

The New Titans of Wall Street: A Theoretical Framework for Passive Investors

Law Working Paper N° 414/2018

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Preliminary drafts of this paper were presented at the IESE CCG-ECGI Conference on Corporate Governance and Ownership with Diverse Shareholders, the Boston University School of Law, the Davies Business Law Lecture Series at the Toronto Club, the Northwestern Pritzker School of Law, the NYU Law & Economics Workshop, the Hastings Law & Economics Workshop, the Tulane Corporate and Securities Roundtable, the University of Pennsylvania Law School Institute for Law & Economics Corporate Roundtable, and the University of Wisconsin School of Law where we received many helpful comments. We are also grateful to Donna Anderson, Lucian Bebchuk, Glenn Booream, Alon Brav, Quinn Curtis, Merritt Fox, Zohar Goshen, Robert Jackson, Jr., Roy Katzovicz, Ann Lipton, Dorothy Shapiro Lund, Justin McCrary, Alessio Paces, Ed Rock, Eric Roiter, Bonnie Saynay, Jeff Schwartz, Anne Tucker, and Andrew Verstein for thoughtful comments.

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Abstract

Passive investors—ETFs and index funds—are the most important development in modern-day capital markets, dictating trillions of dollars in capital flows and increasingly owning much of corporate America. Neither the business model of passive funds, nor the way that they engage with their portfolio companies, however, is well understood, and misperceptions of both have led some commentators to call for passive investors to be subject to increased regulation and even disenfranchisement. Specifically, this literature takes a narrow view both of the market in which passive investors compete to manage customer funds and of passive investors' participation in the capital markets. We respond to this failure by providing the first comprehensive theoretical framework for passive investment and its implications for corporate governance. To start, we explain that to understand passive funds, it is necessary to understand the institutional context in which they operate. Two key insights follow. First, because passive funds are simply a pool of assets, their incentives are a product of the overall business operations of fund sponsors. Second, although passive funds are locked into their investments, their shareholders are not. Like all mutual fund investors, shareholders in index funds can exit at any time by selling their shares and receiving the net asset value of their ownership interest. Consequently, the sponsors of passive funds compete on both price and performance with other investment options—including other passive funds as well as actively managed funds—for investor dollars. As we explain, this competition provides passive fund sponsors with a variety of incentives to engage with the companies in their portfolios. Furthermore, the size of the major fund sponsors and the breadth of their holdings affords them economies of scale that not only justify engagement economically but also enable them to engage effectively. An examination of passive investor engagement in corporate governance demonstrates that passive investors behave in accordance with this theory. Passive investors are devoting greater sophistication and resources to engagement with their portfolio companies and are exploiting their comparative advantages—their size, breadth of portfolio, and resulting economies of scale—to focus on issues with a broad market impact, such as potential corporate governance reforms, that have the potential to reduce the underperformance and mispricing of portfolio companies. Passive investors use these tools, as opposed to analyzing firm-specific operational issues, to reduce the relative advantage that active funds gain through their ability to trade. We conclude by exploring the overall implications of the rise of passive investment for corporate law and financial regulation. We argue that, although existing critiques of passive investors are unfounded, the rise of passive investing raises new concerns about ownership concentration, conflicts of interest, and common ownership. We evaluate these concerns and the extent to which they warrant changes to existing regulation and practice.

Keywords: Law and economics, corporate governance, securities law, passive investing, mutual funds, ETFs, corporate finance, institutional investors, shareholder activism, capital markets

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ARTICLE

THE NEW TITANS OF WALL STREET: A THEORETICAL
FRAMEWORK FOR PASSIVE INVESTORS

JILL FISCH, ASSAF HAMDANI & STEVEN DAVIDOFF SOLOMON[†]

If index funds underperform active funds, then assets will flow out from passives to actives. — Bill Ackman, CEO, Pershing Square Management¹

Passive investors—ETFs and index funds—are the most important development in modern-day capital markets, dictating trillions of dollars in capital flows and increasingly owning much of corporate America. Neither the business model of passive funds, nor the way that they engage with their portfolio companies, however, is well understood, and misperceptions of both have led some commentators to call for passive investors to be subject to increased regulation and even disenfranchisement. Specifically, this literature takes a narrow view both of the market in which passive investors compete to manage customer funds and of passive investors' participation in the capital markets.

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¹ Email from Steve Fraidin, General Counsel, Pershing Square Capital, to Steven Davidoff Solomon (May 30, 2018) (on file with authors).

We respond to this failure by providing the first comprehensive theoretical framework for passive investment and its implications for corporate governance. To start, we explain that to understand passive funds, it is necessary to understand the institutional context in which they operate. Two key insights follow. First, because passive funds are simply a pool of assets, their incentives are a product of the overall business operations of fund sponsors. Second, although passive funds are locked into their investments, their shareholders are not. Like all mutual fund investors, shareholders in index funds can exit at any time by selling their shares and receiving the net asset value of their ownership interest. Consequently, the sponsors of passive funds compete on both price and performance with other investment options—including other passive funds as well as actively managed funds—for investor dollars. As we explain, this competition provides passive fund sponsors with a variety of incentives to engage with the companies in their portfolios. Furthermore, the size of the major fund sponsors and the breadth of their holdings affords them economies of scale that not only justify engagement economically but also enable them to engage effectively.

An examination of passive investor engagement in corporate governance demonstrates that passive investors behave in accordance with this theory. Passive investors are devoting greater sophistication and resources to engagement with their portfolio companies and are exploiting their comparative advantages—their size, breadth of portfolio, and resulting economies of scale—to focus on issues with a broad market impact, such as potential corporate governance reforms, that have the potential to reduce the underperformance and mispricing of portfolio companies. Passive investors use these tools, as opposed to analyzing firm-specific operational issues, to reduce the relative advantage that active funds gain through their ability to trade.

We conclude by exploring the overall implications of the rise of passive investment for corporate law and financial regulation. We argue that, although existing critiques of passive investors are unfounded, the rise of passive investing raises new concerns about ownership concentration, conflicts of interest, and common ownership. We evaluate these concerns and the extent to which they warrant changes to existing regulation and practice.

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INTRODUCTION

Passive investors, or more accurately the large mutual fund complexes that manage most of the assets invested in passively managed funds, are the new power brokers of modern capital markets.² Drawn by the lower costs of these products as well as a literature reporting that even savvy money managers cannot consistently beat the market,³ an increasing number of retail investors invest through indexed mutual funds and exchange-traded funds (ETFs)⁴ (collectively, *index funds* or *passive funds*)—funds that do not make information-based trading decisions. This shift has concentrated a growing portion of publicly traded equity in the hands of the sponsors that operate these index funds, particularly the Big Three—BlackRock, Vanguard, and

² We note at the outset the potential ambiguity in the term “passive investor.” A variety of rules-based investment strategies may be termed “passive,” such as algorithmic trading, and asset owners can employ a passive investment strategy without using a product such as a mutual fund or ETF. See, e.g., Andrew W. Lo, *What Is an Index?*, 42 J. PORTFOLIO MGMT. 21, 21-22 (2016) (describing the breadth of investment strategies that could be termed index investing and arguing that the critical characteristics of an index are that it be “transparent, investable, and systematic”). Moreover, as Adriana Robertson has convincingly demonstrated, it is somewhat misleading to term an index-based strategy “passive” in that the creation and choice of the index are themselves managed (active) investment strategies. See Adriana Z. Robertson, *Passive in Name Only: Delegated Management and ‘Index’ Investing*, 36 YALE J. REG. 795, 843 (2019). We do not extensively address these issues in this Article and instead focus on traditional index funds and ETFs, employing the popular terminology of “passive investors.”

³ The popular press has repeatedly reported that actively managed funds systematically underperform index funds and their market benchmarks. See, e.g., Mark Hulbert, *This Is How Many Fund Managers Actually Beat Index Funds*, MARKETWATCH (May 13, 2017, 10:46 AM), <https://www.marketwatch.com/story/why-way-fewer-actively-managed-funds-beat-the-sp-than-we-thought-2017-04-24> [<https://perma.cc/MAX4-ALTG>] (reporting that “[o]ver the last 15 years, 92.2% of large-cap funds lagged a simple S&P 500 index fund”). The story in the finance literature is more complex and to date there is evidence that actively managed funds may, over the long term, have advantages over passive funds. See *infra* notes 82; see also Diane Del Guercio & Jonathan Reuter, *Mutual Fund Performance and the Incentive to Generate Alpha*, 69 J. FIN. 1673, 1676 (2014) (finding “strong support . . . that actively managed funds earn the same expected after-fee alphas as index funds” within the “direct-sold segment” of the mutual fund market).

⁴ An ETF is a fund which tracks an index but is publicly traded on the market rather than purchased directly from (or sold to) the fund sponsor. See *What are ETFs?*, NASDAQ, <https://www.nasdaq.com/etfs/what-are-ETFs.aspx> [<https://perma.cc/SQ4R-GMMU>] (last visited July 16, 2019). Both mutual funds and ETFs are considered investment companies under the Investment Company Act of 1940. See Investment Company Act of 1940 § 3, 15 U.S.C. § 80a-3 (2018).

State Street.⁵ Although the extent to which index funds will continue to grow remains unclear, some estimates predict that by 2024 they will hold over 50% of the market.⁶

Commentators have expressed concern, even alarm, over the growth of passive investors and its implications for capital market efficiency and corporate governance.⁷ This literature, however, largely misconstrues or ignores the institutional structure of passive funds and the market context in which they operate.⁸ As a result, it fails accurately to reflect the incentives of passive investors. Moreover, by marginalizing passive investors with assertions of apathy or collusion, the literature has failed to appreciate the serious implications of the rise of passive investment for corporate law and governance.

We respond to that deficit. In this Article, we provide the first comprehensive theoretical framework for passive investment. We use this framework to explore the role of passive funds in corporate governance. We

⁵ See, e.g., Jan Fichtner, Eelke M. Heemskerk & Javier Garcia-Bernardo, *Hidden Power of the Big Three? Passive Index Funds, Re-Concentration of Corporate Ownership, and New Financial Risk*, 19 BUS. & POL. 298, 298, 304 (2017) (explaining that BlackRock, Vanguard and State Street dominate the passive fund industry and terming them the “Big Three”).

⁶ See Trevor Hunnicutt, *Index Funds to Surpass Active Fund Assets in U.S. by 2024: Moody's*, REUTERS (Feb. 2, 2017, 9:31 AM), <https://www.reuters.com/article/us-funds-passive/index-funds-to-surpass-active-fund-assets-in-u-s-by-2024-moodys-idUSKBN15H1PN> [<https://perma.cc/5R6B-3U7J>].

⁷ See, e.g., Lucian A. Bebchuk, Alma Cohen & Scott Hirst, *The Agency Problems of Institutional Investors*, 31 J. ECON. PERSP. 89, 90 (2017) (arguing that the rise of index investing has “systemwide adverse consequences on governance”); Dorothy S. Lund, *The Case Against Passive Shareholder Voting*, 43 J. CORP. L. 493, 495 (2018) (arguing that passive investors lack adequate incentives to become informed shareholders); Shawn Langlois, *Robert Shiller: Passive Investing Is a ‘Pseudoscience’ and It’s Bad for Markets*, MARKETWATCH (Nov. 15, 2017, 1:11 PM), <https://www.marketwatch.com/story/robert-shiller-passive-investing-is-a-pseudoscience-and-its-bad-for-markets-2017-11-14> [<https://perma.cc/HY92-DF8X>] (citing interview in which Nobel Prize-winning economist Robert Shiller describes indexing as a “‘chaotic system’ that’s taking a toll on the business landscape across the United States”); see also Fiona Scott Morton & Herbert Hovenkamp, *Horizontal Shareholding and Antitrust Policy*, 127 YALE L.J. 2026, 2026 (2018) (arguing that ownership concentration by the largest passive investors will undermine product market competition); Eric A. Posner, Fiona M. Scott Morton & E. Glen Weyl, *A Proposal to Limit the Anticompetitive Power of Institutional Investors*, 81 ANTITRUST L.J. 669, 669-70 (2017) (same).

⁸ We note that, since we posted the initial draft of this article to SSRN, scholars have posted several other pieces exploring the role and incentives of passive investors in more depth. See Lucian A. Bebchuk & Scott Hirst, *Index Funds and the Future of Corporate Governance: Theory, Evidence, and Policy*, 119 COLUM. L. REV. (forthcoming 2019) (manuscript at 1-2), <https://ssrn.com/abstract=3282794> (arguing that index funds currently expend insufficient resources on firm monitoring); John C. Coates, *The Future of Corporate Governance Part I: The Problem of Twelve 2* (Harvard Pub. Law Working Paper, Paper No. 19-07, 2018), <https://ssrn.com/abstract=3247337> (discussing the rise of indexing and policy responses to concentration of public company control into the hands of very few institutional investors); Edward B. Rock & Marcel Kahan, *Index Funds and Corporate Governance: Let Shareholders be Shareholders* 33-34 (ECGI Working Paper Series in Law, Paper No. 467, 2019), <https://ssrn.com/abstract=3295098> (analyzing index funds’ incentives and information structure and concluding that they align with responsible corporate governance).

then explore the overall implications of the increasingly influential role enjoyed by passive funds for corporate law, including the allocation of power between management and shareholders, the regulation of voting, and the concentration of economic power.

Commentators focus their criticism on two key attributes of passive funds. First, passive funds, by virtue of their investment strategy, are locked into the portfolio companies they hold. They cannot exploit mispricing or other informational advantages through trading, nor can they follow the Wall Street Rule and exit from underperforming companies the way traditional shareholders, particularly active funds, can.⁹ Second, passive funds compete against other passive funds that track the same index, not on the basis of the performance of their portfolio (because the funds hold the same index), but primarily on cost.¹⁰ Firm-specific research is costly, and because they have committed to track the returns of an index, passive funds cannot exploit information-based trading to improve their returns. Critics therefore argue that it is irrational for passive investors to research and monitor their portfolio companies.¹¹

We challenge this portrayal of the passive investor business model as incomplete and offer a more nuanced approach. To start, while the term passive fund is widely used, it is frequently misunderstood. Although a passive fund is a fund that is managed to track an index, there are a wide variety of indexes, meaning that there is substantial variation among passive funds. The construction and management of the index is not passive but entails a form of managed investing, if not by the passive funds themselves, then by the index providers. Moreover, although a large number of funds track some popular indexes like the S&P 500, other funds track a bespoke index created just for that fund.¹² In addition, some nominally passive funds afford their managers a degree of discretion in choosing among the stocks on

⁹ See Anat R. Admati & Paul Pfleiderer, *The "Wall Street Walk" and Shareholder Activism: Exit as a Form of Voice*, 22 REV. FIN. STUD. 2645, 2647 (2009) (detailing how large shareholders respond to poor performance through exit rather than exercising their voting power).

¹⁰ See, e.g., Jeff Sommer, *A Price War Has Driven Fund Fees to Zero. They May Be Set to Drop Further.*, N.Y. TIMES (Apr. 5, 2019), <https://www.nytimes.com/2019/04/05/business/price-war-fund-fees-zero-negative.html> [<https://perma.cc/W6UM-KNQ6>] (explaining how competition among large index fund sponsors is reducing investor costs). The literature notes that passive funds also compete on tracking quality. See, e.g., Ari I. Weinberg, *Watch an Index Fund's 'Tracking Error.'* WALL ST. J. (July 9, 2012), <https://www.wsj.com/articles/SB10001424052702303734204577466453629079534>, [<https://perma.cc/862Y-KL4D>] (explaining tracking error and how it can vary among index funds).

¹¹ See, e.g., Bebchuk, Cohen & Hirst, *supra* note 7, at 90 (arguing that "index funds have especially poor incentives to engage in stewardship activities that could improve governance and increase value"); Lund, *supra* note 7, at 495.

¹² See Robertson, *supra* note 2, at 821 (explaining the nature of bespoke indices).

the index or deviating from that index.¹³ Finally, although many passive funds have very low fees, those fees vary substantially.¹⁴

We next explain that, to understand passive funds, it is necessary to understand the institutional context in which they operate. The existing literature analyzes the behavior and incentives of passive investors at the level of the individual mutual fund but overlooks the fact that an individual mutual fund is simply a pool of assets.¹⁵ The mutual fund's actions are undertaken by third parties who have a contractual relationship with the fund.¹⁶ These third parties—whom we term “passive investors” to distinguish their actions from those of the fund itself—are the fund sponsor, which establishes the fund, and the investment adviser, which makes the fund's operational decisions and is typically a related entity.¹⁷

The institutional context of passive funds can therefore vary widely, depending on the structure and incentives of those who operate the funds. In the case of Fidelity, for example, Fidelity Investments, the fund sponsor, is a privately owned company which, in addition to offering over 500 mutual funds, designs and administers employer-sponsored retirement plans and offers brokerage and other investment services.¹⁸ Fidelity Management & Research Company is the investment advisor for Fidelity's family of mutual funds.¹⁹ Conversely, BlackRock, Inc. is a publicly traded corporation that is the sponsor of the BlackRock mutual funds, and its funds are managed by BlackRock Capital Investment Advisors LLC.²⁰ For simplicity, we will generally refer collectively to the fund sponsor and the investment adviser as the sponsor, but it is worth noting that they are independent entities with differing incentives.²¹

¹³ See *infra* notes 67-70 and accompanying text.

¹⁴ For example, the expense ratio for Fidelity's large cap index fund is zero. See Sommer, *supra* note 10. The expense ratio for T.Rowe Price's Equity Index 500 Fund is 21 basis points. *Equity Index 500 Fund*, T. ROWE PRICE, <https://www.troweprice.com/personal-investing/tools/fund-research/PREIX> [https://perma.cc/AGT2-AED2] (last visited August 6, 2019).

¹⁵ See Jill E. Fisch, *Rethinking the Regulation of Securities Intermediaries*, 158 U. PA. L. REV. 1961, 1968 (2010).

¹⁶ *Id.*

¹⁷ *Id.*

¹⁸ See *Fidelity by the Numbers: Corporate Statistics*, FIDELITY, <https://www.fidelity.com/about-fidelity/fidelity-by-numbers/corporate-statistics> [https://perma.cc/GUQ8-CD2B] (last visited June 11, 2019).

