bulk of the demand for disclosure comes from mainstream financial investors, including BlackRock, State Street, Vanguard, CalPERS, and others who, in the aggregate, invest most Americans' savings.[24] These investors have expressly endorsed the Task Force on Climate-Related Financial Disclosures ("TCFD") framework upon which the SEC Proposal is based and have indicated how they use climate-related information in their investment decisions.[25] Nevertheless, the politicization of environmental, social, and governance ("ESG") has diminished the utility of investor support,[26] regardless of the identity of the investors expressing support. Unlike the statements and positions of specific investors, however, market efficiency cannot be politicized.

Investor Voting Behavior: An active shareholder proposal process has been a feature of U.S. corporate governance since the 1940s and it does enable shareholders to express an advisory view on certain matters. The shareholder proposal process is one of the closest things to a corporate referendum — but it is still far from it. This is an important point to bear in mind, since fluctuating investor support for climate-related shareholder proposals has been used as evidence to contradict the "investor demand" justification for disclosure.[27] This is a superficially intuitive but deeply flawed argument because of the numerous vagaries of the shareholder proposal process.

Why should we view data on shareholder proposals with suspicion? First, the shareholder proposals that come up for a shareholder vote at different companies and in different years are not standardized and vary

[23] *See, e.g.*, Cunningham Letter, *supra* note 16, at 3-5 (noting the Climate Disclosure Proposal's citation patterns).

[24] *See, e.g.*, GRAHAM STEELE, THE NEW MONEY TRUST: HOW LARGE MONEY MANAGERS CONTROL OUR ECONOMY AND WHAT WE CAN DO ABOUT IT (2020), https://bit.ly/3jrPyDR ("[T]he 'Big Three' asset management firms – Black Rock, Vanguard and State Street – manage over $15 trillion in combined global assets . . . .").

[25] *See* Halper et al., *supra* note 21; *see also* Letter from Sandra Boss, Senior Managing Dir., BlackRock, Paul Bodnar, Managing Dir., BlackRock & Elizabeth Kent, Managing Dir., BlackRock, to Vanessa Countryman, Secretary, U.S. Sec. & Exch. Comm'n (June 11, 2021), https://bit.ly/3jrGzT2 (emphasizing importance of climate-related disclosure to asset allocation and voting decisions).

[26] *See, e.g.*, Daniel F. C. Crowley & Robert G. Eccles, *Rescuing ESG from the Culture Wars*, HARV. BUS. REV. (Feb. 9, 2023), https://bit.ly/3VfBVqc (reporting on and then refuting claims that ESG has become "a mechanism investors are using to impose a 'woke' ideology on companies").

[27] *See, e.g.*, Cunningham Letter, *supra* note 16, at 7-12.

widely in their substance.[28] In some cases, the proposals are so different that the only thing they have in common is the word "climate" and, consequently, comparisons in terms of their level of shareholder support are inapt. Second, the fact that some proposals receive a low level of support says as much about the specifics of the proposal as they do about "investor demand": The barrier for making a proposal is low, so some ill-advised proposals invariably make it onto the shareholder ballot.[29] Third, in addition to not being consistent across firms, the sample of proposals that are voted on is also not representative of the matters that are of concern to investors. This is because many of the most viable proposals are settled: the company agrees to take the actions sought by the shareholder proposal and, in exchange, the proposal's proponents withdraw it. Settlements occur because they enable firms to soften popular proposals and also save firms the embarrassment of a voting outcome whereby a proposal was opposed by management but nevertheless received strong or majority support from shareholders.[30] As a result of these dynamics, the sample of proposals that are voted on is invariably skewed towards proposals that management views as ill-advised and less likely to receive investor support.

B. The Functions of Investor Demand in the SEC's Climate Disclosure Rulemaking

What functions does investor demand serve in the SEC's 2022 Proposal? Is it the primary justification for mandating disclosure, one of several justifications for mandating disclosure, or evidence in support of other justifications for mandating disclosure? These are important questions because several commentators have asserted that the SEC has overemphasized investor demand and that this represents a fatal flaw in the Proposal. Those hostile to the Proposal have argued that strong emphasis on investor demand is inappropriate given the ambiguities in

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[28] *See, e.g.*, Merel Spierings, *2023 Proxy Season Preview – Compromise and Conflict Ahead*, HARV. L. SCH. F. ON CORP. GOVERNANCE (Mar. 9, 2023), https://bit.ly/3ngmCRB (providing an analysis of recent shareholder proposals).

[29] *See generally* Sarah C. Haan, *Shareholder Proposal Settlements and the Private Ordering of Public Elections*, 126 YALE L.J. 262 (2016) (characterizing Rule 14a-8 eligibility requirements for shareholder proposals as "minimal").

[30] *See id.* at 297; *see also* Marc Treviño, June M. Hu & Joshua L. Levin, *2021 Proxy Season Review: Shareholder Proposals on Environmental Matters*, HARV. L. SCH. F. ON CORP. GOVERNANCE (Aug. 11, 2021), https://bit.ly/3z5TDU3 (observing that 70 of 115 environmental proposals were withdrawn in 2021 and that "major proponents rarely settled with companies unless the company committed to take actions towards the specified environmental goals or at least adopted their disclosure-based demand").

interpreting investor demand discussed in Part I.A above, and, consequently, have urged the SEC to abandon the climate disclosure project.[31] Even commentators sympathetic to the Proposal have criticized the SEC's emphasis on investor demand and have argued that it militates in favor of an *investor-optional* approach to disclosure, instead of a mandatory disclosure rule, as the only feasible way forward.[32] Though they differ on the underlying reasons, both of these camps appear to agree that the SEC's emphasis on investor demand is likely to doom the climate disclosure rule when it comes to judicial review.[33]

A close reading of the text of the Proposal points to a different reality. While the SEC does reference investor demand on a number of occasions, investor demand is not *the exclusive justification* for climate-related disclosure, or even a non-exclusive justification. Instead, indicators of investor demand are used as *evidence* in support of the two key *justifications* for mandatory climate disclosure: (1) to enable informed investment decisions, and (2) to enable informed voting decisions.[34] Put simply, it is not accurate to describe the Proposal as "resting squarely on the rationale of 'investor demand,'"[35] or even to say that "[t]he SEC and its proponents rely heavily on 'investor demand' as a way to invoke SEC authority based on investor protection."[36]

To be sure, the SEC could have been more precise in drafting the Proposal. Given the attractiveness of investor demand arguments, discussed in Part I.A above, the SEC may have mentioned investor demand too often.[37] But the context of the discussion matters: is investor demand a justification or is it evidence in support of other justifications? It is also worth remembering that any regulatory proposal of some complexity can be critiqued and improved and, indeed, that this is the very purpose of the public comment process in notice-and-comment rulemaking. Ultimately, one would need to look to the text of the adopting release that accompanies the SEC's final rule, which as of this writing is

[31] *See, e.g.*, Cunningham Letter, *supra* note 16 (criticizing the SEC proposal for not disclosing which investors it considered in evaluating "investor demand").