¹⁹ *Id.*

²⁰ BlackRock Advisors LLC is the sole managing partner of BlackRock Capital Investment Advisors LLC and is a wholly owned subsidiary of BlackRock, Inc. See BlackRock Investment Management LLC, Client Brochure, Form ADV Part 2A, at 33 (2019), <https://www.lfg.com/wcs-static/pdf/BlackRock%20Investment%20Management%20LLC.pdf> [https://perma.cc/KX5M-MDBE].

²¹ Fund sponsors are sometimes also referred to as fund complexes or fund families.

The incentives of sponsors, rather than merely those of the pool of assets, drive fund behavior. Most significantly, sponsors normally manage an entire family of funds, and the family usually includes a mixture of passive and actively managed funds. The sponsor's business model involves maximizing the revenue from the entire family.²² That revenue, in turn, is a product of both assets under management and fund fees. To illustrate this principle at the passive investor level, the competition is between Fidelity and Vanguard, not between Fidelity's Large Cap index fund and the Fidelity Magellan Fund.²³

Similarly, it is important to distinguish between a mutual fund and the shareholders who invest in that fund. Although passive funds are locked into their investments, their shareholders are not. Like all mutual fund shareholders, investors in index funds can exit at any time by selling their shares and, when they do so, they receive the net asset value of their ownership interest.²⁴ As a result of this exit option, mutual funds compete for investors on an ongoing basis. Moreover, there is no reason to believe that index funds compete for investors only against other index funds that track the same index. Rather, index funds compete with other passive (i.e. index) funds,²⁵ with actively managed funds,²⁶ and with other investment options. This competition is not based solely on cost. Since mutual fund inflows are based on fund performance,²⁷ passive investors risk losing assets if the performance of passive funds lags that of actively managed funds on a cost-adjusted basis.²⁸

²² We observe that the other components of the business of mutual fund sponsors may affect their incentives and operational decisions as well. For example, commentators have argued that a fund's investment advisor may face a conflict of interest in voting the securities of a portfolio company when the advisor "also manages or seeks to manage the retirement plan assets of [the] company." See Disclosure of Proxy Voting Policies and Proxy Voting Records by Registered Management Investment Companies, 68 Fed. Reg. 6564, 6565 (Feb. 7, 2003).

²³ Incentives operate somewhat differently at the level of the individual portfolio manager. Because passive investors, especially the Big Three, often vote and engage at the level of the fund family, these incentives do not present a significant concern for our analysis.

²⁴ See, e.g., John Morley & Quinn Curtis, *Taking Exit Rights Seriously: Why Governance and Fee Litigation Don't Work in Mutual Funds*, 120 YALE L.J. 84, 89 (2010) (explaining the mechanisms by which mutual fund shareholders exit at net asset value).

²⁵ For example, Adriana Robertson collected data indicating that, in 2017, U.S. mutual funds tracked 555 separate indexes. Robertson, *supra* note 2, at 815.

²⁶ For evidence that active funds compete with passive ones, see generally Martijn Cremers, Miguel A. Ferreira, Pedro Matos & Laura Starks, *Indexing and Active Fund Management: International Evidence*, 120 J. FIN. ECON. 539 (2016).

²⁷ See, e.g., Jonathan Lewellen & Katharina Lewellen, *Institutional Investors and Corporate Governance: The Incentive to Be Engaged 2* (Tuck Sch. of Bus., Working Paper No. 3265761, 2018), <https://ssrn.com/abstract=3265761> (reporting that "a one percentage point increase in an institution's benchmark-adjusted quarterly return predicts a 1.29 percentage point (standard error of 0.12) increase in net inflow over the subsequent ten quarters").

²⁸ See, e.g., Susan E.K. Christoffersen, David K. Musto & Russ Wermers, *Investor Flows to Asset Managers: Causes and Consequences*, 6 ANN. REV. FIN. ECON. 289, 290 (2014) (reviewing empirical

In addition, a mutual fund shareholder is typically the customer of the entire mutual fund family. People who invest in mutual funds often invest within one family of funds.²⁹ Investing in a single fund family offers advantages such as a consolidated statement and easy mechanisms for transferring assets between funds.³⁰ As a result, the business model of a passive investor can be understood as competing both for assets and for investors. This explains why it may be rational for Fidelity to offer four index funds that charge no management fee at all.³¹ Even though it does not receive any direct revenue from the assets that are invested in those funds,³² Fidelity may use these funds to attract customers who then invest in other Fidelity mutual funds. Indeed, when Fidelity began offering its zero fee funds, the stock of other predominantly active fund sponsors suffered.³³

Understanding the business model of passive investors leads to a comprehensive theory of their incentives and behavior, a theory that we set forth in Part I. We first show that competition with other fund sponsors gives passive investors, especially the largest ones, incentives to engage in stewardship, and that fund families that manage a substantial amount of

literature on the factors that influence the flow of funds into and out of mutual funds); Lewellen & Lewellen, *supra* note 27, at 2 (concluding that “[in]flows contribute significantly to institutions’ incentives”).

²⁹ See, e.g., Edwin J. Elton, Martin J. Gruber & T. Clifton Green, *The Impact of Mutual Fund Family Membership on Investor Risk*, 42 J. FIN. & QUANTITATIVE ANALYSIS 257, 257 (2007) (“Individuals often make all of their mutual fund investments within one family of mutual funds.”).

³⁰ See, e.g., Joshua Kennan, *What Is a Mutual Fund Family?*, THE BALANCE (Apr. 26, 2019), <https://www.thebalance.com/what-is-a-mutual-fund-family-358178> [<https://perma.cc/7SPE-73WR>] (describing the advantages of investing within a single fund sponsor).

³¹ Fidelity initially offered two zero-fee index funds. See Eric Rosenbaum, *Fidelity’s New No-fee Index Funds Bring in \$1 Billion in First Month*, CNBC (Sept. 4, 2018, 3:44 PM), <https://www.cnbc.com/2018/09/04/fidelity-offers-first-ever-free-index-funds-and-1-billion-follows.html> [<https://perma.cc/8D97-RBSK>]. It subsequently expanded its offerings to include four zero fee funds. See *We’re Raising the Bar on Value*, FIDELITY, https://www.fidelity.com/mutual-funds/investing-ideas/index-funds?imm_pid=700000001009773&immid=100611&imm_eid=ep35415530159&gclid=CjwKCAiA4t_iBRApEiwAn-vt-ymCpDfC43wE3RjhNoxvZN-L7XKqaoqhwVQHHSp2TILXW69W-VWIwRoCmp8QAvD_BwE&gclsrc=aw.ds [<https://perma.cc/BWF3-77X4>] (last visited June 11, 2019).

³² Fund sponsors receive additional revenue from the funds they manage both through commissions charged on securities transactions and through securities lending. See Sommer, *supra* note 10. These revenues are primarily a product of the borrowing demand for the securities held in the fund’s portfolio. See, e.g., Miles Weiss, *Fidelity Drops Goldman by Bringing Securities Lending In-House*, BLOOMBERG (May 14, 2019, 6:00 AM), <https://www.bloomberg.com/news/articles/2019-05-14/fidelity-drops-goldman-by-bringing-securities-lending-in-house> [<https://perma.cc/9DZ8-CL6K>] (explaining that mutual fund sponsors can earn high fees from lending stocks that are in demand by short sellers).

³³ See Rosenbaum, *supra* note 31 (“Some of the fund companies hit hardest by the Fidelity move were publicly traded managers known primarily for active mutual funds, such as Federated Investors, Legg Mason and Franklin Resources, which were down more than 5 percent on the day Fidelity announced the no-fee funds in early August.”).

assets in passive funds have a distinctive need to preserve the attraction of passive funds relative to active funds on a cost-adjusted basis.

Specifically, active funds compete based on their ability to generate alpha through the use of their investment discretion—choosing particular securities to under- and over-weight relative to their benchmark and trading those securities on the basis of firm-specific information.³⁴ In the extreme case, an active manager who identifies fund-specific problems can exercise market discipline through exit. Passive investors lack that option, and, as a result, they face a potential lemons problem.³⁵ If active managers sell or underweight the securities of low-quality firms, and passive funds are forced to hold the entire market, they will underperform active funds even on a cost-adjusted basis. To stay competitive, passive investors can engage in broad-based efforts to improve the overall performance of the market and address cross-cutting issues such as corporate governance, risk management, sustainability, and cybersecurity.

Using the last as an example, an active fund portfolio manager who perceives cybersecurity as a risk likely to impact firm performance substantially can overweight the stock of the bank with the best cybersecurity system and underweight the laggard. Passive investors, who are forced to hold the entire industry or market, instead must take actions such as increasing market-wide attention to cybersecurity in order to reduce the comparative advantage of active funds.

More broadly, governance initiatives by passive investors such as improved board quality, conflict of interest policies, and appropriately structured executive compensation plans target underperformers in an effort to avoid events that are likely to highlight the value of active management. Investors in S&P 500 Index funds, like those which were forced to continue holding Enron stock as it lost more than 99% of its value before being removed from the index,³⁶ suffered substantial losses that investors in some

³⁴ See, e.g., Del Guercio & Reuter, *supra* note 3, at 1674 (providing evidence that active funds expend resources to generate alpha when investor inflows are responsive to alpha).

³⁵ Institutional investors are well aware of this limitation and note it frequently in communications with investors and firms. See, e.g., Annual Letter to CEOs, Lawrence D. Fink, CEO, BlackRock, *A Sense of Purpose* (Jan. 12, 2018), <https://www.blackrock.com/corporate/investor-relations/larry-fink-ceo-letter> [<https://perma.cc/NCL5-XR26>] (“In managing our index funds, however, BlackRock cannot express its disapproval by selling the company’s securities as long as that company remains in the relevant index. As a result, our responsibility to engage and vote is more important than ever.”).

³⁶ See Lawrence C. Strauss, *The Enron Verdict: Always Diversify*, BARRON’S (May 8, 2006, 12:01 AM), <https://www.barrons.com/articles/SB114687148778645481> [<https://perma.cc/5TAS-8AW7>] (noting the losses suffered by investors in the S&P 500 index fund when Enron collapsed). Standard & Poors did not remove Enron stock from the S&P 500 index until late November 2001, when the company’s stock was trading for less than one dollar per share. See Luisa Beltran, *Enron Failure May Be Biggest*,

active funds were able to avoid.³⁷ To reduce the frequency of events like these, passive investors have incentives to try to address these problems, largely by improving corporate governance.

We also show that the business model of passive investors makes their engagement cost-effective. Passive funds enjoy economies of scale which enable them to manage very large pools of assets at low cost. Because passive investors vote and engage at the fund family level, they are able to aggregate the size of their substantial holdings as well as the information provided by all their investments and to spread the cost of obtaining information across their entire portfolio. Finally, becoming informed is more readily justified for large passive investors because of their role as pivotal voters.

This theory is borne out in reality. In Part II, we document the emerging engagement by passive funds and their increasing influence with respect to firm-specific and market-wide firm governance. We show that passive investors have responded to the incentives to identify—on a system-wide basis—governance weaknesses that contribute to underperformance and to seek to reduce governance risk. We also document how passive investors are coordinating with and mediating the efforts of shareholder activists. We cite the evidence, albeit preliminary, from a number of empirical studies which show that the effect of this behavior has been to improve both firm governance and performance.³⁸

In Part III, we consider the implications of our theory for corporate law and financial regulation. Specifically, we show that, although proposals to disenfranchise passive funds due to governance concerns are misguided, the rise of passive funds raises other potential concerns that, in some cases, have been overlooked by the literature. The growth of passive investing has led to

CNN MONEY (Nov. 29, 2001, 5:40 PM), <https://money.cnn.com/2001/11/29/companies/enron/> [<https://perma.cc/QZH6-22SX>].

³⁷ See Strauss, *supra* note 36 (stating that, although some actively managed funds held Enron through its collapse, others were able to reduce or exit their positions and avoid significant losses).

³⁸ See, e.g., Ian R. Appel, Todd A. Gormley & Donald B. Keim, *Passive Investors, Not Passive Owners*, 121 J. FIN. ECON. 111, 114 (2016) (finding that the presence of increased ownership by passive investors results in more independent directors, removal of takeover defenses, more equal voting rights, and better long-term performance, but reduces the likelihood of being targeted by activists); Ian R. Appel, Todd A. Gormley & Donald B. Keim, *Standing on the Shoulders of Giants: The Effect of Passive Investors on Activism*, 32 REV. FIN. STUD. 2720, 2723 (2019) (finding that higher passive ownership is associated with more vigorous hedge fund activism seeking director positions, proxy fights, settlements, and the sale of the firm); Andrew Bird & Stephen A. Karolyi, *Do Institutional Investors Demand Public Disclosure?*, 29 REV. FIN. STUD. 3245, 3245-48 (2016) (reporting that increased ownership by institutional investors “significantly increases the information content of 8-K filings” and attributing this result to the “disclosure preferences of relatively passive investors”); Audra L. Boone & Joshua T. White, *The Effect of Institutional Ownership on Firm Transparency and Information Production*, 117 J. FIN. ECON. 508, 508 (2015) (demonstrating that increased passive ownership is associated with “greater management disclosure, analyst following, and liquidity, resulting in lower information asymmetry”).

an increased concentration of publicly traded stock in the hands of a small group of sponsors who can potentially use their immense influence over these companies to pursue pecuniary or nonpecuniary private benefits of control.³⁹ Passive fund sponsors also face distinctive issues with respect to conflicts of interests. We consider these concerns and conclude that, although they bear watching both with respect to the interests of fund customers and the economy as a whole, they do not at present warrant regulatory changes.

I. A THEORY OF PASSIVE INVESTOR INCENTIVES

In this Part, we offer a comprehensive theory of the incentives of passive investors. In Section A, we provide critical background on the institutional context, a context that has been largely ignored by existing academic research. In Section B, we explain that passive investors compete for customers and that this competition is not limited to fee minimization. In Section C, we show that competition among funds incentivizes passive investors to take measures to improve the governance of companies in their portfolio on a system-wide basis.

A. *The Institutional Context of Passive Funds*

A mutual fund or ETF⁴⁰ is a pool of assets—assets that may include stocks, bonds, cash, and other types of investments.⁴¹ The value of the mutual fund, commonly described as net asset value (NAV), is the value of the assets owned by the fund divided by the number of outstanding shares.⁴² Mutual funds have no independent operations or employees, and the operational decisions of the fund are made by external service providers.⁴³ Funds themselves do not make money—the fees that they collect go, in part, to pay for services such as investment advice and administrative support, with the remainder going to the fund sponsor.⁴⁴ The mutual fund sponsor is the entity, typically a financial services company,⁴⁵ that establishes and sells mutual fund

³⁹ For an extended analysis of this concern, see generally Coates, *supra* note 8, at 13-14.

⁴⁰ For purposes of this Article our references to mutual funds include references to ETFs unless otherwise specified.

⁴¹ See Fisch, *supra* note 15.

⁴² Jill Fisch & Eric Roiter, *A Floating NAV for Money Market Funds: Fix or Fantasy?*, 2012 U. ILL. L. REV. 1003, 1008.

⁴³ See Fisch, *supra* note 15.

⁴⁴ Shares in the mutual fund are offered by fund sponsors, which offer investors a menu of different types of funds. See generally *Mutual Funds*, U.S. SEC. EXCH. COMM'N (Dec. 14, 2010), <https://www.sec.gov/fast-answers/answersmutfundhtm.html> [<https://perma.cc/4AEG-U3C9>].

⁴⁵ Most fund sponsors are independent fund advisers, but mutual funds are also sold by banks, insurance companies, and brokerage firms. See INV. CO. INST., 2016 INVESTMENT COMPANY FACT BOOK 15 (56th ed. 2016).

shares. It is important to distinguish the interests of the fund itself from those of its sponsor.⁴⁶ Sponsors, with the exception of Vanguard,⁴⁷ are typically public companies such as BlackRock⁴⁸ or private companies, such as Fidelity Investments.⁴⁹ In either case, the fees charged by the fund, minus the costs of operating the fund, generate a profit for the sponsor's shareholders. The goal of the sponsor is to maximize this profit.

Funds charge their investors an annual fee or expense ratio which is calculated as a percentage of the assets that a particular fund manages—their “assets under management.”⁵⁰ Expense ratios vary substantially within the industry and even within a single mutual fund sponsor. As a result, a small fund that charges a higher fee may be more profitable to a sponsor than a fund with a very low fee and more assets under management. The offerings of fund sponsors differ substantially but typically include a mixture of passive and active funds.⁵¹ Some sponsors such as Vanguard specialize in passively managed funds;⁵² others, such as Fidelity⁵³ and T. Rowe Price, focus more on

⁴⁶ See, e.g., John Morley, *Too Big to Be Activist*, 92 S. CAL. L. REV. 1407, 1417 (2019) (stating that it is “easy to conflate Fidelity with its various clients, but we must nevertheless keep them conceptually distinct . . .”).

⁴⁷ Vanguard is a special case. The Vanguard Group, the fund sponsor, is owned by its mutual funds, and the sponsor therefore provides services to the funds at cost. See *Why Ownership Matters*, VANGUARD, <https://about.vanguard.com/what-sets-vanguard-apart/why-ownership-matters/> [<https://perma.cc/3BQ5-C866>] (last visited June 24, 2019).

⁴⁸ See *Our History*, BLACKROCK, <https://www.blackrock.com/corporate/about-us/blackrock-history> [<https://perma.cc/3WAE-PJGR>] (last visited June 12, 2019).

⁴⁹ See Tim McLaughlin, *How the Owners of Fidelity Get Richer at Everyday Investors' Expense*, REUTERS (Oct. 5, 2016, 12:00 PM), <https://www.reuters.com/investigates/special-report/usa-fidelity-family/> [<https://perma.cc/B7Y2-R4CN>].

⁵⁰ Some funds also charge other types of fees such as loads and 12b-1 fees. See Fisch, *supra* note 15, at 1973, 2000. This Article focuses on the fund expense ratio, which reflects the ongoing cost to investors and the ongoing revenue to fund sponsors.

⁵¹ Sponsors vary tremendously in their businesses. Some sponsors limit their business to mutual funds, some engage in a broader range of asset management activities, and others engage in other activities that may include commercial banking, investment banking and more. Deutsche Bank and Goldman Sachs, for example, offer ETFs. See Asjlynn Loder, *ETFs Provide Some Good News at Deutsche Bank*, WALL ST. J. (Feb. 27, 2017, 5:30 AM), <https://www.wsj.com/articles/etfs-provide-some-good-news-at-deutsche-bank-1488191402> [<https://perma.cc/AUK3-J6YC>]; Asjlynn Loder, *Goldman's \$3 Billion Drop in the ETF Bucket*, WALL ST. J. (Mar. 2, 2017, 6:57 PM), <https://www.wsj.com/articles/goldmans-3-billion-drop-in-the-etf-bucket-1488483434> [<https://perma.cc/33A9-DEER>].

⁵² Even Vanguard, which is typically considered a pure passive investor, offers a mix of active and passive funds. For example, as of December 2018, Vanguard offered 129 mutual funds, of which, according to its website, 80 were actively managed funds. See *Vanguard Believes in Active Management*, VANGUARD (Dec. 7, 2018), <https://institutional.vanguard.com/VGApp/iip/site/institutional/research-commentary/article/InvComActiveMgmtInfographic2018> [<https://perma.cc/NR4H-C2RH>]. Active assets account for approximately 30% of Vanguard's total assets under management, with a dollar value of more than \$1 trillion. *Id.*

⁵³ As of early 2019, Fidelity offered investors over 200 mutual funds of which 27 were index funds. See *Why Invest in Fidelity Index Funds?*, FIDELITY, <https://www.fidelity.com/mutual->

active management.⁵⁴ Consequently, the role of passive funds and their economic significance within a fund sponsor's overall business model vary.

To understand a fund sponsor's incentives, it is critical to understand the sponsor's competitive strategy and the relative role of its passive funds and active funds in generating revenues. Fund sponsors compete on a variety of dimensions—the number and type of funds they offer, the expertise of their fund managers, the user-friendliness of their websites, and the types of other products and services they offer.

Some sponsors compete largely on cost. Vanguard's business model, for example, is driven by an effort to be the low-cost leader overall, and Vanguard advertises the fact that its average fund expense ratio is well below the industry average.⁵⁵ This competitive strategy applies to both Vanguard's index funds and its actively managed funds.⁵⁶ In contrast, fund sponsors that charge higher fees can generate substantial revenues even if they attract a far smaller volume of assets.

Sponsors also differ as to the mix of their operations. BlackRock, which is currently the largest global asset manager, with almost \$6 trillion in assets under management, manages two thirds of that money in passive funds.⁵⁷ Yet the fees generated by BlackRock's actively managed products are roughly

funds/fidelity-funds/why-index-funds [https://perma.cc/EHQ3-Q7WQ] (last visited June 12, 2019). Fidelity's index funds include domestic and international equity funds, bond funds, and a real estate fund. *Id.* Fidelity customers are shifting an increasing percentage of their assets to the index funds. See Tirthankar Chakraborty, *Vanguard vs Fidelity: Fee War Heats Up*, NASDAQ (Aug. 25, 2017, 10:45 AM), https://www.nasdaq.com/article/vanguard-vs-fidelity-fee-war-heats-up-cm837199 [https://perma.cc/6KAD-DCSF].

⁵⁴ See *Active Management*, T. ROWE PRICE, https://corporate.troweprice.com/ccw/jsp/pages/active-management/investment-approach.jsp [https://perma.cc/G6HT-U77S] (last visited June 12, 2019) (describing T. Rowe Price's commitment to "disciplined, active investment management"). Even T. Rowe Price, however, offers several index funds. See, e.g., *Mutual Fund Research Tool*, T. ROWE PRICE, https://www3.troweprice.com/fb2/mfpathways/pathways.otc?facets=domesticStock,intStock [https://perma.cc/EKR4-X9JZ] (last visited June 12, 2019) (describing T. Rowe Price Equity Index 500 Fund).

⁵⁵ See *Why Ownership Matters*, VANGUARD, https://about.vanguard.com/what-sets-vanguard-apart/why-ownership-matters/ [https://perma.cc/3BQ5-C866] (last visited June 12, 2019) (noting that Vanguard's average asset-weighted expense ratio in 2018 was .10% and that the industry average was .58%); see also Owen Walker, *Vanguard's Campaign to Drive Down Fees Runs Out of Road*, FIN. TIMES (Mar. 17, 2018), https://www.ft.com/content/e35ba836-291f-11e8-b27e-cc62a39d57a0 [https://perma.cc/2B8H-A3YA] (stating that Vanguard "has led the way in cutting fees over the past decade. . .").

⁵⁶ See Erin Arvedlund, *Vanguard Crushing the Competition with Largest Fund Inflows So Far in 2019*, PHILA. INQUIRER (May 27, 2019), https://www.inquirer.com/business/vanguard-jack-bogle-passive-active-mutual-fund-etf-20190527.html [https://perma.cc/NYV4-N4GE] (describing inflows into Vanguard's actively managed funds as "index-like fees").

⁵⁷ See Chris Flood, *BlackRock's Rivers of Gold from Active Management*, FIN. TIMES (Oct. 14, 2017), https://www.ft.com/content/f62edoc2-ada1-11e7-beba-5521c713abf4 [https://perma.cc/8DU2-FDFE].

equivalent to those generated by its much larger passive funds.⁵⁸ Fidelity, which is known primarily for its active funds, offers four passive funds that do not charge a fee at all.⁵⁹ Critically, each fund sponsor offers a different menu of fund options. Even primarily passive investors offer funds that track different indexes and, as a result, each sponsor holds a somewhat different mix of portfolio companies. In addition, a sponsor may adjust the mixture of funds that it offers in response to business conditions or market developments. State Street, which is known for its indexing, recently announced that current market conditions may favor shifting assets to actively managed funds.⁶⁰ For a given family, the business model involves both navigating the potential loss of assets to other fund families and maximizing the potential revenue from existing customers.⁶¹ Finally, it is also necessary to know how sticky assets are within a fund family in order to determine the extent to which a passive fund risks losing assets to active funds within its own family or to funds sold by other sponsors.

Sponsors' business decisions are made in the context of a highly competitive market.⁶² As of the end of 2018, there were 846 fund sponsors.⁶³ These sponsors competed to offer over 17,700 different mutual funds to investors.⁶⁴ The asset class of passive funds itself demonstrates substantial variation.⁶⁵ Although the term "passive fund" typically evokes an S&P 500

⁵⁸ See *id.* (reporting that BlackRock's active funds generated \$1.32 billion in the third quarter of 2017 and that its passive funds generated \$1.33 billion).

⁵⁹ See *Why Invest in Fidelity Index Funds?*, *supra* note 53.

⁶⁰ See Bailey McCann, *Surprising Cry from an Index Firm: 'Go Active,'* WALL ST. J. (Apr. 8, 2018, 10:07 PM), <https://www.wsj.com/articles/surprising-cry-from-an-index-firm-go-active-1523239621> [<https://perma.cc/63Q2-Q9FU>].

⁶¹ For some fund sponsors, a cheap index fund can be a loss leader designed to get investors to bring their entire portfolio to the fund family with the goal of attracting investment in the complex's other more costly fund options. See, e.g., Ben Johnson, *Penny-Pinching Index Fund Investors May Pay a Price*, MORNINGSTAR (Apr. 14, 2017), <http://www.morningstar.com/articles/802512/pennypinching-index-fund-investors-may-pay-a-price.html> [<https://perma.cc/3Y7W-SKHC>] ("In many settings, these low-cost building blocks are simply loss leaders, a cheap gallon of milk meant to entice consumers into the store in hopes that they'll grab some Cheetos and a pack of gum before they get to the counter.").

⁶² See generally John C. Coates IV & R. Glenn Hubbard, *Competition in the Mutual Fund Industry: Evidence and Implications for Policy*, 33 J. CORP. L. 151, 153 (2007) ("[R]eview[ing] the structure, performance and dynamics of the mutual fund industry, and show[ing that] they are consistent with competition").

⁶³ See INV. CO. INST., 2019 INVESTMENT COMPANY FACT BOOK 43 (59th ed. 2019).

⁶⁴ At the end of 2018, there were 17,707 mutual funds in the U.S. See *id.* at 32.

⁶⁵ In 2018, for example, the New York Stock Exchange (NYSE) listed for trading the NYSE Pickens Oil Response ETF, an ETF that "reflects the investment philosophy of legendary oilman and energy investor T. Boone Pickens[.]" but is nonetheless classified as an index fund. See, e.g., Tom DiChristopher, *Legendary Oilman T. Boone Pickens Inspires New ETF with the 'BOON' Fund*, CNBC (Feb. 28, 2018, 11:28 AM), <https://www.cnbc.com/2018/02/28/legendary-oilman-t-boone-pickens-inspires-new-etf-with-the-boon-fund.html> [<https://perma.cc/7N98-BQCD>].

index fund, the universe of market indexes has exploded to the point where there are now more indexes than publicly traded U.S. stocks.⁶⁶ The new indexes, many of which are created for a single mutual fund sponsor seeking to offer a new product, provide a way of converting what has traditionally been an active investment strategy into a rule-based approach,⁶⁷ using custom criteria such as high dividends or low volatility.⁶⁸ Although the costs of most passive funds are lower than those of active funds, not all are low cost, and many charge much higher fees than S&P 500 index funds.⁶⁹ The proliferation of indexes and index-based investment strategies has led some commentators to argue that there is, in fact, “no such thing as passive investing.”⁷⁰

B. *Passive Fund Competition*

Competition among funds is commonly perceived as providing sponsors with incentives to engage with their portfolio companies.⁷¹ Critics of passive funds, however, argue that, because passive investors compete with each other primarily on fees and tracking error, they lack a reason to try to increase firm value.⁷² This conventional view focuses on the competition between passive funds that track the same index. It assumes that an investor’s preference to purchase a passive fund that tracks a specific index is exogenously

⁶⁶ See *There Are Now More Indexes Than Stocks*, BLOOMBERG NEWS (May 12, 2017, 4:00 AM), <https://www.bloomberg.com/news/articles/2017-05-12/there-are-now-more-indexes-than-stocks> [<https://perma.cc/8XVK-VZ29>].

⁶⁷ Robertson, *supra* note 2, at 831. There are also funds which contain passive components but allow for a measure of active investing. See, e.g., *Fidelity Launches First Two Sustainability-Focused Index Funds*, FIDELITY (May 15, 2017), <https://www.fidelity.com/about-fidelity/institutional-investment-management/first-two-sustainability-focused-index-funds> [<https://perma.cc/7JBC-VM2K>] (“Each fund will attempt to replicate the performance of its respective index, before expenses, by normally investing at least 80% of its assets in securities included in the index.”).

⁶⁸ Some of these strategies, which are labeled as passive, are termed “factor investing” or “smart beta” strategies. See JASON STONEBERG & BRADLEY SMITH, INVESCO WHITE PAPER SERIES: THE FACTS BEHIND FACTOR PERFORMANCE 2 (2019), <https://www.invesco.com/static/us/financial-professional/contentdetail?contentId=634ff6163339f410VgnVCM100000c2f1bfoaRCRD> [<https://perma.cc/R38W-79LB>] (describing factor investing as “a rules-based methodology that uses factor selection and/or alternative weighting in an effort to outperform a benchmark, reduce portfolio risk, or both” and smart beta as ETFs that “are based on indexes that are not market-cap-weighted”).

⁶⁹ See, e.g., Anora Mahmudova, *Pioneer of Smart-beta Investing Warns Strategy is Being Abused*, MARKETWATCH (Aug. 11, 2016, 10:11 AM), <https://www.marketwatch.com/story/the-pioneer-of-smart-beta-investing-is-flashing-warning-signs-2016-08-10> [<https://perma.cc/4UF7-NHAV>] (warning that the “relatively higher fees [of smart beta funds] would eat into any future returns”).

⁷⁰ Dani Burger, *Investing in Index Funds Is No Longer Passive*, BLOOMBERG (Feb. 27, 2018, 3:52 PM), <https://www.bloomberg.com/news/articles/2018-02-27/passive-becomes-the-new-active-as-indexing-rules-everything> [<https://perma.cc/5X6H-D4SB>].

⁷¹ See Lewellen & Lewellen, *supra* note 27, at 2-3.

⁷² See, e.g., Bebhuk & Hirst, *supra* note 8 (manuscript at 19) (“Competition with other index funds gives index fund managers precisely zero additional incentive to invest in stewardship for any of their portfolio companies.”).

determined, and thus, that passive funds that track this index compete to attract investors based exclusively on cost⁷³ and tracking error.⁷⁴

This view, however, is incomplete. Passive funds, and more accurately the sponsors that offer these funds, compete for investor assets not only with each other but also with passive funds that track different indexes as well as active funds. Furthermore, funds compete for investor assets based not only on fees, but also on performance. As we argue in the next Section, this competition provides passive investors with the incentive to improve the governance of companies in their portfolio.

Although the finance literature has documented the competition between active and passive funds,⁷⁵ it has not examined the dynamics of this competition or its effect on passive fund incentives. The incentive of the fund sponsor, however, is to use its menu of fund offerings to attract assets and customers from other fund sponsors. Sponsors that primarily offer actively managed mutual funds, as well as hedge funds, seek to generate alpha, a return that exceeds that available by investing in a passively managed benchmark.⁷⁶ They do this by investing in firm-specific research and trading on the basis of that research, overweighting some stocks and underweighting others relative to their benchmark portfolio.⁷⁷ For example, a portfolio manager who researched a company and determined that it was a massive fraud would underweight or sell its stock, hoping to benefit when the market identified the fraud.⁷⁸ Active funds incur higher costs due to this research and charge higher fees. Investors are willing to pay these fees based on the hope that these funds' stock-picking activities will produce higher returns, net of fees, than the benchmark portfolio.⁷⁹

⁷³ See, e.g., Chakraborty, *supra* note 53 (describing competitive cost-cutting between Fidelity and Vanguard's S&P 500 index funds).

⁷⁴ See, e.g., Weinberg, *supra* note 10 (observing that returns of two otherwise identical index funds can differ due to tracking error).

⁷⁵ See generally Cremers et al., *supra* note 26 (finding that the increased presence of index funds reduces fees and raises alpha for active funds).

⁷⁶ See Paolo Guasoni, Gur Huberman & Zhenyu Wang, *Performance Maximization of Actively Managed Funds*, 101 J. FIN. ECON. 574, 575 (2011) (explaining alpha and discussing its significance in financial services).

⁷⁷ See Robert F. Stambaugh, *Skill and Fees in Active Management* 1 (Nat'l Bureau of Econ. Research, Working Paper No. 26027, 2019), <https://ssrn.com/abstract=3412701> ("Active investment managers seek to outperform a passive benchmark portfolio by identifying and trading securities likely to over- or under-perform.").

⁷⁸ The paradigmatic example of this occurred in the months preceding Enron's collapse. See, e.g., Jen Wiczner, *Hedge Fund Manager Who Spotted Fraud at Enron Calls Tesla 'The Anti-Amazon'*, FORTUNE (Sept. 13, 2016, 2:52 PM), <http://fortune.com/2016/09/13/tesla-amazon-stock-solarcity-jim-chanos/> [<https://perma.cc/QD6S-A83D>] (identifying Jim Chanos as the hedge fund manager who famously identified the Enron fraud before the market and profited by selling Enron stock short).

⁷⁹ See, e.g., K. J. Martijn Cremers & Antti Petajisto, *How Active Is Your Fund Manager? A New Measure That Predicts Performance*, 22 REV. FIN. STUD. 3329, 3329 (2009) (demonstrating that

If investors believe that passive funds cannot offer a better rate of return than active funds, they will flee to active funds, and vice versa. Indeed, we believe the substantial recent inflows to passive funds are a response, in part, to extensive media reports that active funds underperform passive funds.⁸⁰ More broadly, investors will invest with the fund sponsor that offers the most attractive menu of funds on a cost-adjusted basis. The finance literature has consistently shown that mutual fund assets flows respond to past performance.⁸¹ It also provides reasons to believe that performance-chasing by mutual fund investors is reasonable.⁸² That this competition persists is evidenced by the fact that some actively managed funds with strong performance both continue to attract substantial new assets and charge fees that are considerably higher than those charged by index funds.⁸³ Even with the dramatic recent inflows into passive funds, at least some customers continue to believe that active funds will produce higher returns, net of fees.

Moreover, mutual fund investors are not locked into a particular mutual fund.⁸⁴ Instead, they have an ongoing option to exit the fund at fair value or

mutual funds whose holdings differ most from their benchmark tend to outperform that benchmark net of fees).

⁸⁰ See, e.g., Peter Coy, *Index Funds Are King, But Some Indexers Are Passive-Aggressive*, BLOOMBERG (Jan. 24, 2019, 5:00 AM), <https://www.bloomberg.com/news/articles/2019-01-24/index-funds-are-king-but-some-indexers-are-passive-aggressive> [<https://perma.cc/QW83-PQDA>] (“In 2019, assets in passively managed U.S. equity funds are likely to surpass assets in actively managed ones. . . . Through August, only 17 percent of actively managed funds in the U.S. ‘large blend’ category had beaten the performance of their passive peers over 20 years.”).

⁸¹ See, e.g., Jonathan B. Berk & Jules H. van Binsbergen, *Mutual Funds in Equilibrium*, 9 ANN. REV. FIN. ECON. 147, 148 (2017) (“[F]und flows into mutual funds are known to be highly predictable on the basis of past performance”); C. Wei Li, Ashish Tiwari & Lin Tong, *Investment Decisions Under Ambiguity: Evidence from Mutual Fund Investor Behavior*, 63 MGMT. SCI. 2509, 2509 (2017) (describing “the well-documented phenomenon of performance chasing by fund investors”).