[32] *See* Hirst, *supra* note 17, at 140-52.

[33] *Id.*

[34] The SEC uses the phrase "investment or voting decisions" (or a substantially identical variant) more than 25 times throughout the proposal. *See* Climate Disclosure Proposal, *supra* note 10.

[35] Hirst, *supra* note 17, at 91.

[36] Cunningham Letter, *supra* note 16, at 2.

[37] The Proposing Release is said to refer to "investor demand" 54 times, which has been used as a point of criticism. *Id.* at 3.

not yet available, to determine whether the SEC has struck the right balance.

II. DISCLOSURE'S ROLE IN MARKETS: ECONOMIC AND LEGAL FOUNDATIONS

This Part provides an overview of disclosure's role in markets from theoretical and doctrinal perspectives. Part II.A focuses on the economic theories which support the policy case for mandatory disclosure in the interest of market efficiency. Part II.B discusses federal and state judicial doctrines premised on capital market efficiency. Part II.C elaborates on the statutory basis for SEC disclosure rulemaking. Part II.D discusses case law that supports a broad view of the SEC's authority over disclosure rulemaking. Part II.E highlights the SEC's disclosure rulemaking practice, with a focus on long-settled disclosure rules that were not specifically mandated by Congress and rules pertaining to environmental impacts.

A. Economic Theory

One of the primary benefits associated with mandatory disclosure relates to the improved accuracy of the prices of firms' securities. On a theoretical level, the more information that is incorporated into the price of a security, the more the price of such security correctly anticipates the future prospects of the company.[38] Investors benefit from this because the link between their investment and their expected return is strengthened, and their capital is allocated to the highest-valued user of capital. In addition, mandatory disclosure contributes to price accuracy by economizing on investor information costs. When disclosure is absent or lacking, it becomes more expensive or even impossible for investors to distinguish between high- and low-quality firms, which can lead to adverse selection problems and market unraveling.[39] Efficient stock prices are also important because they improve the effectiveness of the market for corporate control as a disciplining device on firm performance by

[38] *See* Merritt B. Fox, *Securities Disclosure in a Globalizing Market: Who Should Regulate Whom*, 95 MICH. L. REV. 2498, 2540 n.80 (1997); *see also* Merritt B. Fox, *Why Civil Liability for Disclosure Violations When Issuers Do Not Trade?*, 2009 WIS. L. REV. 297, 312 (concluding that "[m]ore disclosure makes share prices more accurate").

[39] *See* Ronald J. Gilson & Reinier H. Kraakman, *The Mechanisms of Market Efficiency*, 70 VA. L. REV. 549, 637-39 (1984).

decreasing the costs of identifying underperforming firms as potential targets.[40]

Empirical evidence generally supports the positive correlation between disclosure and security price accuracy (and stock price accuracy in particular).[41] A related question about the extent to which stock prices are in fact informationally efficient (often framed as the efficient market hypothesis) is subject to intense debate.[42] Notwithstanding the validity or precise formulation of the efficient market hypothesis, however, there is a near consensus in the literature that disclosure contributes to investor welfare by way of price accuracy, because the informational content of security prices is greater with disclosure than without it.[43]

The price accuracy rationale for disclosure is admittedly more abstract than the investor demand rationale, which uses evidence of investor interest in climate-related disclosure to support the SEC's proposal on climate-related disclosure. It is important to bear in mind, therefore, that securities price accuracy is but one of the ways in which mandatory disclosure contributes to the functioning of public firm corporate governance and, more broadly, to economic efficiency. Even though shareholders do not participate in the day-to-day governance of public companies, they do have three types of rights, to "vote, sell [stock], or

40 *See* John C. Coffee, Jr., *Market Failure and the Economic Case for a Mandatory Disclosure System*, 70 VA. L. REV. 717, 747 (1984).

41 *See* Merritt B. Fox, Randall Morck, Bernard Yeung & Artyom Durnev, *Law, Share Price Accuracy, and Economic Performance: The New Evidence*, 102 MICH. L. REV. 331, 370-81 (2003); *see also* Allen Ferrell, *Measuring the Effects of Mandated Disclosure*, 1 BERKELEY BUS. L.J. 369, 372-73 (2004) (providing an assessment of the various empirical studies and noting that "[t]he concept of stock price accuracy is well accepted and commonly employed in the accounting and finance literature").

42 *See, e.g.*, Donald C. Langevoort, *Judgment Day for Fraud-on-the-Market: Reflections on* Amgen *and the Second Coming of* Halliburton, 57 ARIZ. L. REV. 37, 48-54 (2015) (presenting a discussion of recent research on and judicial use of the efficient capital markets hypothesis); Lynn A. Stout, *The Mechanisms of Market Inefficiency: An Introduction to the New Finance*, 28 J. CORP. L. 635, 635 (2003) ("[T]he weaknesses of the efficient market theory are, and were, apparent from a careful inspection of its initial premises, including the presumptions of homogeneous investor expectations, effective arbitrage, and investor rationality.").

43 *See* Ferrell, *supra* note 41, at 371; Marcel Kahan, *Securities Laws and the Social Costs of "Inaccurate" Stock Prices*, 41 DUKE L.J. 977, 985 (1992); *see also* Zohar Goshen & Gideon Parchomovsky, *The Essential Role of Securities Regulation*, 55 DUKE L.J. 711, 713 (2006) (rejecting "the widespread . . . belief that securities regulation aims at protecting the common investor" and arguing that, instead, "the ultimate goal of securities regulation is to attain efficient financial markets and thereby improve the allocation of resources in the economy").

sue."[44] In each case, the information provided through the disclosure regime is important. For example, shareholders receive periodic information about the firm's performance, and special disclosure materials in connection with votes they are asked to cast, either as a matter of course (e.g., to elect the board of directors), or as a result of extraordinary corporate events (e.g., a vote to approve a statutory merger or an asset sale).[45] Disclosure also plays a role in informing investors when they exercise litigation rights (e.g., derivative suits under state law or securities fraud suits under federal law), as well as certain special rights under state law (e.g., dissenter rights or appraisal rights).[46]

B. Judicial Doctrines Premised on Capital Market Efficiency

Key existing provisions of federal securities law and state corporate law hinge on market efficiency, which reflects the widespread acceptance of the theoretical rationales for a robust disclosure regime discussed in Part II.A. Consider, briefly, the following examples: First, the U.S. Supreme Court has held on multiple occasions that in securities class actions under Rule 10b-5, investors are entitled to rely on the integrity of the prevailing market price.[47] Relatedly, the SEC has made it considerably easier for firms trading in efficient markets to raise capital through a special framework for well-known seasoned issuers ("WKSIs");[48] as such, achieving efficiency by way of ongoing disclosure, market liquidity, and securities analyst coverage confers tangible benefits on large public firms. Finally, market efficiency is also a goal promoted by state corporation law statutes, evidenced by the fact that such statutes impose an onerous

[44] Robert B. Thompson, *Preemption and Federalism in Corporate Governance: Protecting Shareholder Rights to Vote, Sell, and Sue*, 62 LAW & CONTEMP. PROBS. 215, 216 (1999).