⁸² See, e.g., Jonathan B. Berk & Richard C. Green, *Mutual Fund Flows and Performance in Rational Markets*, 112 J. POL. ECON. 1269, 1270-71 (2004) (providing an economic explanation for investors to chase past performance by mutual funds). Indeed, scholars have documented that assets flow at an increased rate into a successful fund, but because the fund adviser’s ideas are finite, eventually investors will no longer receive an excess return. See, e.g., David C. Brown & Shaun William Davies, *Moral Hazard in Active Asset Management*, 125 J. FIN. ECON. 311, 313 (2017) (explaining that empirical evidence supports the conclusion that “truly active funds experience decreasing-returns-to-scale”).

⁸³ See, e.g., Lee Conrad & Andrew Shilling, *Fund Flows: Who’s the Big Winner YTD?*, FIN. PLANNING (Dec. 13, 2017, 3:52 PM), <https://www.financial-planning.com/slideshow/mutual-funds-and-etfs-with-the-biggest-net-flows-ytd#slide-1> [<http://perma.cc/L3HU-7FE6>] (documenting the top 20 funds with substantial inflows in 2017, a number of which were actively managed funds with higher fees).

⁸⁴ Concededly, there is a documented stickiness to investment through fund families and defined benefit plans. See generally Anne M. Tucker, *Locked In: The Competitive Disadvantage of Citizen Shareholders*, 125 YALE L.J. F. 163, 172-178 (2015) (reviewing structural obstacles to switching mutual funds within a retirement plan).

at NAV.⁸⁵ In addition, a fund's NAV is unaffected by investors' expectations about the fund's future fees or performance.⁸⁶

Another dimension of the competition among funds is the fact that a substantial percentage of all mutual fund investing occurs within the framework of employer-sponsored 401(k) retirement plans.⁸⁷ These plans typically give participants a menu of investment options that include passive funds, actively managed funds, stable value funds, and other products.⁸⁸ The employer chooses the investment options available to participants. Two aspects of retirement investing affect the market for mutual funds. First, because of its fiduciary obligations under the Employee Retirement Income Security Act of 1974 (ERISA),⁸⁹ an employer is likely to prefer a plan menu that includes at least some low cost options.⁹⁰ Courts have generally upheld plans that include higher cost options, however, so long as the overall plan provides participants with sufficient choice.⁹¹ Second, investors can generally switch between funds in retirement plans without paying any taxes.⁹²

The institutional reality under which the sponsors of passive funds compete for investors sharply contrasts with the view of some scholars that competition provides passive investors with little reason to care about the performance of companies in their portfolio. Our analysis suggests that passive fund sponsors compete both with other passive fund sponsors and with active fund sponsors and that they compete along the dimensions of both

⁸⁵ See Fisch & Roiter, *supra* note 42, at 1008 (“A fundamental component of mutual fund regulation requires mutual funds . . . to allow investors to redeem their shares at any time at the NAV of the shares.”).

⁸⁶ See, e.g., Morley & Curtis, *supra* note 24, at 89 (explaining that a mutual fund’s “NAV is unaffected by expectations about future fees or portfolio changes[,]” or even about expected future returns).

⁸⁷ See, e.g., 2019 INVESTMENT COMPANY FACT BOOK, *supra* note 63, at 180 (“The \$8.2 trillion in mutual fund retirement assets made up 46 percent of all mutual fund assets at year-end 2018.”).

⁸⁸ See, e.g., BRIGHTSCOPE & INV. CO. INST., THE BRIGHTSCOPE/ICI DEFINED CONTRIBUTION PLAN PROFILE: A CLOSE LOOK AT 401(K) PLANS, 2014 32 (2016) (reporting that in 2014 the average 401(k) plan offered investors 21 investment options, counting target date funds as a single investment option).

⁸⁹ Pub. L. No. 93-406, 88 Stat. 829 (codified as amended in scattered sections of 26 and 29 U.S.C.).

⁹⁰ See *Tibble v. Edison Int'l*, 135 S. Ct. 1823, 1829 (2015) (holding that employer is under a continuing duty to monitor and improve the investment options in its 401(k) plan). For an overview of employer obligations under ERISA, see Jill E. Fisch, Tess Wilkinson-Ryan & Kristin Firth, *The Knowledge Gap in Workplace Retirement Investing and the Role of Professional Advisors*, 66 DUKE L.J. 633, 643-48 (2016).

⁹¹ On the typical structure of 401(k) plans and judicial oversight of the composition of such plans, see Jill E. Fisch & Tess Wilkinson-Ryan, *Why Do Retail Investors Make Costly Mistakes? An Experiment on Mutual Fund Choice*, 162 U. PA. L. REV. 605, 614-19 (2014).

⁹² See, e.g., Kent Thune, *How to Reduce Taxes on Mutual Funds*, THE BALANCE (Nov. 27, 2018), <https://www.thebalance.com/how-to-reduce-taxes-on-mutual-funds-2466701> [<https://perma.cc/QBH9-RWCV>] (explaining that selling mutual funds in a 401(k) plan does not generate taxes).

cost and performance. Passive fund sponsors that principally compete against active fund sponsors therefore have an incentive to take measures to neutralize the comparative advantage enjoyed by sponsors of active funds—that is, their ability to use their investment discretion to generate alpha. To the extent that sponsors offer both active and passive funds, they also have an incentive to engage in order to improve the performance of their higher-cost active fund options. As we explain in the next Section, both factors create an incentive for fund sponsors to engage with their portfolio companies.

Before we move on, we offer a few points of clarification concerning collective action problems, cross-sponsor differences, and the dimensions of competition among fund sponsors.

Collective Action. We acknowledge that, at the fund level, passive funds' competition with active funds is characterized by an asymmetric collective action problem. An actively managed fund can make itself attractive to potential investors by deploying its stock picking skills to attempt to beat the benchmark. In contrast, a passive fund's market-wide efforts are likely to benefit all passive funds tracking the same index. This collective action problem, however, characterizes all institutional investor engagement in corporate governance—by both active and passive funds.⁹³ Costly steps that investors may take to improve the performance of companies in their portfolio benefit all the investors that hold shares of these companies.⁹⁴

Concededly, the collective action problem may limit the extent to which passive funds are willing to participate in costly engagement efforts. To an extent, the decision is driven by which competitors a given fund fears most—active funds or other passive funds.⁹⁵ There are several countervailing considerations, however. As we explain in more detail below, the engagement activities of passive funds are facilitated by the informational advantages of active funds in the same family and inure to the benefit of those funds as well as the passive funds.⁹⁶ Moreover, because of their size, the Big Three enjoy substantial economies of scale with respect to corporate governance and market-wide initiatives.⁹⁷ The size of the Big Three enables them to capture

⁹³ See, e.g., Jill E. Fisch, *Relationship Investing: Will It Happen? Will It Work?*, 55 OHIO ST. L.J. 1009, 1023-24 (1994) (arguing that, because its competitors are able to free-ride on an institutional investor's monitoring, monitoring "diminishes the institutional investor's returns relative to the market as a whole").

⁹⁴ See *id.*

⁹⁵ The more resources a passive fund's sponsor devotes to corporate governance, the better it can hedge the fund's risk of losing assets to actively managed funds. But if the expenditures lead to a higher expense ratio, they compromise the fund's position vis-à-vis other index funds.

⁹⁶ See *infra* notes 130–131 and accompanying text.

⁹⁷ See *infra* notes 112–116 and accompanying text.

outsized benefits from improved corporate governance.⁹⁸ Governance engagement also may give fund sponsors another dimension on which to compete for assets.⁹⁹ Finally, and perhaps most important, although this article focuses on economic incentives, fund sponsors also act as fiduciaries for the shareholders in their funds.¹⁰⁰ Sponsors' fiduciary duties include taking reasonable measures to maximize the value of the assets that they invest, and they create an additional reason for funds to behave as responsible owners.¹⁰¹

Cross-Sponsor Differences. The effect of the competition between active and passive funds may vary across fund sponsors. On the one hand, those sponsors that derive a higher proportion of their income from passive funds may be more concerned about the comparative advantage of active funds. On the other hand, those sponsors that also have substantial actively managed holdings are best able to leverage both the firm-specific expertise and the trading opportunities of their active managers. We do not seek here to identify how an individual fund sponsor may balance these incentives; it is sufficient for our purposes to recognize that both are likely to motivate sponsor engagement.

Other Levels of Competition. Fund sponsors compete on other dimensions. For example, as noted above, a substantial proportion of mutual fund assets are invested through employer-sponsored retirement plans. Many fund sponsors, including primarily passive sponsors such as Vanguard and active sponsors such as Fidelity, compete both to administer these plans and to provide the funds that will serve as investment options in the plans.¹⁰² In this model, index funds compete within the fund complex for investment fund flows but also enable the sponsor to compete to administer plans by lowering the average fee level of the

⁹⁸ See Lewellen & Lewellen, *supra* note 27, at 17 (highlighting the size of BlackRock's portfolio and noting how large total gains follow small percentage shifts in returns).

⁹⁹ Active governance may serve a branding or marketing function. BlackRock, for example, enjoys substantial public attention from Larry Fink's letters to the CEOs of its portfolio companies. See Fink, *supra* note 35; see also Arno Riedl & Paul Smeets, *Why Do Investors Hold Socially Responsible Mutual Funds?*, 72 J. FIN. 2505, 2507 (2017) (reporting that some investors seem to be willing to pay higher fees and earn lower returns for investing in socially responsible mutual funds); Symposium, *Corporate Governance "Counter-Narratives": On Corporate Purpose and Shareholder Value(s)*, 31 J. APP. CORP. FIN. 9, 21 (2019) (quoting Ronald Gilson's roundtable comments on legal and political challenges to corporate purpose) (predicting that some investors will be willing to pay higher fees for environmental, social, and governance (ESG)-conscious funds).

¹⁰⁰ For an exploration of the role of fiduciary duties, see *infra* Section III.C.

¹⁰¹ We note that the UK has attempted to formalize the stewardship obligations of institutional investors through the adoption of the Stewardship Code. See generally Iris H-Y Chiu, *Institutional Shareholders as Stewards: Toward a New Conception of Corporate Governance*, 6 BROOK. J. CORP. FIN. & COM. L. 387 (2012).

¹⁰² See Kent Thune, *The 7 Best Mutual Funds to Hold in a 401k Plan*, INVESTORPLACE (Aug. 18, 2017, 3:08 PM), <https://investorplace.com/2017/08/best-mutual-funds-401k-plan-401k-funds/> [<https://perma.cc/75W8-8Y6F>] (terming Vanguard, Fidelity, and American Funds the "biggest players in the employer-sponsored-plan business").

overall plan. At the same time, once an asset manager wins a company's 401(k) plan business, they typically provide a plan that includes both lower-cost indexed options and higher cost actively managed funds, and those funds compete for investment dollars within the plan.¹⁰³

C. Passive Funds and Governance

Passive funds, by their very nature, must hold both the good and bad companies in their index. They do not have the option of exit and thus lack the active funds' ability to generate alpha through investment choices. Passive investors also do not have the firm-specific information or expertise necessary to address operational issues. Instead, passive investors compete against active funds by using their voice and seeking to improve corporate governance.

For example, a passive investor can identify governance "best practices" that are likely to reduce the risk of underperformance with little firm-specific information, and the investment in identifying a governance improvement can be deployed across a broad range of portfolio companies.¹⁰⁴ Although we note that index funds do not typically submit shareholder proposals,¹⁰⁵ by way of comparison, the NYC Comptroller, the office charged with administering New York City's pension funds, incurred a minimal marginal cost in submitting a proxy access shareholder proposal to 75 portfolio companies in its pension fund.¹⁰⁶

Unlike active funds, passive investors cannot take advantage of issuer mispricing, but they can try to reduce it in a variety of ways. They may do so directly by supporting governance initiatives like higher-quality financial reporting, as well as indirectly by seeking enhanced board monitoring or better-functioning audit committees with financial expertise. Good governance can also reduce price volatility. A firm with greater governance

¹⁰³ See, e.g., Clemens Sialm, Laura T. Starks & Hanjiang Zhang, *Defined Contribution Pension Plans: Sticky or Discerning Money?*, 70 J. FIN. 805, 805 (2015) (finding that "flows into funds from [defined contribution or "DC"] assets are more volatile and exhibit more performance sensitivity than non-DC flows, primarily due to adjustments to the investment options by the plan sponsors.").

¹⁰⁴ A passive investor can also target a generic governance reform to those companies that it identifies as underperformers. CalPERS, one of the first governance activists, employed this strategy in the early years of its engagement. See, e.g., Stephen L. Nesbitt, *Long-term Rewards from Shareholder Activism: A Study of the "CalPERS Effect,"* 6 J. APPLIED CORP. FIN. 75, 76 (1994).

¹⁰⁵ See, e.g., Bebchuk & Hirst, *supra* note 8 (manuscript at 48) ("Our review of these almost-4,000 shareholder proposals [submitted from 2008 to 2017] did not identify a single proposal submitted by any of the Big Three.").

¹⁰⁶ See Nikita Stewart, *City Comptroller Reaches Deals with 5 Companies on Giving Shareholders Say on Directors*, N.Y. TIMES (Mar. 10, 2015), <https://www.nytimes.com/2015/03/11/nyregion/city-comptroller-reaches-deals-with-5-companies-on-giving-shareholders-say-on-directors.html> [<https://perma.cc/AHL5-8XDX>].

risk may experience more frequent price movements due to the materialization of those risks, and its price movements in response to firm or market-wide developments may be more extreme as the developments generate greater investor uncertainty about the impact of those developments on the firm.¹⁰⁷ High quality corporate governance is also likely to reduce the frequency of value-decreasing events such as insider self-dealing, fraud, overconfidence bias, director groupthink, and so forth.¹⁰⁸ In addition, firm-specific problems may have spillover effects on the other companies in a passive fund's portfolio.¹⁰⁹ Generic governance improvements that increase board oversight and managerial accountability, such as annual election of directors and proxy access, thus offer the potential for reducing underperformance. The competition with active funds thus provides passive investors with incentives to invest in governance and other market-wide changes that limit the competitive advantage of active funds.

Moreover, because of their size, passive investors in general, and the Big Three in particular, have a comparative advantage in using voting and engagement to address issues such as corporate governance. This advantage is twofold. First, passive investors enjoy economies of scale that significantly reduce the effective costs of engagement on a per-company basis. Their large holdings also mean that passive investors gain more—in dollar terms—from governance and other changes that enhance the value of portfolio companies. As a result, despite facing the competitive pressure of fee competition, engagement remains rational.¹¹⁰ Second, their holdings increasingly allow passive funds to be the pivotal voter, increasing their ability to implement changes or to pressure issuers to do so voluntarily.

With respect to the first point, the low-fee model of passive investment has made passive funds highly attractive to customers and has led to dramatic growth in the quantity of assets managed by passive fund sponsors. Economies

¹⁰⁷ See Merritt B. Fox, Ronald J. Gilson & Darius Palia, *The Core Corporate Governance Puzzle: Contextualizing the Link to Performance*, 99 B.U. L. REV. 1995, 2004 (2019) (stating that good governance “can be a signal concerning a firm’s managerial quality, a characteristic that is difficult for the market to observe directly”).

¹⁰⁸ See René Otto & Wim Weterings, *D&O Insurance and Corporate Governance: Is D&O Insurance Indicative of the Quality of Corporate Governance in a Company?*, 24 STAN. J.L. BUS. & FIN. 105, 111 (2019) (explaining the value of corporate governance in limiting managerial agency costs and reducing the risk of opportunistic behavior).

¹⁰⁹ See, e.g., Madison Condon, *Externalities and the Common Owner*, 95 WASH. L. REV. (forthcoming 2020) (manuscript at 5), <https://ssrn.com/abstract=3378783> [<https://perma.cc/3YHL-DLEA>] (“If a subset of firms in a portfolio impose costs on the broader portfolio through the generation of negative externalities, a portfolio-wide owner should be motivated to curtail those externalities at the source.”).

¹¹⁰ See Lewellen & Lewellen, *supra* note 27, at 17 (observing that “the largest institutional investors—because of their size—actually have stronger incentives to be engaged than many activist investors”) (emphasis in original).

of scale enable large sponsors to charge lower fees, making their funds relatively more attractive.¹¹¹ The Big Three manage three quarters of all passively managed funds.¹¹² Because of their size, these large fund sponsors own substantial stakes in their portfolio companies and are less likely than active ones to suffer from the collective action problems of smaller shareholders.¹¹³ Even though the overall expense ratios at the passive funds are low, because of their large size, they nonetheless generate substantial fees for their sponsors, enabling them to devote substantial resources to governance.¹¹⁴

Moreover, these resources are spread across a broad portfolio and, in the case of market-wide initiatives, the cost of engagement on a per issuer basis is likely to be low, especially if a fund sponsor supports a particular governance reform across its entire portfolio. Governance provisions such as proxy access, forum-selection bylaws, or staggered boards are likely to be in play at multiple companies within the passive fund's portfolio. Passive investors are well-placed to evaluate such provisions and to determine whether these provisions are likely, as a general matter, to increase or decrease firm value at the majority of portfolio companies.¹¹⁵ They are also more likely to internalize any spillover effects that may arise from governance provisions.¹¹⁶

Second, the fact that passive investors are likely to be pivotal voters facilitates their engagement with portfolio companies. Management has clear

¹¹¹ See, e.g., Stewart L. Brown, *Mutual Fund Advisory Fee Litigation: Some Analytical Clarity*, 16 J. BUS. & SEC. L. 329, 351 (2016) (“Economies of scale exist and are substantial in the portfolio management process.”).

¹¹² See Reshma Kapadia, *Passive Investors Are the New Shareholder Activists*, BARRON'S (July 8, 2017, 1:27 AM), <https://www.barrons.com/articles/passive-investors-are-the-new-shareholder-activists-1499491673> [<https://perma.cc/AU5Q-HW44>]. Notably, the next three firms, in terms of size, Fidelity, JP Morgan and BNY Mellon, rely more heavily on active management.

¹¹³ Cf. Elliott J. Weiss & John S. Beckerman, *Let the Money Do the Monitoring: How Institutional Investors Can Reduce Agency Costs in Securities Class Actions*, 104 YALE L.J. 2053, 2110-12 (1995) (explaining, analogously, that institutional investors' large stakes make it rational for them to participate actively in shareholder litigation).