[45] *See* Merritt B. Fox, *Retaining Mandatory Securities Disclosure: Why Issuer Choice Is Not Investor Empowerment*, 85 VA. L. REV. 1335, 1364 (1999).

[46] *See, e.g.*, DEL. CODE ANN. tit. 8, § 262 (2023) (state law); Exchange Act Rule, 17 C.F.R. § 240.13e-3 (2023) (federal law).

[47] *See, e.g.*, Donald C. Langevoort, *Disasters and Disclosures: Securities Fraud Liability in the Shadow of a Corporate Catastrophe*, 107 GEO. L.J. 967, 986 (2019) ("The Supreme Court in both *Basic* and *Halliburton II* affords investors a presumption of reliance on the integrity of the prevailing market price not because smart investors naively assume management integrity, but because offering it stimulates socially valuable investment in the face of risk.").

[48] *See* Securities Offering Reform, Securities Act Release No. 33-8591, 70 Fed. Reg. 44,727 (Dec. 1, 2005).

appraisal remedy in cases when a firm's securities do not trade in efficient markets.[49]

It is worth noting that the judicial and regulatory doctrines incorporating capital market efficiency do not hinge on *perfect* market efficiency. As explored by Professors Ronald Gilson and Reinier Kraakman, "the informational efficiency of market prices must be understood as relative rather than absolute" and the overarching goal should be to make prices "more informationally efficient."[50] The mechanisms of market efficiency are complex and do not always work perfectly, but the basic premise — price accuracy requires information and responds to information — enjoys such universal support because, in the words of Nobel Prize-winning economist Michael Jensen, "there is no other proposition in economics which has more solid empirical evidence supporting it."[51]

C. Statutory Basis for Disclosure Rulemaking

The legislative history of the original securities laws supports a focus on the market-essential role of corporate climate disclosure. As we will see in Part III, climate-related matters impact the most important aspect of any securities transaction — the price at which investors buy or sell — and Congress was focused on valuation matters, among others, when it adopted the Securities Act in 1933. Congress' intent was to create an information-generating regime "designed to reach items of distribution profits, watered values, and hidden interests . . . [of] indispensable importance in appraising the soundness of a security," which contains "items indispensable to any accurate judgment upon the value of the security."[52] In discussing the original disclosure requirements, the same congressional report also noted that "[t]he type of information required to be disclosed is of a character comparable to that demanded by competent bankers from their borrowers, and has been worked out in the light of these and other requirements."[53] The reference to bankers and borrowers is

[49] *See, e.g.*, Gil Matthews, *The "Market Exception" in Appraisal Statutes*, HARV. L. SCH. F. ON CORP. GOVERNANCE (Mar. 30, 2020), https://bit.ly/3AF2zzs (discussing the prevalence of and the policy rationales for the "market out" exception in appraisal statutes).

[50] Ronald J. Gilson & Reinier Kraakman, *Market Efficiency After the Financial Crisis: It's Still a Matter of Information Costs*, 100 VA. L. REV. 313, 318-20 (2014).

[51] Michael C. Jensen, *Some Anomalous Evidence Regarding Market Efficiency*, 6 J. FIN. ECON. 95, 95 (1978) (speaking of the broad formulation of the efficient market hypothesis).

[52] H.R. REP. NO. 73-85, at 3, 7 (1933).

[53] *Id.* at 3.

instructive as to Congress' focus on valuation and pricing matters, since the primary purpose of bankers requiring information from borrowers is to determine the borrowers' creditworthiness and the cost of capital.

Turning from legislative history to the text of the statute, Congress, in the original federal securities laws, the Securities Act of 1933 and the Securities Exchange Act of 1934, authorized the SEC to promulgate rules for registrant disclosure pursuant to broadly articulated delegations of authority. Consider the following non-exhaustive list of relevant provisions:

- Section 7 of the Securities Act identified categories of information required to be included in the registration statement for public offerings, as augmented by "such other information . . . as the Commission may by rules or regulation require as being necessary or appropriate in the public interest or for the protection of investors."[54]
- Section 12 of the Exchange Act conditioned trading on exchanges on disclosing "such information, in such detail, as to the [company] . . . as the Commission may by rules and regulations require, as necessary or appropriate in the public interest or for the protection of investors, in respect of the following: . . . the organization, financial structure, and nature of the business."[55]
- Section 13(a)(2) of the Exchange Act, which established the periodic reporting framework for public companies, requires companies to disclose information under rules the SEC "may prescribe as necessary or appropriate for the proper protection of investors and to insure fair dealing in the security . . . such annual reports . . . and such quarterly reports . . . as the Commission may prescribe."[56]
- Section 3(b) of the Exchange Act gave the SEC authority to "define technical, trade, accounting, and other terms used [in the statute]."[57]

These are only some examples of Congress' broad delegation to the SEC of the power to determine what disclosure is necessary or appropriate in

[54] Securities Act of 1933 § 7(a)(1), 15 U.S.C. § 77g(a)(1) (2018).
[55] Securities Exchange Act of 1934 § 12(b)(1)(A), 15 U.S.C. § 78l(b)(1)(A) (2018).
[56] *Id.* § 13(a)(2).
[57] *Id.* § 3(b).

the public interest, or for the protection of investors, or to promote fair dealing in securities traded on the U.S. capital markets.[58]

Moreover, Congress recognized that capital market regulation was essential, not just for investor protection, but to serve the broader interests of the U.S. economy. As a result, in 1996, Congress instructed the SEC in determining whether a disclosure requirement is necessary or appropriate to consider "whether the action will promote efficiency, competition, and capital formation."[59] This language reflects well-settled understanding that public company securities trade in efficient markets and that the prices of those securities incorporate relevant and accurate information generated through the SEC's disclosure requirements and guaranteed through its liability regime. This regulatory scheme serves to protect investors, improve market efficiency, and ensure the productive allocation of capital.

Empirical and theoretical evidence increasingly suggests that climate considerations represent an important vector of competition in capital and labor markets. Participants in these markets seek out climate information and consider it alongside other factors, such as price, when making economic decisions. In many cases, climate or ESG information is also a key input in determining the relevant market price. ESG information cannot adequately serve these purposes, however, unless it is consistent, comparable, and reliable. By all accounts, currently available ESG information does not exhibit such characteristics.[60] The incorporation of low-quality ESG information in decision-making can have distortive effects, thereby not only failing to promote competition but also undermining market efficiency, another aspect of the SEC's statutory mandate.