¹¹⁴ See Lewellen & Lewellen, *supra* note 27, at 4.

¹¹⁵ See also Rock & Kahan, *supra* note 8, at 34-35 (stating that governance arrangements tend to be “issue-specific” rather than “firm-specific”).

¹¹⁶ Some governance changes at one company may also benefit its peers. See, e.g., Michael D. Guttentag, *An Argument for Imposing Disclosure Requirements on Public Companies*, 32 FLA. ST. U. L. REV. 123, 136 (2004) (describing positive externalities associated with mandated securities disclosure). There is evidence that cross-ownership by large investors leads to more disclosure by portfolio companies. See, e.g., Jie (Jack) He, Jiekun Huang & Shan Zhao, *Internalizing Governance Externalities: The Role of Institutional Cross-Ownership*, 134 J. FIN. ECON. 400, 414 (2019) (citing empirical evidence supporting the premise that “institutional cross-owners play an active role in internalizing governance externalities”); Andrea Pawliczek, A. Nicole Skinner & Sarah L.C. Zechman, *Facilitating Tacit Collusion: A New Perspective on Common Ownership and Voluntary Disclosure* 27 (May 8, 2019) (unpublished manuscript), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3002075 (finding evidence that common ownership is associated with an increased disclosure and observing spillover effects from common owners to other investors).

incentives to engage with shareholders whose support can be outcome determinative in a shareholder vote. At the same time, the increasing importance of shareholder voting rights enables passive investors to exercise influence not only directly through voting, but also indirectly through the threat of casting a substantial number of votes in opposition to a management position or policy (even if the vote is not legally binding).¹¹⁷ The Dodd-Frank Act, for example, implements a requirement that issuers allow shareholders the opportunity to vote on executive compensation.¹¹⁸ Shareholder proposals have broadened in scope, putting a wide range of topics before the shareholders.¹¹⁹ Modifications to the process of electing directors, such as proxy access and majority voting, have made shareholder votes on director elections more significant.¹²⁰ And changes to Delaware corporate law have increased the legal significance of shareholder voting with respect to a range of issues, including approval of mergers and the structure of director compensation plans.¹²¹ Voting on all these issues gives passive investors a powerful tool to pressure issuers for change and enables institutional investors to signal their dissatisfaction with specific issuer policies and, more generally, with the issuer's economic performance.¹²²

¹¹⁷ See, e.g., Jill E. Fisch, *Standing Voting Instructions: Empowering the Excluded Retail Investor*, 102 MINN. L. REV. 11, 14 (2017) (observing that “[r]ecent regulatory changes and the rise of shareholder activism have made shareholder voting power increasingly important”).

¹¹⁸ See Dodd-Frank Wall Street Reform and Consumer Protection Act § 951, 15 U.S.C. § 78n-1 (2018).

¹¹⁹ See, e.g., *Trinity Wall St. v. Wal-Mart Stores, Inc.*, 792 F.3d 323, 327 (3d Cir. 2015) (evaluating Wal-Mart's obligation to include a shareholder proposal seeking to compel it to develop standards regarding the sale of firearms); Deere & Co., SEC No-Action Letter, 2015 WL 5862424 (Dec. 3, 2015) (declining to concur with Deere's view that it could exclude a shareholder proposal requesting an annual report to the shareholders on the corporation's political activity); *Exxon Shareholders Approve Measure on Climate-Change Report*, CNBC (May 31, 2017, 4:37 PM), <http://www.cnbc.com/2017/05/31/exxon-steps-up-efforts-to-sway-shareholders-on-climate-report-vote.html> [<https://perma.cc/LC8T-3RK5>] (reporting on shareholder proposal requesting that the company report on “the impact on its business of compliance with global climate change guidelines . . .”).

¹²⁰ See, e.g., Stephen J. Choi, Jill E. Fisch, Marcel Kahan & Edward B. Rock, *Does Majority Voting Improve Board Accountability?*, 83 U. CHI. L. REV. 1119, 1124-26 (2016) (describing the shift in public companies from plurality to majority voting).

¹²¹ See, e.g., *Corwin v. KKR Fin. Holdings, LLC*, 125 A.3d 304, 306 (Del. 2015) (applying business judgment rule to board's decision to approve a merger when approved by fully informed shareholder vote); *Cambridge Ret. Sys. v. Bosnjak*, C.A. No. 9178-CB, 2014 Del. Ch. LEXIS 107, at *27-28 (Del. Ch. June 26, 2014) (applying the waste standard of review to dismiss challenges to outside directors' equity awards when awards had been approved by shareholder vote).

¹²² See, e.g., Jill Fisch, Darius Palia & Steven Davidoff Solomon, *Is Say on Pay All About Pay? The Impact of Firm Performance*, 8 HARV. BUS. L. REV. 101, 101 (2018) (documenting responsiveness of say-on-pay voting to both characteristics of compensation plans and issuers' overall economic performance).

Critically, passive investors' voting power allows them to engage at lower cost. Passive investors need not resort to costly and confrontational tactics such as litigation and shareholder proposals. Their ability to influence management through their voting power increases the likelihood that management will both meet with them and respond to their concerns. This influence may explain the observation by some commentators that passive investors are less likely to vote against management.¹²³ Because of their leverage, such votes are often unnecessary.¹²⁴ Studies show that issuers are responsive to the interests of large investors and will frequently modify their policies rather than put issues to a vote that they expect to lose.¹²⁵ As a result, it may be unnecessary for passive investors to vote against an executive compensation plan or in favor of a shareholder proposal.¹²⁶

A fund's status as a pivotal investor not only increases its voting leverage but also reduces the cost of monitoring. Corporate managers appreciate the importance of cultivating the votes of passive investors and are more likely to communicate and share information with them.¹²⁷ Similarly, because the support of passive investors is necessary for activist campaigns to be successful, activists are likely to approach passive investors voluntarily in order to share their ideas and enlist their support.¹²⁸ A well-documented

¹²³ See, e.g., Sean J. Griffith & Dorothy S. Lund, *Conflicted Mutual Fund Voting in Corporate Law*, 99 B.U. L. REV. 1151, 1180 (2019) (observing that large mutual fund sponsors "are less likely than other investors and third-party proxy advisors to support the dissident slate in a proxy contest"); Alon Brav, Wei Jiang, Tao Li & James Pinnington, *Picking Friends Before Picking (Proxy) Fights: How Mutual Fund Voting Shapes Proxy Contests* 3 (ECGI Working Paper Series in Finance, Paper No. 601, 2019), <https://ssrn.com/abstract=3101473> (finding that passive funds are less likely than active funds to vote against management in proxy fights).

¹²⁴ See, e.g., Kapadia, *supra* note 112 (explaining that, for passive investors, "a proxy vote isn't a good gauge of their activism, but rather, a last resort").

¹²⁵ See, e.g., Rob Bauer, Frank Moers & Michael Viehs, *Who Withdraws Shareholder Proposals and Does it Matter? An Analysis of Sponsor Identity and Pay Practices*, 23 CORP. GOVERNANCE 472, 484 (2015) (documenting that managers proactively settle with large shareholders by changing corporate practices rather than putting proposals to a vote and losing).

¹²⁶ This observation explains empirical findings about the limited extent to which passive investors vote in opposition to management on shareholder proposals such as say on pay. See, e.g., Griffith & Lund, *supra* note 123, at 1180.

¹²⁷ See David R. Beatty, *How Activist Investors Are Transforming the Role of Public-company Boards*, MCKINSEY & CO. (Jan. 2017), <https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/how-activist-investors-are-transforming-the-role-of-public-company-boards> [<https://perma.cc/4CVD-GQQ3>] ("[B]oards and executives frequently review lists of the largest shareholders in order of percentage of holdings. They then decide on a consultation strategy that may well include a visit from an independent director without any management being present.").

¹²⁸ See Ronald J. Gilson & Jeffrey N. Gordon, *The Agency Costs of Agency Capitalism: Activist Investors and the Revaluation of Governance Rights*, 113 COLUM. L. REV. 863, 900 (2013) ("After [an initial investment], the activist undertakes a nonpublic campaign to elicit a favorable institutional response.").

highway of information runs between activist shareholders and the Big Three as each trades information about underperforming firms.¹²⁹

By serving as gatekeepers for activism, passive funds also play a complementary role in the more focused engagement provided by hedge funds. As Ron Gilson and Jeff Gordon have observed, hedge funds typically purchase less than 10% of an issuer's shares and, as a result, cannot wage a successful campaign unless they have the support of institutional investors (and thus passive funds).¹³⁰ As pivotal voters, passive investors can mediate activist efforts by evaluating the hedge fund's strategy and providing support only if they believe it is likely to be successful. Notably, conducting a firm-specific analysis in such cases is not cost-prohibitive because a limited number of a passive investor's portfolio companies are involved in mergers, activist campaigns, and the like. Unlike sponsors of actively managed funds, sponsors with substantial passive holdings may exercise their voting power with a longer-term focus because—unlike predominantly active fund sponsors—they are less able to overweight and then exit a target for which the activist's agenda is focused on the creation of short-term gains.¹³¹

Finally, passive fund sponsors are aided in all these efforts by the fact that their product mixture typically includes active and passive funds. This mixture, which most commentators have ignored, creates efficient cross-subsidization due to the differing expertise of active and passive funds. Active funds that need to evaluate a governance proposal, for example, can benefit from the governance expertise of passive funds, expertise that might be too costly for active funds to develop. Passive funds benefit from the firm-specific information generated by active investors in connection with stock-picking information that is particularly useful in the context of economically significant shareholder votes such as proxy contests and mergers. As we detail below,¹³² it is common for fund sponsors to coordinate the engagement and voting activities of their active and passive funds through a centralized governance or stewardship committee, a measure designed, at many fund families, to increase information flow between active and passive funds. This

¹²⁹ See Beatty, *supra* note 127 (“Collaboration between activists and traditional asset managers is changing the boardroom.”).

¹³⁰ Gilson & Gordon, *supra* note 128, at 897 (“While activist investors frame and seek to force governance/performance changes, they are successful only if they can attract broad support from institutional investors capable of assessing alternative strategies presented to them . . .”).

¹³¹ See, e.g., Leo E. Strine, Jr., *Can We Do Better by Ordinary Investors? A Pragmatic Reaction to the Dueling Ideological Mythologists of Corporate Law*, 114 COLUM. L. REV. 449, 478 (2014) (“Precisely because index funds do not sell stocks in their target index, those funds have a unique interest in corporations pursuing fundamentally sound strategies that will generate the most durable wealth for stockholders.”).

¹³² See *infra* notes 143–149 and accompanying text.

enables the efforts of passive and active funds within the same fund family to be complementary.

Our analysis does not suggest that passive investors will seek to identify and address firm-specific operational deficiencies.¹³³ We agree with other commentators that passive investors lack the expertise and the resources to do so effectively.¹³⁴ This feature, however, is not unique to passive investors but is common to active mutual funds (as well as public pension funds and retail investors).¹³⁵ Governance engagement and engagement on issues that are common to a number of portfolio companies such as board composition, cybersecurity, and risk management, do not require a fund to generate an improved business strategy for a specific company in its portfolio. At the same time, these efforts can increase performance for all companies in a passive fund's portfolio, thereby improving market-wide returns and discouraging capital flight to active funds or alternatively composed competing indexes.

II. THE PASSIVE INVESTOR IN PRACTICE

The preceding Part set out our theory of passive investors. In this Part we demonstrate that the behavior of passive investors is consistent with our theory. Section A examines how governance works in the mutual fund complex. Section B explores the relationship between passive funds and activists. Section C examines how passive funds affect governance through voice.

A. *Passive Investors and Governance*

Contemporaneous with the growth of passive investors has been their increasing involvement in corporate governance. Institutional investor participation in corporate governance began with the engagement of several

¹³³ We readily acknowledge that passive funds lack the research necessary to engage based on fundamentals analysis. *See, e.g.*, SHARON E. FAY, ALLIANCEBERNSTEIN, THE MEGAPHONE EFFECT: AMPLIFYING THE IMPACT OF ENGAGEMENT WITH MANAGEMENT 3 (2018), https://www.alliancebernstein.com/sites/library/Instrumentation/FINAL_EQU-7697-0618.pdf [<https://perma.cc/56SM-7S66>] (observing that “index funds are noticeably absent from engagement based on fundamental research”).

¹³⁴ We also disagree with Bebchuk and Hirst to the extent that they criticize passive investors for failing to engage in the level of monitoring that might be expected by a single owner. Apart from the fact that, for the reasons we identify, a single owner is an inappropriate benchmark, the costs of such engagement would dramatically change the business model of passive investors and reduce their attractiveness as an investment vehicle for their customers.

¹³⁵ *See, e.g.*, Fisch, *supra* note 93, at 1024 (identifying why free-riding rationally reduces the expenditures by institutional investors in firm-specific monitoring); Gilson & Gordon, *supra* note 128, at 889 (“Public funds are more likely to be proactive but largely limited to governance matters rather than firm strategy or implementation. At most, institutions might engage in ‘governance activism,’ not ‘performance activism.’”).

large public pension funds—most visibly CalPERS.¹³⁶ Mutual funds, both passive and active, did not join in the initial efforts, and commentators offered a variety of reasons why mutual funds lacked the incentives to participate in efforts to improve the corporate governance of their portfolio companies.¹³⁷

The situation changed in the aftermath of the SEC's 2003 adoption of a rule requiring mutual funds to disclose how they vote their portfolio company shares.¹³⁸ Although the rule technically does not require mutual funds to vote on every issue that is submitted to the shareholders, as a practical matter, mutual funds have responded to it by voting virtually all of their shares.¹³⁹ For example, BlackRock states that it aims to vote 100% of its shares in 17,000 firms across 85 markets.¹⁴⁰ These votes and any policies underlying the voting are filed publicly with the SEC and tracked by others in the market, allowing mutual funds not only to express their voice at the firm level but to the entire market.¹⁴¹

Mutual fund sponsors structure their voting operations in different ways.¹⁴² Many large fund sponsors centralize voting decisions through the use of a voting or governance staff that makes voting decisions on behalf of the

¹³⁶ See Stephen J. Choi & Jill E. Fisch, *On Beyond CalPERS: Survey Evidence on the Developing Role of Public Pension Funds in Corporate Governance*, 61 VAND. L. REV. 315, 315-16 (2008) (describing CalPERS's leadership role in affecting the corporate governance of portfolio companies and the empirical research studying CalPERS's effectiveness in leveraging this strategy).

¹³⁷ See, e.g., James Cotter, Alan Palmiter & Randall Thomas, *ISS Recommendations and Mutual Fund Voting on Proxy Proposals*, 55 VILL. L. REV. 1, 8-10 (2010) (describing and offering reasons for traditional mutual fund passivity, including the possibility that the costs would outweigh the benefits, possible conflicts of interest, and legal and regulatory restrictions).

¹³⁸ See Disclosure of Proxy Voting Policies and Proxy Voting Records by Registered Management Investment Companies, 68 Fed. Reg. 6564 (Feb. 7, 2003).

¹³⁹ See, e.g., PROXYPULSE, 2017 PROXY SEASON REVIEW 2 (2017), <https://broadridge.com/assets/pdf/broadridge-2017-proxy-season-review.pdf> [<https://perma.cc/CH3E-7SVX>] (reporting that institutional investors voted 91% of their shares in the 2017 proxy season).

¹⁴⁰ BLACKROCK, PROXY VOTING AND SHAREHOLDER ENGAGEMENT FAQ 1-2 (2019), <https://www.blackrock.com/corporate/literature/fact-sheet/blk-responsible-investment-faq-global.pdf> [<https://perma.cc/5UGW-J8MP>] [hereinafter BLACKROCK, FAQ] (“We aim to vote at 100% of meetings where our clients have given us authority to vote their shares—thus we vote at approximately 17,000 shareholder meetings in over 85 markets each year.”).

¹⁴¹ See Disclosure of Proxy Voting Policies and Proxy Voting Records by Registered Management Investment Companies, 68 Fed. Reg. at 6567 (“The Commission is adopting, with modifications, amendments that will require each fund to file with the Commission its proxy voting record and make this record available to its shareholders.”). See generally K.J. Martijn Cremers & Roberta Romano, *Institutional Investors and Proxy Voting on Compensation Plans: The Impact of the 2003 Mutual Fund Voting Disclosure Rule*, 13 AM. L. ECON. REV. 220 (2011).

¹⁴² See Bonnie Saynay & Henning Stein, INVESCO WHITE PAPER SERIES: PROXY VOTING: THE HALLMARK OF ACTIVE OWNERSHIP 6 (2017), https://apinstitutional.invesco.com/ap-public/dam/jcr:c15b0254-7307-4602-acb4-b8543bd21470/Macro_20170718_ESG%20Proxy%20Voting-the%20hallmark%20of%20active%20ownership-July2017.pdf [<https://perma.cc/6STP-ZRD6>] (describing the varying voting strategies of mutual fund sponsors); see also Griffith & Lund, *supra* note 123, at 1170-1171 (describing voting practices at the largest passive investors).

entire fund complex.¹⁴³ At some sponsors, voting takes place through a centralized governance committee. For example, each Vanguard mutual fund delegates voting authority to its Investment Stewardship Oversight Committee,¹⁴⁴ although Vanguard recently announced that, as of the end of 2019, the portfolio managers of its actively managed funds will be responsible for casting votes on certain issues affecting the shares that they manage.¹⁴⁵

Alternatively, individual fund managers may retain voting authority. In such cases, however, fund sponsors still provide mechanisms for their managers to share information and coordinate their voting decisions. For example, BlackRock has a centralized voting function, but individual fund managers retain ultimate voting authority to depart from the “BlackRock” view.¹⁴⁶ T. Rowe Price has a proxy committee that recommends how funds vote and, although the ultimate voting discretion remains with the fund manager, a fund manager must document his or her reasons for deviating from the central recommendation.¹⁴⁷ Invesco uses an innovative voting

¹⁴³ See, e.g., Strine, *supra* note 131, at 478 n.85 (citing sources documenting centralization of voting authority at BlackRock, Fidelity, and Vanguard). *But see* Stephen Choi, Jill Fisch & Marcel Kahan, *Who Calls the Shots? How Mutual Funds Vote on Director Elections*, 3 HARV. BUS. L. REV. 35, 47-48 (2013) (reporting varying degrees of centralization among mutual fund families).

¹⁴⁴ The committee is “composed of senior officers at Vanguard without external client duties.” VANGUARD, PROXY VOTING GUIDELINES FOR U.S. PORTFOLIO COMPANIES 2 (2019), https://about.vanguard.com/investment-stewardship/portfolio-company-resources/proxy_voting_guidelines.pdf [<https://perma.cc/9WR2-L28M>] [hereinafter VANGUARD, PROXY VOTING GUIDELINES]; see also, e.g., Hortense Bioy, Jose Garcia-Zarate & Alex Bryan, *Passive Fund Providers and Investment Stewardship*, HARV. LAW SCH. F. ON CORP. GOVERNANCE & FIN. REG. (Dec. 21, 2017), <https://corpgov.law.harvard.edu/2017/12/21/passive-fund-providers-and-investment-stewardship/> [<https://perma.cc/Q7LD-YKXR>] (observing that at “Vanguard, SSgA, and LGIM . . . the corporate-governance teams have ultimate authority on the final votes”).

¹⁴⁵ Dawn Lim & Cara Lombardo, *Vanguard Is Handing Over Some of its Voting Power*, WALL ST. J. (Apr. 25, 2019, 7:02 AM), <https://www.wsj.com/articles/vanguard-is-handing-over-some-of-its-voting-power-11556190120> [<https://perma.cc/T88A-QCEY>] (“By the end of the year . . . firms that manage Vanguard’s active equity funds [which represent approximately 9% of Vanguard’s assets under management] will be able to cast votes on takeovers, board slates or shareholder proposals affecting the portion of shares they oversee[,]” but Vanguard “will continue to vote on its vast index fund holdings . . .”).

¹⁴⁶ See BLACKROCK, FAQ, *supra* note 140, at 1 (outlining how BlackRock votes shares through its Investor Stewardship team).

¹⁴⁷ See T. ROWE PRICE, PROXY VOTING GUIDELINES 1 (2019), https://www3.troweprice.com/usis/content/trowecorp/en/utility/policies/_jcr_content/maincontent/policies_row_1/para-mid/thiscontent/pdf_link/pdf_file [<https://perma.cc/88X8-E9FH>] (stating that proxy vote recommendations are made by the Proxy Committee but that fund managers ultimately have the discretion to vote for their companies, as long as they “document their reasons in writing to the Proxy Committee”). The centralized recommendations of T. Rowe Price’s proxy committee are limited, however, and leave a substantial number of issues including say on pay, separating the chair and CEO positions, and ESG issues to a case-by-case determination in which the portfolio managers play a substantial role in making company-specific determinations and may ultimately decide to vote their shares differently. See Donna F. Anderson, *T. Rowe Price’s Investment Philosophy on Shareholder Activism*, HARV. L. SCH. F. ON CORP. GOVERNANCE & FIN. REG. (June 18, 2018),

platform that allows its individual fund managers to debate upcoming votes at their portfolio companies and to reach consensus.¹⁴⁸ Even funds that generally centralize voting decisions may give voting authority to fund managers for particular issues such as mergers or election contests where firm-specific information is important.¹⁴⁹ Finally, a fund may outsource its voting decisions.¹⁵⁰ A number of small fund complexes appear to delegate voting decisions to a proxy advisor such as Institutional Shareholder Services (ISS).¹⁵¹

Centralized governance committees, voting platforms, and consultation among fund managers are among the tools that allow sponsors to leverage their resources across all funds to make voting decisions. Active funds benefit from the governance expertise of passive funds, and passive funds, in turn, rely on the company-specific knowledge of active managers.¹⁵² Notably, fund voting involves ongoing interaction between the governance groups and between passive and active fund managers.¹⁵³ The result of these mechanisms is a high degree of commonality among fund voting decisions, even when the complex gives portfolio managers the discretion to make voting decisions for their funds.¹⁵⁴

On the other hand, particularly with respect to specific transactions such as proxy contests and mergers, members of a fund family do not appear to vote in lockstep.¹⁵⁵ Moreover, each individual fund sponsor has its own policies and practices, which determine the way that fund complex votes and

<https://corpgov.law.harvard.edu/2018/06/18/t-rowe-prices-investment-philosophy-on-shareholder-activism/> [https://perma.cc/RR8Q-LWT2].

¹⁴⁸ Saynay & Stein, *supra* note 142, at 8 (“[T]he Invesco Fund Manager Portal . . . allows for proxy voting to be based on consensus intelligence instead of one person or team overruling everybody else[. It enables] managers who might have deeper insights and more up-to-date information to share their knowledge among colleagues.”).

¹⁴⁹ See, e.g., VANGUARD, PROXY VOTING GUIDELINES, *supra* note 144, at 9.

¹⁵⁰ For example, Fidelity outsources the voting by its index funds to subadvisor Geode. See Bioy et al., *supra* note 144, at 4.

¹⁵¹ See Choi et al., *Who Calls the Shots?*, *supra* note 143 at 53 (reporting that mutual fund voting that is most closely aligned with ISS recommendations accounts for a relatively small proportion of mutual fund assets).

¹⁵² Some mutual fund companies explicitly rely on their active managers to determine the voting policies of their passive funds. See, e.g., Saynay & Stein, *supra* note 142, at 7 (explaining that Invesco’s passive funds engage in echo-voting to “leverage active equity expertise”).

¹⁵³ See, e.g., *id.* at 8 (explaining how Invesco’s proxy voting platform “encourages an internal debate on any vote, enabling managers who might have deeper insights and more up-to-date information to share their knowledge among colleagues”).

¹⁵⁴ See, e.g., Choi et al., *Who Calls the Shots?*, *supra* note 143 (documenting the degree of centralization in voting decisions within fund families).

¹⁵⁵ See Bioy et al., *supra* note 144, at exhibit 3 (detailing differences across fund complexes in voting policies and practices). The failure of fund sponsors even to coordinate their voting behavior offers reasons to question academic papers suggesting that common ownership among large passive investors raises antitrust concerns. See, e.g., Morton & Hovenkamp, *supra* note 7; Posner et al., *supra* note 7.

the frequency with which it votes against management.¹⁵⁶ Empirical evidence indicates that funds that have a greater percentage of an issuer's equity are more likely to engage in active voting,¹⁵⁷ more likely to devote resources to making voting decisions and less likely to follow the recommendations of ISS.¹⁵⁸ Critically, this suggests that, for the votes in which passive investors are most influential, they are most likely to be informed.¹⁵⁹

A variety of sources have documented the effect of mutual fund voting on corporate governance and operational decisions.¹⁶⁰ Most do not distinguish between active and passive investors. However, Appel, Gormley, and Keim's recent empirical study focuses specifically on the effect of passive ownership by using a discontinuity analysis based on stock assignments in the Russell 1000 and 2000 indexes.¹⁶¹ They examine three types of governance measures and conclude that passive ownership influences the governance of the firm. Specifically, they find that increased passive ownership is associated with an increased number of independent directors, decreased takeover defenses, and an increase in one-share, one-vote ownership rights.¹⁶²

¹⁵⁶ See Bioy, et al., *supra* note 144, at exhibit 3.

¹⁵⁷ See Peter Iliev & Michelle Lowry, *Are Mutual Funds Active Voters?*, 28 REV. FIN. STUD. 446, 458-60 (2015).

¹⁵⁸ See *id.* at 455 (suggesting that larger fund families are less likely to follow ISS voting recommendations); see also Choi, et al., *Who Calls the Shots?*, *supra* note 143, at 53-54, 61-62 (2013) (reporting that large fund families are less likely to follow ISS recommendations and identifying divergence between Vanguard's votes and ISS recommendations).

¹⁵⁹ This contrasts with Professor Lund's claim that passive investors adhere to a "a low-cost, unthinking approach to governance . . ." See Lund, *supra* note 7, at 513.

¹⁶⁰ See, e.g., Matthew D. Cain, Jill E. Fisch, Sean J. Griffith & Steven Davidoff Solomon, *How Corporate Governance is Made: The Case of the Golden Leash*, 164 U. PA. L. REV. 649, 678-94 (2016) (studying mutual fund voting and engagement and its effect on golden leash compensation arrangements); Steven Mufson, *Financial Firms Lead Shareholder Rebellion Against ExxonMobil Climate Change Policies*, WASH. POST (May 31, 2017), https://www.washingtonpost.com/news/energy-environment/wp/2017/05/31/exxonmobil-is-trying-to-fend-off-a-shareholder-rebellion-over-climate-change/?utm_term=.9579fd3049f6 [<https://perma.cc/LGN5-8MRY>] (reporting that BlackRock and Vanguard owned 13% of ExxonMobil and that their votes were pivotal in the passage of a shareholder proposal seeking improved disclosure about the effects of climate change).

¹⁶¹ See Appel et al., *Standing on the Shoulders of Giants*, *supra* note 38. Appel, Gormley, and Keim's use of the Russell 2000/1000 as an identification method has been ubiquitous and has now been used in at least six different studies. See Ian Appel, Todd A. Gormley & Donald B. Keim, *Identification Using Russell 1000/2000 Index Assignments: A Discussion of Methodologies 1* (May 20, 2019) (unpublished manuscript), <https://ssrn.com/abstract=2641548>. It is unclear to us whether this IV is a correct one or is merely picking up changes in companies that are destined to either enter or exit the index as index recalibration is predictable from year to year and is reflected in firm performance. Nonetheless, they do give some preliminary evidence of passive investor influence. This empirical evidence is buttressed by extensive anecdotal evidence.

¹⁶² In addition, Appel, Gormley, and Keim find that passive ownership is associated not just with observed governance differences, but also with improved performance as measured by return on assets and Tobin's Q. See Appel et al., *Passive Investors, Not Passive Owners*, *supra* note 38, at 114. But see Appel, Gormley & Keim, *Standing on the Shoulders of Giants: The Effect of Passive Investors on Activism*, 32 REV. FIN. STUD. 2720, 2753 (finding that "passive ownership does not have a statistically

However, passive investor voting does not operate in a vacuum. Instead, passive investors increasingly use their voting power as leverage to gain an audience with managers and directors at their portfolio companies to communicate their views and encourage changes.¹⁶³ Passive funds have shown increased willingness to vote against management, an approach that increases the effectiveness of their private engagements.¹⁶⁴ Evidence shows that this willingness coupled with the leverage provided by their substantial ownership is often sufficient to produce a management response.¹⁶⁵

In recent years, private engagement by mutual funds has grown dramatically.¹⁶⁶ Mutual funds have increasingly made direct contact—by letter, phone, electronic communication, and direct meetings—with the officers and directors of their portfolio companies.¹⁶⁷ One recent survey reports that 63% of large institutional investors engaged in direct discussions with management over the past five years and 45% had private discussions with a company's board outside of management presence.¹⁶⁸ Similarly, the

significant association with target firms' cash holdings, dividend yield, leverage ratio, level of capital expenditures or research and development (R&D) expenses, return on assets, Tobin's q, or stock return in the year prior to being targeted”).

¹⁶³ Passive funds can also exert market pressure through the composition of their indexes. For example, Fidelity offers two sustainability index funds, and a shift by investors of substantial assets into these funds would create an incentive for issuers to adopt more sustainable business practices. *Fidelity Launches First Two Sustainability-Focused Index Funds*, FIDELITY (May 15, 2017), <https://www.fidelity.com/about-fidelity/institutional-investment-management/first-two-sustainability-focused-index-funds> [<https://perma.cc/B5WV-QTQ6>].

¹⁶⁴ See, e.g., Kapadia, *supra* note 112 (explaining that “there appears to be an increasing willingness to act when talks don't progress”).

¹⁶⁵ *Id.*

¹⁶⁶ This engagement takes various forms. See, e.g., STATE ST. GLOB. ADVISORS, PROXY VOTING AND ENGAGEMENT GUIDELINES 2 (2019), <https://www.ssga.com/our-insights/viewpoints/2019-proxy-voting-and-engagement-guidelines-north-america.html> [<https://perma.cc/KK94-CWQD>] (reporting that SSGA engages “with companies to provide insight on the principles and practices that drive our voting decisions. We also conduct proactive engagements to address significant shareholder concerns and environmental, social, and governance (“ESG”) issues in a manner consistent with maximizing shareholder value”); Sarah Krouse, *At BlackRock, Vanguard and State Street, ‘Engagement’ Has Different Meanings*, WALL ST. J. (Jan. 20, 2018, 7:00 AM), <https://www.wsj.com/articles/at-blackrock-vanguard-and-state-street-engagement-has-different-meanings-1516449600> [<https://perma.cc/38A8-AZ4P>] (noting that engagement takes different routes for different passive investors).

¹⁶⁷ Engagement is, of course, not limited to passive investors, but is also done by actively managed mutual funds and hedge funds. See, e.g., Matthew J. Mallow & Jasmin Sethi, *Engagement: The Missing Middle Approach in the Bebchuk-Strine Debate*, 12 N.Y.U. J.L. & BUS. 385, 395 (2016) (reporting that T. Rowe Price “holds hundreds of short, direct conversations with companies owned in portfolios it manages throughout the year on issues that fall beyond the normal due diligence meetings with the companies”).

¹⁶⁸ Joseph A. McCahery, Zacharias Sautner & Laura T. Starks, *Behind the Scenes: The Corporate Governance Preferences of Institutional Investors*, 71 J. FIN. 2905, 2906 (2016).

percentage of S&P 500 companies reporting investor engagement rose from 56% in 2015 to 77% as of July 2018.¹⁶⁹

The engagement of the large passive investors in particular has increased. During 2017, BlackRock had over 1600 engagements with its portfolio companies, Vanguard participated in more than 900 engagements, and State Street participated in more than 600.¹⁷⁰ In addition to in-person engagements, State Street reported sending hundreds of letters to its portfolio companies.¹⁷¹ BlackRock, Vanguard, and State Street all have dedicated corporate governance teams that are responsible for engagement with their portfolio companies.¹⁷² BlackRock explains, for example, that its governance specialists engage “in thousands of conversations with companies each year” that build on the new amount and access to information that investors have gained in recent years “to glean investment insights.”¹⁷³ Vanguard explained that, for the twelve months prior to June 30, 2018, its engagements represented greater than \$1.6 trillion in fund assets and reflected an increase in engagement volume of 63% from 2014.¹⁷⁴

As with voting, the mixture of passive and active funds within the same fund complex creates complementarity with respect to engagement.¹⁷⁵ Active funds can identify underperforming issuers that might be an appropriate target for governance or other improvements, but the sponsor can then leverage the voting power from its passive funds to maximize its impact. Together, active and passive funds finance the sponsor’s knowledge and expertise even if they benefit in different ways from the deployment of that expertise.

¹⁶⁹ 2018 Proxy Season Review, ERNST & YOUNG (July 2018), [https://www.ey.com/Publication/vwLUAssets/EY-cbm-proxy-season-review-2018/\\$FILE/EY-cbm-proxy-season-review-2018.pdf](https://www.ey.com/Publication/vwLUAssets/EY-cbm-proxy-season-review-2018/$FILE/EY-cbm-proxy-season-review-2018.pdf) [<https://perma.cc/VE7W-MGS8>].

¹⁷⁰ See Krouse, *supra* note 166.

¹⁷¹ See *id.*

¹⁷² See, e.g., Madison Marriage, *BlackRock, Vanguard and State Street Bulk Up Governance Staff*, FIN. TIMES (Jan. 28, 2017), <https://www.ft.com/content/657b243c-e492-11e6-9645-c9357a75844a> [<https://perma.cc/CZU-Z8WD>] (observing that, as of January 2017, BlackRock had increased the size of its governance staff to 31 persons, Vanguard had 20 governance employees, and State Street had 11).

¹⁷³ BLACKROCK, EXPLORING ESG: A PRACTITIONER’S PERSPECTIVE 2, 1 (2016), <https://www.blackrock.com/corporate/literature/whitepaper/viewpoint-exploring-esg-a-practitioners-perspective-june-2016.pdf> [<https://perma.cc/55KU-RJE4>].

¹⁷⁴ VANGUARD, INVESTMENT STEWARDSHIP 2018 ANNUAL REPORT at 7, 8 (2018), <https://global.vanguard.com/documents/investment-stewardship-annual-report-v2.pdf> [<https://perma.cc/P4LD-6MWD>].

¹⁷⁵ See, e.g., Ann M. Lipton, *Shareholder Divorce Court*, 44 J. CORP. L. 297, 309 (2019) (“[T]hough large asset managers hold their shares across multiple funds, they often coordinate their governance and engagement policies so that the funds speak with a single voice, amplifying their power.”).

Despite these activities, some commentators have criticized passive investors for the limited size of their governance staffs.¹⁷⁶ We have three responses. First, as their level of engagement increases, passive investors are increasing the size of the governance staffs.¹⁷⁷ Second, the number of personnel required to analyze governance issues is significantly smaller than that required for conducting research focused on firm-specific characteristics. Finally, this criticism ignores the shareholder ecosystem today where individual fund complexes interact and rely upon not only proxy advisory firms but also shareholder activist hedge funds to supplement their voice, monitoring, and information gathering processes. These mechanisms substantially lower informational gathering and assessment costs for both passive and active funds.