Since 2019, sustainable finance has become a significant phenomenon in U.S. capital markets, which includes strong capital inflows into sustainable funds, and climate-related issues currently represent the most significant sustainability dimension for investors. Given the funding volumes at stake, there are multiple competitive dynamics in the markets

58 *See also* Securities Act of 1933 §§ 10, 19(a); Securities Exchange Act of 1934 §§ 14, 15(d), 23(a). The Commission has established a related disclosure regime for investment funds and advisers pursuant to the Investment Company Act of 1940, 15 U.S.C. § 80a-1, and the Investment Advisers Act of 1940, 15 U.S.C. § 80b-1.

59 Securities Act of 1933 § 2(b); *see also* Securities Exchange Act of 1934 § 23(a)(2). Congress added a similar provision to the Investment Company Act of 1940 in 1999. *See* 15 U.S.C. § 80a–2(c) (2018).

60 *See, e.g.*, U.S. GOV'T ACCOUNTABILITY OFF., PUBLIC COMPANIES: DISCLOSURE OF ENVIRONMENTAL, SOCIAL, AND GOVERNANCE FACTORS AND OPTIONS TO ENHANCE THEM (2020) (noting deficiencies and inconsistencies in voluntary disclosure practices).

for sustainable finance. For example, established and new firms compete for "green capital" and a higher ESG rating can translate into a lower cost of capital. Similarly, a firm's inclusion in an ESG fund can lead to a lower cost of capital, whereas exclusion can lead to higher cost of capital. Nevertheless, the lack of consistent, comparable, and reliable ESG information thwarts this competition. Sustainable firms are unable to differentiate themselves from less sustainable firms because ESG information is not presented in a consistent fashion. Since investment and fund inclusion/exclusion decisions are by their nature comparative, a high-quality firm can only stand apart (and reap the corresponding benefits) if other firms also report their ESG data. Separately, asset managers also need this information because they compete with one another to assemble relevant and high-performing sustainable funds. By all accounts, investors and asset managers currently rely on incomplete and low-quality data, often coming from third-party providers. The solution to these problems is to enhance the quality and availability of ESG information (including climate-related information). Doing so would produce competition benefits in addition to the well-known investor protection benefits, and these additional benefits ought to be considered as part of SEC rulemaking.

ESG information also plays an important role in labor market competition — for both executive and non-executive employees. ESG performance metrics have quietly become commonplace in incentive-based executive compensation plans; recent research suggests that more than half of S&P 500 companies have incorporated ESG metrics as part of executive pay. This includes both climate-related metrics and metrics related to human capital management.[61] As things currently stand, however, the effectiveness of tying executive compensation to ESG metrics is uncertain at best due to the low quality of available ESG information. Moreover, the peer-group benchmarking that is a routine part of setting executive compensation cannot take place in the absence of consistent, comparable, and reliable ESG information. The same informational problems also disrupt competition for non-executive employees. Extensive data suggests that employees express affirmative preferences for firms that score high on ESG dimensions; a considerable number of employees even report willingness to accept lower wages in

[61] *See, e.g.*, WILLIS TOWERS WATSON, ESG AND EXECUTIVE COMPENSATION: HEARING FROM BOARD MEMBERS GLOBALLY 18 (2021), https://bit.ly/3Ko5jDT (documenting trends in incentive-based compensation plans).

order to work for such firms.[62] This sorting process also cannot occur effectively without high-quality ESG information.

In summary, pursuant to the existing statutory framework, the heightened relevance of climate information in multiple segments of the capital markets, as well as in related labor markets and product markets, supports the need for an SEC rule that would provide accurate, standardized, and comparable information.

D. Judicial Support for the SEC's Broad Authority

We now turn from the text of the statutes to courts' interpretations of these statutes. In short, courts have always interpreted Congress' authorization to the SEC to act as "necessary or appropriate in the public interest or for the protection of investors" as granting the SEC broad rulemaking authority.[63] As summarized by the D.C. Circuit Court of Appeals in 1979, "the Commission has been vested by Congress with broad discretionary powers to promulgate (or not to promulgate) rules requiring disclosure of information beyond that specifically required by statute."[64] In related proceedings, the D.C. District Court stated unequivocally: "These statutes grant the SEC broad rulemaking authority. The language of the acts suggests that the SEC is empowered to exercise its informed discretion about which information will be required to be disclosed in the various corporate filings."[65] No court has invalidated an SEC rule for overstepping the SEC's disclosure authority despite the SEC's active rulemaking spanning close to nine decades and despite the fact that, as is often the case with economic regulation, many of the SEC's rules were initially resisted by the regulated entities and other interested parties.

The D.C. Circuit has explained the historical interaction between Congress and the SEC as follows: "Rather than casting disclosure rules in stone, [the 1933] Congress opted to rely on the discretion and expertise of the SEC for a determination of what types of additional disclosure would be desirable."[66] The court further noted that "[t]he Commission's task [is] a peculiarly difficult one, requiring it to find a path between the views of

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[62] *See, e.g.*, Adele Peters, *Most Millennials Would Take a Pay Cut to Work at a Environmentally Responsible Company*, FAST CO. (Feb. 14, 2019), https://bit.ly/3YFcBKU (noting consumer and employee preferences).

[63] 15 U.S.C. § 78l(b)(1) (2018).

[64] Nat. Res. Def. Council, Inc. v. SEC, 606 F.2d 1031, 1045 (D.C. Cir. 1979).

[65] Nat. Res. Def. Council, Inc. v. SEC, 389 F. Supp. 689, 695 (D.D.C. 1974).

[66] *Nat. Res. Def. Council, Inc.*, 606 F.2d at 1045.

the parties to the rulemaking polarized in support of the broadest disclosure or in opposition to any disclosure, to interpret novel statutory commands, and to make decisions against the background of rapidly changing conditions."[67] As part of the same proceedings, the D.C. District Court urged the SEC to "develop a [factual] record" and "exercise its authority and expertise."[68]

E. SEC Rulemaking Practice on Disclosure

The SEC has consistently focused on disclosure's role in ensuring price accuracy and efficiency. Relying on the power granted to it by Congress in 1933, the SEC has, decade after decade, built out a detailed disclosure regime aimed at protecting investors. As noted by then-SEC Chair Jay Clayton in 2018, "[a]s stewards of [the] powerful, far reaching, dynamic and ever evolving [disclosure] system, a key responsibility of the SEC is to ensure that the mix of information companies provide to investors facilitates well-informed decision making."[69] A comprehensive history of the SEC disclosure regime is beyond the scope of this Article.[70] This Subsection focuses on two relevant points: (1) the SEC's established practice of promulgating disclosure rules on relevant topics without waiting for a specific congressional directive relating to those topics, and (2) the SEC's long history of requiring environmental and climate-related disclosure.

Disclosure Rulemakings Without a Specific Congressional Mandate: Over the nine decades of the disclosure regime, the subject areas in which the SEC has pursued rulemaking have most often been governed by the SEC's expert judgment rather than by congressional mandates identifying specific disclosure topics. This approach follows directly from the broad grant of statutory authority discussed above. For example, as recently as 2020, the SEC adopted new disclosure requirements on human capital management ("HCM") because it recognized that economic changes warrant a specific disclosure requirement in this area.[71] The SEC

[67] *Id.* at 1057.

[68] *See Nat. Res. Def. Council, Inc.*, 389 F. Supp. at 695.

[69] Clayton, *supra* note 5.

[70] For an overview, see Georgiev, *Critiquing the Critics*, *supra* note 12, at 114-20.

[71] *See* Jay Clayton, Chairman, U.S. Sec. & Exch. Comm'n, Modernizing the Framework for Business, Legal Proceedings and Risk Factor Disclosures (Aug. 26, 2020), https://bit.ly/3GS8YJD ("From a modernization standpoint, today, human capital accounts for and drives long-term business value in many companies much more so than it did 30

proceeded with this disclosure mandate even as both the House and the Senate were contemplating legislation that would have required HCM disclosure,[72] and no one argued that the SEC was required to await congressional authorization before proceeding with or finalizing its own rulemaking.[73] Moreover, all five commissioners agreed on the materiality of human capital matters and supported enhanced disclosure in this area, despite some disagreement about the format of the new disclosure requirement, which resulted in a split vote.[74] Other subject areas in which the SEC has adopted disclosure rules without specific congressional authorization include executive compensation, related-party transactions, asset-backed securities, share repurchases, and various technical industry-specific items.[75]

Environmental and Climate-Related Disclosure: The SEC has had a history of requiring environmental disclosures for more than five decades. Consider the following non-exhaustive list of examples:

- In 1971, the SEC "called attention to the requirements" under the Securities Act and the Exchange Act "for disclosure of legal proceedings and a description of the registrant's business as these requirements relate to material matters involving the environment and civil rights."[76]
- In 1973, the SEC mandated disclosure of *all* environmental proceedings by a governmental authority, and of environmental

years ago. Today's [new] rules reflect that important and multifaceted shift in our domestic and global economy.").

[72] *See* George S. Georgiev, *The Human Capital Management Movement in U.S. Corporate Law*, 95 TUL. L. REV. 639, 683-85 (2021) [hereinafter *Human Capital Management*].

[73] Given the difficulty in advancing legislation and the flaws in many recently-adopted Congressional mandates, waiting for Congress to act is neither feasible nor desirable, particularly when the SEC has the requisite rulemaking authority and expertise. *See, e.g.*, Steven A. Bank & George S. Georgiev, *Paying High for Low Performance*, 100 MINN. L. REV. 14 (2016) (discussing the flaws in the highly-prescriptive Congressional mandates on executive compensation disclosure imposed by the Dodd-Frank Act).

[74] *See* Georgiev, *Human Capital Management*, *supra* note 72, at 682, 714 (discussing objections of Commissioners Lee and Crenshaw who wanted an even stronger HCM disclosure rule).

[75] *See id.* at 716-17.

[76] Disclosures Pertaining to Matters Involving the Environment and Civil Rights, Securities Act Release No. 5170, Exchange Act Release No. 9252, 36 Fed. Reg. 13,989, 13,989 (July 29, 1971).

proceedings not involving a governmental authority that meet certain specified conditions.[77]

- In 1976, the SEC required disclosure about capital expenditures relating to environmental compliance.[78]
- Since the 1970s, the SEC and accounting standard-setters developed detailed rules on the treatment of contingent environmental liabilities,[79] as well as rules about disclosure and accrual of environmental obligations upon future asset retirement.[80]
- Since the 1980s, the SEC's Management Discussion and Analysis ("MD&A") releases have also made reference to environmental matters.[81]
- In 1993, the Commission issued Staff Accounting Bulletin 92, which addressed accounting and disclosures relating to environmental loss contingencies.[82]

In addition to formal disclosure rules, the SEC has also developed a practice of providing real-time disclosure guidance for the benefit of investors and firms, which in most cases results in substantially enhanced disclosure. In 2010, the SEC adopted additional guidance on climate-

[77] *See* Notice of Commission Conclusions and Rulemaking Proposals in the Public Proceeding Announced in Securities Act, Securities Act Release No. 5627, Exchange Act Release No. 11733, 40 Fed. Reg. 51,656, 51,662, 51,663 (Nov. 6, 1975) (summarizing disclosure provisions adopted in 1973).

[78] *See* Conclusions and Final Action on Rulemaking Proposals Relating to Environmental Disclosure, Securities Act Release No. 5704, 41 Fed. Reg. 21,632, 21,632 (May 27, 1976).

[79] SEC Staff Accounting Bulletin No. 92, 58 Fed. Reg. 32,843, 32,843 (June 14, 1993); AM. INST. OF CERTIFIED PUB. ACCTS., STATEMENT OF POSITION 96-1: ENVIRONMENTAL REMEDIATION LIABILITIES 80-81 (1996); FIN. ACCT. STANDARDS BD., STATEMENT OF FINANCIAL STANDARDS NO. 5: ACCOUNTING FOR CONTINGENCIES 5-9 (1975).

[80] *See* FIN. ACCT. STANDARDS BD., INTERPRETATION NO. 47: ACCOUNTING FOR CONDITIONAL ASSET RETIREMENT OBLIGATIONS – AN INTERPRETATION OF FASB STATEMENT NO. 143 (2005); FIN. ACCT. STANDARDS BD., STATEMENT OF FINANCIAL STANDARDS NO. 143: ACCOUNTING FOR ASSET RETIREMENT OBLIGATIONS 4 (2001).

[81] *See, e.g.*, Management's Discussion and Analysis of Financial Condition and Results of Operations; Certain Investment Company Disclosures, Securities Act Release No. 6835, Exchange Act Release No. 26,831, 54 Fed. Reg. 22,427, 22,430 (May 24, 1989) (the SEC mentions the Environmental Protection Agency ("EPA") in the context of management principles).