Relatedly, issuers and shareholders are also developing private initiatives to promote board-shareholder engagement. Again, passive investors are at the forefront of these efforts. For example, in 2014, major U.S. issuers collaborated with several big institutional investors, including BlackRock and Vanguard, to create the “Shareholder-Director Exchange Program.”¹⁷⁸ Similarly, in 2016, representatives of major U.S. corporations and major investors, including again BlackRock, State Street, and Vanguard, signed an accord supporting a set of commonsense principles of corporate governance and calling for an ongoing constructive dialogue among issuers and shareholders.¹⁷⁹ The “Investor Stewardship Group” (ISG) a collective of sixteen large asset managers including Vanguard and BlackRock, was formed “to establish a framework for standards of stewardship and corporate governance.”¹⁸⁰

Passive investors also engage beyond the level of the individual firm. One way in which they do so is by influencing the voting policies of proxy advisory firms such as ISS and Glass Lewis. These advisory firms reduce information costs with respect to governance, which is critical for cost-conscious passive investors with large portfolios. Advisory firms also have a major influence on

¹⁷⁶ See, e.g., Bebchuk, Cohen & Hirst., *supra* note 7, at 100 (asserting that index funds devote “practically negligent resources” to governance and stewardship); Lund, *supra* note 7, at 515-16 (arguing that the governance groups at the Big Three are “understaffed” and “not yet up to the task”).

¹⁷⁷ See *supra* notes 152–54 and accompanying text.

¹⁷⁸ See James Woolery, *Introduction to the SDX Protocol*, HARV. L. SCH. F. ON CORP. GOVERNANCE & FIN. REG. (Feb. 5, 2014), <https://corpgov.law.harvard.edu/2014/02/05/introduction-to-the-sdx-protocol/> [<https://perma.cc/K25P-K989>]; see also *About SDX*, SDX, <http://www.sdxprotocol.com/about-sdx/> [<https://perma.cc/VQ3B-3MLH>] (last visited Oct. 14, 2017).

¹⁷⁹ See Open Letter from Tim Armour et al., *Commonsense Principles 2.0* (Oct. 18, 2018), <https://www.governanceprinciples.org/wp-content/uploads/2018/10/CSP-2.0-Open-Letter.pdf> [<https://perma.cc/M4QK-MCPT>].

¹⁸⁰ David A. Katz & Laura A. McIntosh, *Common-Sense Capitalism*, HARV. L. SCH. F. ON CORP. GOVERNANCE & FIN. REG. (July 28, 2017), <https://corpgov.law.harvard.edu/2017/07/28/common-sense-capitalism/> [<https://perma.cc/7CFC-6ESJ>].

firm governance by developing governance policies that serve as the basis of their voting recommendations. The advisor voting policies are, however, heavily influenced by the viewpoints of the fund complexes.¹⁸¹

ISS explicitly uses the viewpoints of its institutional customers to develop its voting guidelines.¹⁸² This allows investors to aggregate preferences and overcome collective action problems and to leverage their views by influencing smaller fund complexes with more limited governance expertise. Importantly and evidential of the independent and active voice of many mutual funds, while ISS and Glass Lewis inform mutual fund voting, they do not dictate it. Instead, studies have found that mutual funds increasingly engage in independent analysis of voting decisions.¹⁸³

Finally, even passive investors that track a popular index can affect the composition of the indexes themselves, thus providing a limited degree of control over the companies in which they must invest.¹⁸⁴ For example, the Big Three were influential in persuading some index providers to exclude the issuers of dual class stock from their indexes.¹⁸⁵ The literature commonly assumes that the composition of the major indexes is fixed and rule-based but, in fact, the index providers have a substantial degree of discretion over the criteria for inclusion.¹⁸⁶ Investors have influenced index providers both to waive filters that would otherwise exclude popular or profitable firms¹⁸⁷ and excluded companies that investors view as problematic.¹⁸⁸

¹⁸¹ See generally David F. Larcker, Allan L. McCall & Brian Tayan, *And Then A Miracle Happens!: How Do Proxy Advisory Firms Develop Their Voting Recommendations?*, STAN. CLOSER LOOK SERIES (Stanford Univ., Stanford, Cal.), Feb. 25, 2013, <https://www.gsb.stanford.edu/sites/gsb/files/publication-pdf/cgri-closer-look-31-proxy-firms-voting-recommendations.pdf> [<https://perma.cc/6JCB-W6NL>] (summarizing and criticizing policy formulation procedures of ISS and Glass Lewis).

¹⁸² See *Policy Formulation Process*, ISS, <https://www.issgovernance.com/policy-gateway/policy-formulation-application/> [<https://perma.cc/S3JR-BTMG>] (last visited June 2, 2019).

¹⁸³ See Iliev & Lowry, *supra* note 157, at 466 (finding that mutual funds that stand to gain more from active voting frequently disagree with ISS recommendations).

¹⁸⁴ We are grateful to Andrew Verstein for bringing this point to our attention.

¹⁸⁵ See Joann S. Lublin, *Big Investor Group to Push for End to Dual-Class Shares*, WALL ST. J. (Jan. 31, 2017, 11:50 AM), <https://www.wsj.com/articles/big-investor-group-to-push-for-end-to-dual-class-shares-1485817380> [<https://perma.cc/9GNW-LPDY>] (reporting effort by a group including BlackRock, State Street, and Vanguard to ban companies with dual-class shares from listing on U.S. exchanges).

¹⁸⁶ See Gabriel Rauterberg & Andrew Verstein, *Index Theory: The Law, Promise and Failure of Financial Indices*, 30 YALE J. REG. 1, 18-19 (2013) (describing the broad degree of interpretive discretion exercised by index providers).

¹⁸⁷ *Id.* at 19 (“For example, the S&P 500 imposes profitability and domicile requirements, but its selection committee waives them on a case-by-case basis for popular or important firms.”).

¹⁸⁸ See, e.g., Emma Boyde, *Index Providers Tweak Rules as Investors Raise Concerns*, FIN. TIMES (Nov. 18, 2011), <https://www.ft.com/content/b02adf58-092e-11e1-8e86-00144feabdco> [<https://perma.cc/YH5U-W6N8>] (reporting that the Russell and S&P decided to exclude Chinese reverse merger companies from the definition of a U.S. company, thereby excluding them from popular indexes).

B. *Passive Investors and Activists*

As our theory predicts, passive investors play an important role in mediating the influence of activists. Because of their potential influence, activists and issuers pay increasing attention to passive investors and their concerns both when developing strategic interactions and when considering governance changes. Activists, for a variety of reasons, typically do not purchase more than 5-10% of a portfolio company and, in the case of large targets, may purchase substantially less.¹⁸⁹ As a result, they cannot achieve their objective, whether that is engineering a sale of the company or achieving board representation, without the support of passive investors. Because of their substantial stakes, passive investors frequently decide the success of an activist campaign. For example, none of the Big Three voted in favor of Trian during its activist campaign at DuPont. According to media reports, if any of the three had supported Trian, that vote would have changed the result of the proxy contest and given Trian a victory.¹⁹⁰ In post-mortems on the vote, DuPont's advisors cited engagement with passive investors as a factor in DuPont's win.¹⁹¹

Their role as pivotal voters creates a unique opportunity for passive investors to engage in stewardship on an individual firm level, mediating the role of activists. Passive investors have a critical role in screening activism because their incentives may differ from those of the activists and some actively managed funds. Passive investors share in company-wide gains from valuable activism, but they lose if the activist can implement changes that produce short-term gains but harm the company for the long term because passive investors, unlike active investors, cannot exit before that happens.¹⁹² These incentives are likely to make passive investors take a more cautious approach and be less willing than actively managed funds to support some activists.¹⁹³

¹⁸⁹ See CLAIRE A. HILL, BRIAN JM QUINN & STEVEN DAVIDOFF SOLOMON, *MERGERS & ACQUISITIONS: LAW, THEORY, AND PRACTICE* 767 (2d ed. 2019) ("Activists generally limit their stake to 10% of a target company in order to avoid application of § 16 of the '34 Act . . ."); see also Gilson & Gordon, *supra* note 128, at 897.

¹⁹⁰ See Stephen Gandel, *DuPont Nearly Lost its War with Activist Nelson Peltz*, FORTUNE (June 4, 2015), <http://fortune.com/2015/06/04/dupont-nelson-peltz-vote/> [<https://perma.cc/46BB-PXDC>].

¹⁹¹ Andrew R. Brownstein, Steven A. Rosenblum, David A. Katz & Sabastian V. Niles, *Winning a Proxy Fight—Lessons from the DuPont-Trian Vote*, HARV. LAW SCH. F. ON CORP. GOVERNANCE & FIN. REG. (May 18, 2015), <https://corpgov.law.harvard.edu/2015/05/18/winning-a-proxy-fight-lessons-from-the-dupont-trian-vote/> [<https://perma.cc/L2AK-CJVB>].

¹⁹² See, e.g., *In re PLX Tech., Inc. Stockholders Litig.*, No. 9880-VCL, 2018 WL 5018535, at *41 (Del. Ch. Oct. 16, 2018) (citing the concern that "particular types of investors may espouse short-term investment strategies and structure their affairs to benefit economically from those strategies").

¹⁹³ FactSet Sharkrepellent reports that in 2016 and 2017, activists hedge funds had a 55% and 53% success rate, respectively, in dissident proxy contests. See generally SHARKREPELLENT,

Early empirical evidence supports the role of passive investors in intermediating hedge fund activism. A study authored by Appel, Gormley, and Keim found that higher passive investor ownership is associated with activists' strategic choices and, in particular, an increased incidence of proxy fights.¹⁹⁴ This study also finds that activists are more successful in these circumstances and activists are more likely to obtain board representation or effect a sale of the company.¹⁹⁵ These findings run contrary to other theoretical work suggesting that passive investors are unwilling to support activists.¹⁹⁶

Passive funds have also sought to police private agreements between managers and hedge funds. Increasingly activist proxy contests are resolved through settlements in which the board agrees to add one or more activist-nominated directors.¹⁹⁷ These settlements typically do not involve a shareholder vote, and there are reasons to be concerned that such settlements reduce management accountability.¹⁹⁸ Some passive funds have recently objected to the issuer practice of settling election contests without seeking the input of longer-term institutional investors.¹⁹⁹ These conclusions also suggest that passive investors will be able to develop reputational sanctions to constrain destructive hedge fund activism.²⁰⁰

<https://www.sharkrepellent.net> [<https://perma.cc/C3R8-QNGM>] (last visited Oct. 25, 2019). For a recent example, in Marcato's proxy contest with Deckers Outdoor, BlackRock and Vanguard—two of the five biggest shareholders in the company—voted with management. Glass Lewis sided with management while ISS sided with the activist. See Svea Herbst-Bayliss, *Deckers Wins Proxy Contest Against Hedge Fund Marcato*, REUTERS (Dec. 14, 2017, 12:43 PM), <https://www.reuters.com/article/us-deckers-outdoor-marcato/deckers-wins-proxy-contest-against-hedge-fund-marcato-idUSKBN1E82KR> [<https://perma.cc/F69S-TXDX>]. While passive funds may take a more individualized approach to hedge fund activism, active funds may systematically avoid activism as inhibiting their ability to obtain alpha.

¹⁹⁴ See Appel et al., *Standing on the Shoulders of Giants*, *supra* note 38, at 2723.

¹⁹⁵ See *id.* at 2724.

¹⁹⁶ See Lund, *supra* note 7.

¹⁹⁷ See, e.g., Gail Weinstein, Warren S. de Wied & Philip Richter, *Shareholder Activism: 1H 2018 Developments and Practice Points*, HARV. LAW SCH. F. ON CORP. GOVERNANCE & FIN. REG. (Oct. 14, 2018), <https://corpgov.law.harvard.edu/2018/10/14/shareholder-activism-1h-2018-developments-and-practice-points/> [<https://perma.cc/FJ2A-QF2G>] (noting the continued prevalence of settlements in activist campaigns which result in the placement of a director on the targeted board).

¹⁹⁸ See Jill E. Fisch & Simone M. Sepe, *Shareholder Collaboration*, 98 TEX. L. REV. (forthcoming 2019) (manuscript at 37-39), <https://ssrn.com/abstract=3227113> (explaining that shareholder collaboration may reduce transparency and limit accountability).

¹⁹⁹ See Kai Haakon Liekefett & Lawrence Elbaum, *Think Twice Before Settling with an Activist*, LAW360 (Dec. 9, 2016, 12:21 PM), <https://www.law360.com/articles/869160/think-twice-before-settlings-with-an-activist> [<https://perma.cc/CUW3-RUQJ>].

²⁰⁰ See Kapadia, *supra* note 112.

C. The Role of Policy

Passive investors increasingly have a role in politics and regulation.²⁰¹ They actively engage in policy discussions and generally push for greater voice for investors. They also engage with policymakers on a variety of issues beyond corporate governance. As such, they can bring their knowledge of policy considerations to issuers and can bring the interests of their portfolio companies to policymakers. At the same time, their increasing involvement in such matters is consistent with our theory of passive investor incentives.

One place where passive investors have actively influenced regulatory policy is with their active participation in the governance of their portfolio companies. Passive investors regularly comment upon and call for change to the rules adopted by the SEC under federal securities laws. In April 1991, for example, *Institutional Investor* published a report calling for a number of proxy reforms to allow for increased cooperation among mutual funds.²⁰² Institutional investors broadly supported the reforms, which the SEC enacted in 1992 and which reduced the regulatory burdens for investor communication and collective action.²⁰³ Institutional investors have been active in a variety of other SEC reforms to enhance the effectiveness of shareholder voting rights; for example, most recently institutional investors have been active in shaping and attempting to forestall congressional proposals to regulate proxy advisory services.²⁰⁴

Passive investors' role in the formulation of public policy extends beyond securities regulation. As Asaf Eckstein documents, passive investors spend substantial sums on lobbying, provide comments on agency rulemaking, and participate in roundtables and other policy discussions as well as private meetings with lawmakers.²⁰⁵ Eckstein notes that executives at some passive investors have testified before Congress.²⁰⁶ Passive investors participate in

²⁰¹ See Asaf Eckstein, *The Virtue of Common Ownership in an Era of Corporate Compliance*, 105 IOWA L. REV. (forthcoming 2020) (manuscript at 46), <https://ssrn.com/abstract=3194605> ("Common ownership provides institutional investors with significant power, allowing them privileged access to lawmaking and rulemaking . . .").

²⁰² See Alicia McElhaney, *Fight for Your Right to Proxy*, INSTITUTIONAL INV. (Nov. 10, 2017), <https://www.institutionalinvestor.com/article/b15kfxz7qzdrpy/fight-for-your-right-to-proxy> [<https://perma.cc/C6JH-VNTR>] (describing the report and its proposals).

²⁰³ See Regulation of Communications Among Shareholders, 57 Fed. Reg. 48,276 (Oct. 22, 1992).

²⁰⁴ See Letter from the Council of Institutional Inv'rs to the U.S. Senate Comm. on Banking, Hous., & Urban Affairs (Sept. 6, 2016), <https://corpgov.law.harvard.edu/2016/09/26/the-regulation-of-proxy-advisory-firms/> [<https://perma.cc/MSL6-8XTL>] (sharing concerns about the proposed Corporate Governance Reform and Transparency Act). On the perils of regulating proxy advisors, see generally Asaf Eckstein, *Great Expectations: The Peril of an Expectations Gap in Proxy Advisory Firm Regulation*, 40 DEL. J. CORP. L. 77 (2015).

²⁰⁵ See Eckstein, *supra* note 201 (manuscript at 47-48).

²⁰⁶ *Id.* at 48.

trade groups like the Council for Institutional Investors to develop and support corporate governance best practices as well as other policy positions.²⁰⁷ Institutional investors now regularly take policy positions on legislation and file amicus briefs.²⁰⁸ Institutional investors were active in the negotiation and passage of the Dodd-Frank Act and subsequent legislative efforts.²⁰⁹ Recently, institutional investors, including fund complexes with primarily passive funds, have been active in the fight against climate change.²¹⁰

This policy work includes both broad-based policy initiatives and firm-specific efforts. The big mutual fund complexes regularly publish policy letters and missives, and several have begun using annual letters to issuers to highlight their policy concerns. For example, in 2019 BlackRock's chairman Larry Fink issued a letter to the CEOs of all of the public companies in which BlackRock invests calling for more sustainable business practices.²¹¹ Similarly, a number of institutional investors have issued announcements calling for more gender diversity on corporate boards.²¹² In sum, existing data details the significant and growing involvement index fund sponsors have in engagement, governance, and broader policy initiatives that have market-wide effects on their portfolio companies.

III. THE IMPLICATIONS OF THE THEORY

As the preceding Parts detail, we challenge the claim that passive investors lack incentives to be engaged and informed.²¹³ Instead, we provide evidence

²⁰⁷ See *Associate Members*, COUNCIL OF INSTITUTIONAL INVS., https://www.cii.org/associate_members [<https://perma.cc/5NHD-NX8R>] (last visited June 9, 2019) (listing BlackRock, Vanguard, and State Street as among the CII's associate members).

²⁰⁸ See, e.g., Zach Wener-Fligner, *Every US Company Arguing for the Supreme Court to Legalize Same-Sex Marriage*, QUARTZ (Mar. 10, 2015), <https://qz.com/359424/every-us-company-arguing-for-the-supreme-court-to-legalize-same-sex-marriage/> [<https://perma.cc/WM24-SJGY>] (reporting that BlackRock signed an amicus brief filed in the U.S. Supreme Court arguing for marriage equality for same-sex couples).

²⁰⁹ See, e.g., *Dodd-Frank Act*, COUNCIL OF INSTITUTIONAL INVS., https://www.cii.org/dodd_frank_act [<https://perma.cc/M4GT-JQ36>] (observing that the Council of Institutional Investors "advocated vigorously for many elements of the Dodd-Frank Act").

²¹⁰ See, e.g., Ken Silverstein, *More Institutional Investors Throw Weight into Fight Against Climate Change*, FORBES (Dec. 12, 2017, 12:53 PM), <https://www.forbes.com/sites/kensilverstein/2017/12/12/is-the-financial-and-political-heft-behind-the-climate-fight-enough-to-make-a-difference/#41639a621551> [<https://perma.cc/LMJ5-E49T>].

²¹¹ Fink, *supra* note 35.

²¹² See, e.g., Brianna Castro, *Raising the Stakes on Board Gender Diversity*, HARV. L. SCH. F. ON CORP. GOVERNANCE & FIN. REG. (Jan. 8, 2018), <https://corpgov.law.harvard.edu/2018/01/08/raising-the-stakes-on-board-gender-diversity/> [<https://perma.cc/3AMS-LKHX>] (reporting announcements by State Street, BlackRock, and Vanguard). We do not take a stand on whether any of these initiatives is desirable for society at large or for the companies included in their portfolios.