[82] Staff Accounting Bulletin No. 92, 58 Fed. Reg. 32,482, 32,843 (June 14, 1993).

change developments that could be required to be disclosed under the existing rules. Noting that legislation, regulation, international accords, business trends, and physical impacts of climate change could all affect a registrant's operations or results, the guidance "remind[ed] companies of their obligations under existing federal securities laws" and of the need "to consider climate change and its consequences" when preparing disclosure reports.[83] Even the SEC commissioners who dissented from the SEC's 2010 initiative did so because they believed additional guidance was not necessary, not because they believed that the SEC *lacked rulemaking authority* in this area.[84]

III. Market Impacts of Climate Change and Climate Adaptation

After examining the economic and legal foundations of disclosure's role in capital markets in Part II, we now turn to the economic significance of climate change and climate change adaptation. This is an expansive topic and the discussion here is concise by design. This Part illustrates the physical and transition risks created by climate change and their potential impacts on firms' financial and operational condition, and it then highlights new legislative provisions that are transforming the funding and competitive landscape.

A. Physical and Transition Risks

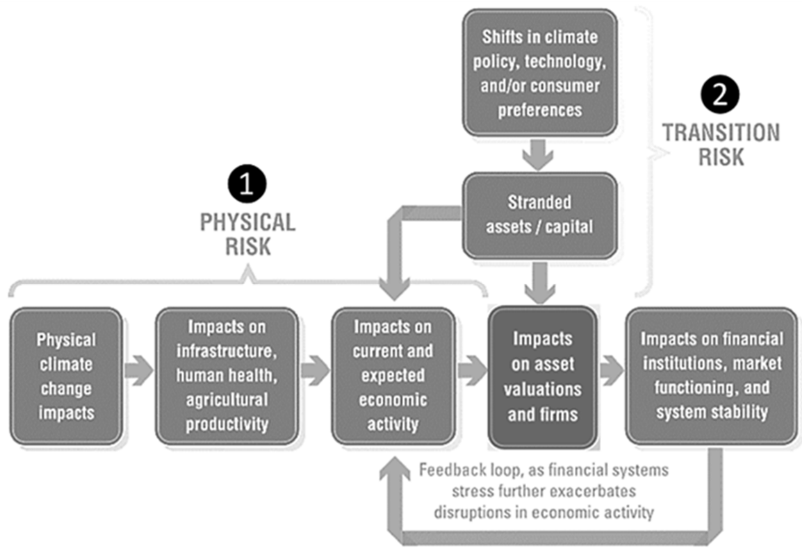
There are two primary mechanisms through which climate change affects asset valuations and firms: physical risk channels and transition

[83] Commission Guidance Regarding Disclosure Related to Climate Change, Securities Act Release No. 9106, Exchange Act Release No. 61,469, 75 Fed. Reg. 6290, 6297 (Feb. 8, 2010).

[84] *See* Kathleen L. Casey, Comm'r, U.S. Sec. & Exch. Comm'n, Speech by SEC Commissioner: Statement at Open Meeting — Interpretive Release Regarding Disclosure of Climate Change Matters (Jan. 27, 2010), https://bit.ly/41LxIgs (noting that the SEC's "disclosure regime related to environmental issues including climate change is highly developed and robust, and registrants are well aware of, and have decades of experience complying with, these disclosure requirements"); Troy A. Paredes, Comm'r, U.S. Sec. & Exch. Comm'n, Speech by SEC Commissioner: Statement Regarding Commission Guidance Regarding Disclosure Related to Climate Change (Jan. 27, 2010), https://bit.ly/3oKDEYl (noting that "a number of [SEC] disclosure requirements have long related to environmental matters" and referencing law firm guidance related to SEC "disclosure requirements regarding climate change").

risk channels. Figure 1, adapted from a report prepared by independent U.S. financial regulators,[85] nicely summarizes the causal mechanisms.

Figure 1: Physical and Transition Risk as a Factor in Asset Valuations and Securities Prices



As we can see from Figure 1, asset valuations and firm valuations (which determine securities prices) are impacted by physical risks and transition risks. Other scholars have collected evidence of these impacts.[86] Additional examples emerge on a regular basis, and they affect both equity and debt markets: In March 2023, the Fitch rating agency announced that it is placing more than 1,600 non-financial firms on notice "as part of a mass review of credit scores triggered by the growing threat that climate change poses to [their] risk profiles."[87]

[85] MANAGING CLIMATE RISK IN THE U.S. FINANCIAL SYSTEM: REPORT OF THE CLIMATE-RELATED MARKET RISK ADVISORY COMMITTEE OF THE U.S. COMMODITY FUTURES TRADING COMMISSION 12 (2020), https://bit.ly/3iDT5it.

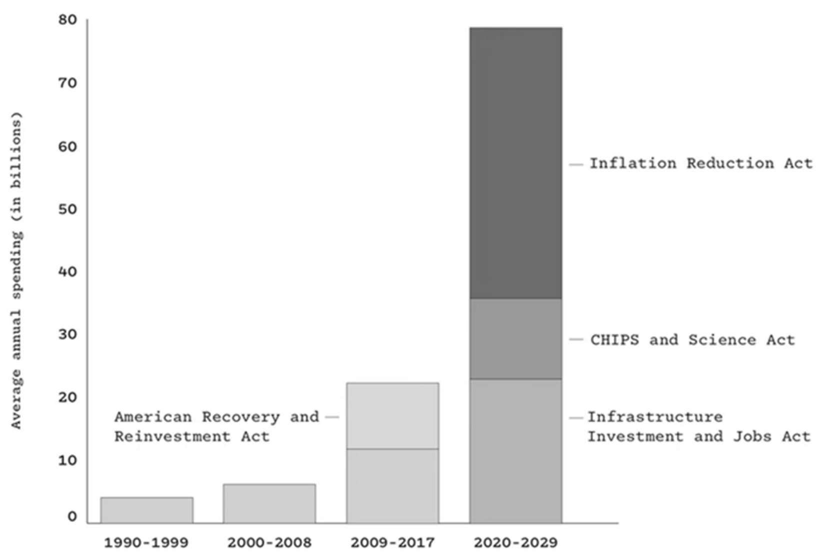
[86] *See, e.g.*, Madison Condon, *Market Myopia's Climate Bubble*, 2022 UTAH L. REV. 63; John Armour, Luca Enriques & Thom Wetzer, *Mandatory Corporate Climate Disclosures: Now, But How?*, 2021 COLUM. BUS. L. REV. 1085 (2022).

[87] *See* Frances Schwartzkopff, *Fitch to Review 1,600 Issuer Credit Scores as CO2 Risk Soars*, BLOOMBERG (Mar. 28, 2023), https://bit.ly/41x9oxQ. The rating agency further noted that its focus is "very much financial materiality and financial materiality as it affects credit." *Id.*

B. Competitive and Regulatory Impacts

In 2022, Congress passed three pieces of legislation that provided extensive funding for climate-related programs: (1) the bipartisan CHIPS and Science Act ("CHIPS"), (2) the bipartisan Infrastructure Investment and Jobs Act, and (3) the Inflation Reduction Act ("IRA").[88] These bills were not related to *climate disclosure*, but they further bolstered the case for such disclosure because of the massive federal spending involved (over $500 billion by 2030).[89] Figure 2 provides an overview of the historic funding amounts and compares them against other recent legislation.[90]

Figure 2: Investment in Carbon Transition and Other Climate Initiatives



The bills advance two primary goals: (1) reducing greenhouse gas emissions through tax and other incentives; and (2) supporting research on clean energy and promoting the growth of zero-carbon industries.[91] The new federal spending will impact the financial and operational prospects of all firms across the economy in different ways and over the course of many years; investors need to understand these effects as they make

[88] *See* Robinson Meyer, *Congress Just Passed a Big Climate Bill. No, Not That One.*, ATLANTIC (Aug. 10, 2022), https://bit.ly/3kl8RPO.

[89] *Id.*

[90] *Id.*

[91] *See id.*

investment decisions and allocate capital. For example, firms that can reduce their greenhouse gas emissions stand to benefit under the IRA, while those that cannot reduce emissions will fare relatively worse. And as green energy becomes cheaper due to new Federal Research and Development ("R&D") funded by CHIPS, firms with strong plans for decarbonization will benefit, while those reliant on fossil fuels will likely fare worse. The U.S. programs have, in turn, spurred similar programs in other jurisdictions.[92] Both in terms of substantive regulation and government subsidies, we can expect greater regulatory convergence in the future.[93]

The effects of governmental programs cannot be predicted but information supplied under the SEC rule will help investors distinguish among firms, take advantage of relevant investment opportunities, and mitigate new risks.[94]

IV. Implications for Ongoing Debates on Climate-Related Disclosure

Insofar as it parries critiques of "investor demand" and centers attention on the market-essential role of corporate climate disclosure, the foregoing discussion has broad implications for various ongoing debates on climate disclosure. This Part focuses on three matters: (1) the propriety of the SEC's climate disclosure rulemaking project, (2) the viability of an "investor optional" approach to disclosure, and (3) the validity of objections based on the major questions doctrine.

A. Is Climate Disclosure Beyond the SEC's Regulatory Remit?

The discussion in Part II demonstrated that the SEC has ample rulemaking authority to pursue climate-related disclosure to ensure market efficiency — a statutory goal in its own right as well as a core element of

[92] *See, e.g.*, Angeli Mehta, *Policy Watch: Europe Beefs up Green Deal in Response to Biden's Climate Subsidies*, Reuters (Feb. 3, 2023), https://bit.ly/3HlZ4l0 (summarizing increases in green subsidies in the European Union and the United Kingdom as a reaction to the introduction of U.S. subsidies).

[93] Under conditions of globalization, regulatory systems are generally more likely to converge than to diverge over time. *See, e.g.*, George S. Georgiev, *Bridging the Divide? The European Court of First Instance Judgment in* GE/Honeywell, 31 Yale J. Int'l L. 518 (2006) (discussing patterns of regulatory convergence among the EU and U.S. antitrust systems).

[94] *See* Letter from Ams. for Fin. Reform Educ. Fund to U.S. Sec. & Exch. Comm'n 9 (Dec. 1, 2022), https://bit.ly/3HNh4Ef.

investor protection. Nevertheless, the SEC's Proposal for climate-related disclosure has promoted a question that has often been asked about new disclosure rules: Is the disclosure intended for shareholders or for stakeholders?[95] But this is not a binary choice and posing it as such automatically shifts the terms of the debate in favor of opponents of climate-related disclosure, regardless of the actual content of the Proposal. Since climate change has society-wide implications, information about it will inevitably resonate beyond the boundaries of the disclosing firm and the capital markets. The social resonance of climate-related disclosure should not be used to drown out its clear-cut financial relevance. Indeed, a subject matter's relevance to one audience (stakeholders) cannot cancel out the well-established relevance of that same subject matter to another audience (investors). At most, the SEC can be faulted for citing environmental organizations more than it cited investors in parts of the proposing release.[96] Even this can be explained by the context because environmental organizations have studied the economic impacts of climate change on firms, and, moreover, it is the SEC's standard practice to mention all relevant comments when discussing a particular point. But since mainstream investor groups have made many of the same points as those environmental organizations, the SEC can and should fix this issue in the final release.

Given the economic, social, and political salience of climate-related information, it is inevitable that at least some of the information released pursuant to any new SEC disclosure requirements will be of interest to non-investor constituencies. Indeed, such constituencies may elect to become involved in the rulemaking process by submitting comment letters to the SEC, which the SEC may then cite in its rulemaking releases. Nevertheless, a subject matter's relevance to one audience, stakeholders, does not negate the relevance of that same subject matter to another audience, investors. In this context, it is worth recalling a basic postulate of financial economics: Information released pursuant to mandatory securities disclosure requirements is non-rivalrous and non-excludable in

95 *See, e.g.*, Ann M. Lipton, *Not Everything Is About Investors: The Case for Mandatory Stakeholder Disclosure*, 37 YALE. J. ON REGUL. 499 (2020) (criticizing the use of the investor-focused disclosure regime as a means of supplying important information to non-investor audiences); Steven A. Bank & George S. Georgiev, *Securities Disclosure as Soundbite: The Case of CEO Pay Ratios*, 60 B.C. L. REV. 1123, 1125 (2019) (discussing the debate on the investor- and stakeholder-focused justifications for the pay ratio disclosure mandate during the rulemaking process).

96 *See* Cunningham Letter, *supra* note 16, at 8, 20.

character.[97] In practice, this means that the information can be used both by its target audience (investors) and by other audiences, but, importantly, that the use of disclosure by other audiences does not diminish its utility to the target audience. This is not a contested proposition: At the start of the COVID-19 pandemic in 2020, for example, the Republican-appointed leadership of the SEC spoke approvingly of the collateral benefits of investor-facing disclosure for society as it required new specialized disclosure.[98] So long as the SEC continues to be focused on and guided by the informational needs of mainstream investors, it is on solid footing regardless of the collateral effects of its disclosure rules with respect to other audiences.[99]

B. Is an "Investor-Optional" Disclosure Rule a Viable Option?

The difficulty in formulating an SEC disclosure rule on climate has given rise to an ingenuous proposal. According to Professor Scott Hirst, the SEC should allow shareholders to opt out of an SEC disclosure rule.[100] In this way, shareholders should be able to avoid the costs of climate disclosure at a particular firm. Though superficially appealing, this proposal ignores the market-essential role of corporate climate disclosure.

At its core, an investor-optional disclosure rule would mean that market efficiency itself would become investor-optional. The reason for requiring climate disclosure is that it would provide consistency and comparability among firms. A firm's disclosure affects not only its own share price, but

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[97] *See, e.g.*, ONNIG H. DOMBALAGIAN, CHASING THE TAPE: INFORMATION LAW AND POLICY IN CAPITAL MARKETS 27-28 (2015).

[98] *See* Jay Clayton, Chairman, U.S. Sec. & Exch. Comm'n & William Hinman, Dir., Div. of Corp. Fin., U.S. Sec. & Exch. Comm'n, The Importance of Disclosure — For Investors, Markets and Our Fight Against COVID-19 (Apr. 8, 2020), http://bit.ly/3z9smjx ("High quality disclosure will not only provide benefits to investors and companies, it also will enhance valuable communication and coordination across our economy — including between the public and private sectors — as together we pursue the fight against COVID-19. This transparency can foster confidence in countless specific instances, for example, between a supplier and a manufacturer as well as between an investor and a company, which in combination will benefit all.").

[99] A number of other important disclosure categories implicate non-investor constituencies: cybersecurity information is of potential interest to customers (in addition to investors), information about human capital management matters is of potential interest to employees (in addition to investors), and so on. As noted above, the non-excludable nature of securities disclosure suggests that this is to be expected, while its non-rivalrous nature suggests that it is not a problem.

[100] *See* Hirst, *supra* note 17, at 91.

also the share prices of other firms in the public market.[101] Even if that firm's investors are content to trade off the price accuracy provided by disclosure for the cost savings resulting from non-disclosure, this choice would invariably affect other firms and other investors who would not have had a choice.

C. The Major Questions Doctrine

The resurgent Major Questions Doctrine has raised questions about the SEC's ability to promulgate a proposal on climate disclosure. As we will see, however, understanding that the SEC's Proposal is about market efficiency — a goal that is neither novel nor controversial — shows that the Major Questions Doctrine is not implicated and does not prevent the SEC from acting.

In June 2022, the U.S. Supreme Court announced its decision in *West Virginia v. EPA* articulating the principles of the Major Questions Doctrine and, potentially, greatly expanded its reach in ways that some have argued implicates the SEC's climate disclosure proposal.[102] The Court distinguished between "ordinary cases," where the specificity of congressional intent does not affect the analysis, and "extraordinary cases."[103] When an agency asserts an authority for which both "the history and breadth" and the "economic and political significance" of the assertion gives one pause before determining that Congress intended to "confer such authority," a different approach is required.[104] The Court held that when the Major Questions Doctrine is triggered, an agency must point to "'clear congressional authorization' for the power it claims."[105]

[101] *See, e.g.*, George S. Georgiev, *Too Big to Disclose: Firm Size and Materiality Blindspots in Securities Regulation*, 64 UCLA L. REV. 602, 652-58 (2017) (discussing the inter-firm effects of disclosure).

[102] *See* West Virginia v. EPA, 142 S. Ct. 2587, 2614 (2022). The case concerned challenges to the Clean Power Plan, a carbon dioxide emission reduction regulatory scheme designed to strongly encourage large scale generation shifting at power plants. *Id.*

[103] *Id.* at 2608.

[104] *Id.* ("[T]here are 'extraordinary cases' that call for a different approach — cases in which the 'history and the breadth of the authority that [the agency] has asserted,' and the 'economic and political significance' of that assertion, provide a 'reason to hesitate before concluding that Congress' meant to confer such authority." (quoting FDA v. Brown & Williamson Tobacco Corp., 529 U.S. 120, 159 (2000))).

[105] *Id.* at 2609 ("[S]omething more than a merely plausible textual basis for the agency action is necessary. The agency instead must point to 'clear congressional authorization' for the power it claims." (quoting Util. Air Regul. Grp. v. EPA, 573 U.S. 302, 324 (2014))).

How do we know when a different approach is required? Based on relevant cases, the Court presented a series of appropriate considerations. First, the Court noted that Congress generally does not intend to confer "sweeping and consequential authority" in a cryptic fashion.[106] The Court also noted that Congress does not "implicit[ly] delegate" broad and unusual authority.[107] Moreover, if an agency has not asserted a given authority in its history, it is unlikely that Congress intended to confer such an authority.[108] The Court further observed that Congress rarely grants extraordinary regulatory authority "through 'modest words,' 'vague terms,' or 'subtle device[s],'"[109] and that it does not employ "oblique or elliptical language" to give an agency authority to make "'radical or fundamental change[s]' to a statutory scheme."[110] Finally, if an agency has "no comparative [policy making] expertise," Congress is unlikely to have given it authority to do so.[111]

The analysis presented in this Article demonstrates that these considerations do not apply. The grants of congressional authority in the 1930s were specific — authority over the disclosure regime in the interest of market efficiency. The SEC has exercised this authority consistently for close to nine decades. The congressional grant of authority does not contain "modest words," "vague terms," or "subtle devices," but is, instead, specific. The relevant expertise is with respect to disclosure regulation (and not "regulating climate change"), because the SEC's proposal is limited to disclosure, and only disclosure. The SEC is not setting greenhouse gas emission limits, calculating carbon trading prices, drawing up climate transition plans, or setting climate resilience standards for businesses. As such, the SEC has relevant, decades-long experience handling disclosures on technical topics. The SEC has not veered away from its time-tested approach.

[106] *Id.* at 2608 ("'Congress could not have intended to delegate' such a sweeping and consequential authority 'in so cryptic a fashion.'" (quoting FDA v. Brown & Williamson Tobacco Corp., 529 U.S. 120, 160 (2000))) (giving a rationale for denying FDA authority to regulate tobacco).

[107] *See id.* (quoting Gonzales v. Oregon, 546 U.S. 243, 267 (2006)) (explaining that the Attorney General cannot intrude upon state licensing and police power of physician assisted suicide though an implicit delegation in the Food, Drug and Cosmetic Act).

[108] *See id.* at 2608-09 (citing Nat'l Fed'n of Indep. Bus. v. Dep't of Lab., 142 S. Ct. 661, 666 (2022)).

[109] *See id.* at 2609 (quoting Whitman v. Am. Trucking Ass'ns, 531 U.S. 457, 468 (2001)).

[110] *See id.* (quoting MCI Telecomms. Corp. v. AT&T Co., 512 U.S. 218, 229 (1994)).

[111] *See id.* at 2612-13 (quoting Kisor v. Wilkie, 139 S. Ct. 2400, 2417 (2019)).

CONCLUSION

Efficient *capital markets* are, axiomatically, a central institution of a *capitalist economy*. This means that for capitalism to work, market participants need accurate, standardized, and comparable information about the major risks and opportunities faced by firms, which, in today's world, include climate-related risks and opportunities. While it is true that investors have jump-started the regulatory process by demanding climate-related disclosure, investor demand is not the only valid justification for adopting a climate disclosure rule. And, to the extent investor demand has come to be used as a means of sowing doubt about the legitimacy of the SEC's climate disclosure project, as this Article has demonstrated, regulators and policy and academic experts should recall price efficiency as a supplemental and more objective justification for requiring climate-related disclosure. Focusing on the market-essential role of corporate climate disclosure inoculates the SEC's disclosure project against a number of challenges.