²¹³ Cf. Lund, *supra* note 7, at 494-95 (arguing that active funds have incentives to monitor that passive funds lack).

of increasing passive investor engagement, a theoretical explanation for why passive investors have incentives to monitor their portfolio companies actively, and empirical evidence that this monitoring is effective.²¹⁴ Our critiques of this literature, however, do not mean there is no reason to be concerned about the rise of passive investors.²¹⁵ In this Part, we address several potential issues. Section A considers the effect of passive investing on market discipline. Section B explores the concern that the rise of passive investing will produce a harmful concentration of economic power. Section C identifies the distinct conflicts of interest raised by passive investors. We emphasize that the substantial size and engagement of passive investors is a relatively recent phenomenon. Accordingly, our analysis is necessarily preliminary.

A. Market Discipline

One concern raised by passive investing is its potential impact on market discipline. Commentators have argued that passive investing “could impair efficient price finding on equity markets”²¹⁶ This concern arises because passive investors do not engage in information-based trading and have no discretion over buying and selling shares.

This concern is particularly important since the premise that stock prices reflect firm value not only drives the market for corporate control, but also guides courts and independent directors.²¹⁷ An important mechanism underlying market efficiency is trading. Informed investors sell overpriced stock, thereby pushing its price down to reflect its fundamental value (and vice versa).²¹⁸ Passive investors, however, have no investment discretion:

²¹⁴ Our description of the channels for passive investor engagement is also inconsistent with academic claims that passive investor common ownership raises antitrust concerns. For an example of such a claim, see Posner et al., *supra* note 7, at 669-70.

²¹⁵ We do not make the claim that passive investors engage in socially optimal stewardship. As others have demonstrated, sometimes they do not. See, e.g., Brown & Davies, *supra* note 82, at 312 (arguing that competition from passive funds creates a moral hazard problem and reduces the effort expended by active fund managers).

²¹⁶ Fichtner et al., *supra* note 5, at 321.

²¹⁷ See Jeffrey N. Gordon, *The Rise of Independent Directors in the United States, 1950–2005: Of Shareholder Value and Stock Market Prices*, 59 STAN. L. REV. 1465, 1563 (2007) (theorizing that independent directors look to stock prices as a signal of company value).

²¹⁸ Trading by institutional investors is associated with informational efficiency of stock prices. See Ekkehart Boehmer & Eric K. Kelley, *Institutional Investors and the Informational Efficiency of Prices*, 22 REV. FIN. STUD. 3563, 3564 (2009) (“Based on four years of proprietary daily data on institutional trading, we link institutional trading to more efficient prices.”); Alex Edmans, *Blockholders and Corporate Governance*, 6 ANN. REV. FIN. ECON. 23, 29 (2014) (noting that blockholders’ informed exit can lead share price to reflect firm value); see also McCahery et al., *supra* note 168, at 2912 (reporting survey findings suggesting that selling shares because of dissatisfaction

even if they believe some shares in their portfolio are overpriced, passive investors cannot sell them. With passive investors comprising an increasingly large fraction of the market, the concern is that not enough investors will engage in information and price discovery and that market prices will become less efficient.²¹⁹

These concerns find some *indirect* support in research showing that (i) index inclusion can lead to stock price changes that do not necessarily reflect fundamentals,²²⁰ (ii) the prices of stock included in an index exhibit comovement, as passive funds buy and sell all the stock comprising an index in response to fund inflows and outflows,²²¹ and (iii) passive investment can produce some temporary pricing distortions.²²² There is scant evidence, however, on the *direct* effect of passive investors on the informational efficiency of stock prices.²²³

Our theory suggests that even a sharp increase in passive investing would not undermine market efficiency. As a substantial percentage of the market becomes indexed, the gains available from having an informational advantage increase.²²⁴ Actively traded mutual funds and hedge funds can exploit these

with performance or governance is quite prevalent; 49% of respondents sold because of the former and 39% because of the latter).

²¹⁹ See, e.g. STEVEN D. BLEIBERG ET AL., EPOCH INV. PARTNERS, THE IMPACT OF PASSIVE INVESTING ON MARKET EFFICIENCY 5-6 (2017), http://www.eipny.com/assets/pdfs/The_Impact_of_Passive_Investing_FINAL.pdf [<https://perma.cc/PDR2-E7DV>] (reporting results of three studies claiming that the increase in passive investing is reducing the efficiency of market prices).

²²⁰ See, e.g., Eric Belasco, Michael Finke & David Nanigian, *The Impact of Passive Investing on Corporate Valuations*, 38 MANAGERIAL FIN. 1067, 1067-68 (2012) (noting that flows into S&P 500 index funds affect valuations of companies within this index); Stijn Claessens & Yishay Yafeh, *Comovement of Newly Added Stocks with National Market Indices: Evidence from Around the World*, 17 REV. FIN. 203, 205 (2012) (finding that “inclusion in a major stock market index is associated with increased comovement between the newly added stock and the rest of the market”).

²²¹ See Vladyslav Sushko & Grant Turner, *The Implications of Passive Investing for Securities Markets*, BIS Q. REV., Mar. 2018, at 119.

²²² See, e.g., Jeffrey L. Coles, Davidson Heath & Matthew C. Ringgenberg, On Index Investing (June 6, 2018) (unpublished manuscript), <https://papers.ssrn.com/abstract=3055324> (finding that index investing introduces noise into stock prices, but does not impact long-term price efficiency or trading by arbitrageurs).

²²³ One study, for example, found that an increase in holdings by exchange traded funds is associated with less firm-level price efficiency. See Doron Israeli, Charles M. C. Lee & Suhas A. Sridharan, *Is There a Dark Side to Exchange Traded Funds? An Information Perspective*, 22 REV. ACCT. STUD. 1048, 1051 (2017). Another study was more positive, finding that passive investors lead to better incorporation of systematic earning information. Lawrence R. Glosten, Suresh Nallareddy & Yuan Zou, *ETF Activity and Informational Efficiency of Underlying Securities*, MGMT. SCI. (forthcoming) (manuscript at 1), <https://ssrn.com/abstract=2846157>.

²²⁴ See Jason Zweig, *Are Index Funds Eating the World?*, WALL ST. J.: THE INTELLIGENT INVESTOR (Aug. 26, 2016, 11:46 AM), <http://blogs.wsj.com/moneybeat/2016/08/26/are-index-funds-eating-the-world/> [<https://perma.cc/PFA2-U43B>] (“[I]n a market in which everyone has equal information, it must pay off for someone to make the extra effort to obtain superior information. So active management is unlikely ever to disappear.”).

gains²²⁵ and, as a result, increase the fees that they charge relative to the fees charged by passive funds.²²⁶ This will increase the incentive of active funds to acquire information that will give them a trading advantage over index funds²²⁷ and further increase the competition between active and passive funds.²²⁸

Moreover, the case that passive investors undermine the informational efficiency of stock prices has not been made. Active investors still dominate the U.S. equity markets. Although estimating the precise percentage of equity securities that are passively invested is difficult, most commentators estimate that percentage as high as 50%,²²⁹ meaning that there is still a substantial portion of the market which is still subject to information-based trading strategies. Additionally, empirical and theoretical research has shown that price discovery and efficiency only require a small number of active

²²⁵ See Sushko & Turner, *supra* note 221, at 120 (“[G]reater anomalies in individual security prices would be expected to increase the gains from informed analysis and active trading, and thus spur more active investment strategies.”); see also Sanford J. Grossman & Joseph E. Stiglitz, *On the Impossibility of Informationally Efficient Markets*, 70 AM. ECON. REV. 393, 405 (1980) (describing a model showing that market efficiency depends on the availability of gains from acquiring information).

²²⁶ Several studies document the ability of some fund managers to outperform the market consistently. See, e.g., Malcolm Baker, Lubomir Litov, Jessica A. Wachter & Jeffrey Wurgler, *Can Mutual Fund Managers Pick Stocks? Evidence from Their Trades Prior to Earnings Announcements*, 45 J. FIN. & QUANTITATIVE ANALYSIS 1111, 1129-30 (2010) (finding evidence that mutual fund managers can trade profitably due to their ability to forecast earnings-related fundamentals); Robert Kosowski, Allan Timmermann, Russ Wermers & Hal White, *Can Mutual Fund “Stars” Really Pick Stocks? New Evidence from a Bootstrap Analysis*, 61 J. FIN. 2551, 2553 (2006) (finding that a sizeable minority of mutual fund managers pick stocks well enough to cover their costs).

²²⁷ We note that the emergence of such trading opportunities is unclear, in part because it is unlikely that the level of indexing is sufficient to generate a price effect. See, e.g., Adam Zoll, *Does the Growth of Passive Investing Make Opportunities for Active Investors?*, MORNINGSTAR (Jan. 22, 2014), <http://www.morningstar.com/articles/631398/does-the-growth-of-passive-investing-make-opportun.html> [<https://perma.cc/PWF8-A5CW>] (quoting Morningstar analyst James Xiong as stating that “the question of whether increased indexing creates exploitable opportunities for active investors remains open”).

²²⁸ As one study observes, competition among similar funds reduces the ability of mutual fund managers to generate consistent outperformance. See Gerard Hoberg, Nitin Kumar & Nagpurnanand Pabhala, *Mutual Fund Competition, Managerial Skill, and Alpha Persistence*, 31 REV. FIN. STUD. 1896, 1897 (2018). As a result, to the extent that active managers face less competition in a world in which a substantial percentage of assets are indexed, they should be able to outperform and to charge higher fees. *Id.*

²²⁹ See, e.g., Alicia Adamczyk, *Index Funds Are More Popular Than Ever—Here’s Why They’re a Smart Investment*, CNBC (Sept. 19, 2019, 11:40 AM), <https://www.cnbc.com/2019/09/19/why-index-funds-are-a-smart-investment.html> [<https://perma.cc/JH87-46Z5>] (“U.S. stock index funds are more popular than actively managed funds for the first time ever, according to investment research firm Morningstar. As of August 31, these index funds held \$4.27 trillion in assets, compared to \$4.25 trillion in active funds.”).

traders.²³⁰ Even if passive investing comprised 60% or 70% of the market, there would still be sufficient trading for price discovery.²³¹

A second concern is the impact of passive investing on governance decisions by IPO companies. Existing law has been deferential to firm governance decisions at the IPO stage, based in part on the premise that these decisions are subject to market discipline.²³² IPO investors can, in theory, price an issuer's governance structure or, in the alternative, refuse to invest in issuers that have bad corporate governance.²³³ The growth of passive investing, however, may reduce IPO-stage market discipline.²³⁴

Specifically, passive investors cannot avoid purchasing the shares of an issuer that is to become part of their index,²³⁵ whatever the quality of its corporate governance.²³⁶ Passive investors, therefore, are forced buyers.²³⁷

²³⁰ See Jonathan B. Berk & Jules H. van Binsbergen, *Measuring Skill in the Mutual Fund Industry*, 118 J. FIN. ECON. 1, 18 (2015); Bradford Cornell, *Passive Investing and Market Efficiency*, 26 J. INV., Fall 2017, at 7-8.

²³¹ Cf. Zweig, *supra* note 224 (claiming that, because they trade so frequently, active funds will still set market prices even if the levels of passive ownership continue to rise).

²³² See Michal Barzuza, *Inefficient Tailoring: The Private Ordering Paradox in Corporate Law*, 8 HARV. BUS. L. REV. 131, 147 (2018) ("The IPO stage's optimality, however, [with respect to the choice of governance terms] hinges on the assumption that capital markets value governance terms correctly.").

²³³ See, e.g., Andrew William Winden, *Sunrise, Sunset: An Empirical and Theoretical Assessment of Dual-Class Stock Structures*, 2018 COLUM. BUS. L. REV. 852, 903 (noting that "[p]roponents of private ordering" argue that investors are not "forced to accept the founder's terms for investment—investors can always choose not to invest, and the risks of agency costs created by the dual-class governance model are priced into the IPO share price by the market, which has the ability to assess and price such risks.").

²³⁴ Commentators have challenged this description of the IPO process as factually inaccurate and suggested that IPO investors may not price governance terms. See John C. Coates IV, *Explaining Variation in Takeover Defenses: Blame the Lawyers*, 90 CALIF. L. REV. 1301, 1308 (2001); Robert Daines & Michael Klausner, *Do IPO Charters Maximize Firm Value? Antitakeover Protection in IPOs*, 17 J.L. ECON. & ORG. 83, 85-86 (2001).

²³⁵ The problem may be more severe in non-U.S. markets, where it may be easier for companies to get included in major stock indexes. In the UK, for example, listings of poorly governed large-cap companies from Russia and Indonesia led to their inclusion in a leading FTSE index. This in turn led UK institutional investors to push for new listing rules that would govern premium-listed companies. See Richard Wachman, *FTSE Makes Room for More Russians*, GUARDIAN (Dec. 6, 2011, 4:15 PM), <https://www.theguardian.com/business/2011/dec/06/ftse-russian-miners-governance-concerns> [<https://perma.cc/F6WK-HK7X>].

²³⁶ The Council of Institutional Investors, for example, has noted that its members follow passive investment strategies and therefore cannot simply decline to buy shares of such companies. See Letter from Jeff Mahoney, Gen. Counsel, Council of Inst. Inv'rs, to Claudia Crowley, CEO & Chief Regulatory Officer, NYSE (Oct. 2, 2012), https://www.cii.org/files/issues_and_advocacy/correspondence/2012/10_2_12_cii_letter_to_nyse_dual_class_stock.pdf [<https://perma.a.c/MSL6-8XTL>].

²³⁷ We note, however, that most indexes require that an issuer be public for a period of time before they are included in an index. Ari I. Weinberg, *Why Index Funds Have a Limited Presence in the IPO Market*, WALL ST. J. (Sept. 4, 2017, 10:04 PM), <https://www.wsj.com/articles/why-index->

Moreover, because the terms of inclusion in an index are predetermined and public, a company may be able to predict at the time it goes public that its shares will become part of a popular index. The company can then rely on this “fixed” demand for its shares to go public with value-reducing features.²³⁸

Governance provisions introduced at the IPO stage may also limit subsequent efforts by passive investors to use their voice.²³⁹ For example, dual-class stock has become increasingly popular in technology companies at the IPO stage.²⁴⁰ The IPO of SNAP on March 2, 2017, is an extreme example in offering shares with *no* voting rights.²⁴¹ SNAP was the first such no-vote IPO listed on the NYSE since 1940.²⁴² A number of institutional investors had previously objected to the dual-class structure, and the SNAP IPO raised the intensity of these objections. As State Street explained, even passive investors who prefer engagement over confrontation are concerned that limited voting rights will lead management to give less weight to their concerns.²⁴³

Following the SNAP IPO, several institutional investors responded to the risk of being forced to invest in companies with dual-class structures by asking the leading index providers to exclude dual-class companies.²⁴⁴ In response, two of the largest index providers, the S&P and the FTSE Russell, agreed to exclude certain multiple-class companies from their major

funds-have-a-limited-presence-in-the-ipo-market-1504577040 [https://perma.cc/ZV2V-MVAK]. In such a case, index inclusion would not address the issuer’s ability to sell their stock at the IPO stage.

²³⁸ See *id.*

²³⁹ See e.g., Jill E. Fisch, *Governance by Contract: The Implications for Corporate Bylaws*, 106 CALIF. L. REV. 373, 382-399 (2018) (identifying various limitations on effective shareholder voting that are inconsistent with a contractual understanding of the corporation); see also Scott Hirst, *Frozen Charters*, 34 YALE J. REG. 91, 93 (2017) (explaining how voting rules adopted at the IPO stage can limit issuers’ ability to amend disfavored charter terms).

²⁴⁰ FINRA reports that “[b]etween 2013 and late 2015, 98 companies newly listed on U.S. exchanges had dual class IPOs.” *Supervoters, Stocks and Silicon Valley: What Investors Should Know About Dual Class Voting Structures*, FIN. INDUSTRY REG. AUTHORITY (Dec. 1, 2015), <http://www.finra.org/investors/insights/supervoters-stocks-and-silicon-valley-what-investors-should-know-about-dual-class-voting> [https://perma.cc/7EDT-RP4G].

²⁴¹ Ken Bertsch, *Snap and the Rise of No-Vote Common Shares*, HARV. L. SCH. F. ON CORP. GOVERNANCE & FIN. REG. (May 26, 2017), <https://corpgov.law.harvard.edu/2017/05/26/snap-and-the-rise-of-no-vote-common-shares/> [https://perma.cc/JGH9-LDX4].

²⁴² *Id.*

²⁴³ See Julie Segal, *State Street Blasts Snap Over Lack of Shareholder Voting Rights*, INSTITUTIONAL INV’R (June 23, 2017), <https://www.institutionalinvestor.com/article/b1505pmgs8zjg5/state-street-blasts-snap-over-lack-of-shareholder-voting-rights> [https://perma.cc/5Q3S-DVSB].

²⁴⁴ See Letter from Kenneth A. Bertsch, Exec. Dir., Council of Inst. Inv’rs, to MSCI Equity Index Comm. 6 (Aug. 3, 2017), https://www.cii.org/files/issues_and_advocacy/correspondence/8-3-17%20CII%20response%20to%20MSCI%20Consutation.pdf [https://perma.cc/8G25-JZMM] (“CII’s membership includes strong supporters of passive index strategies, and we believe that major index providers have a critical role to play in preventing non-voting and multi-class equity structures from gaining unstoppable momentum.”).

indexes.²⁴⁵ The third major index provider, the MSCI, decided after an eighteen-month consultation period to retain dual-class issuers in its major indexes but to create a series of new benchmarks that contain voting rights in their eligibility criteria.²⁴⁶ Notably, however, not all passive investors supported the approach of excluding dual-class stock from the major indexes. BlackRock expressed the concern that its passive funds would be deprived of investments in high growth technology stocks which active funds could still purchase.²⁴⁷

At present, a number of institutions are seeking an alternative approach in which the stock exchanges, rather than index providers, would impose limits on issuer use of dual-class structures. This would free passive funds from the obligation to invest in issuers with problematic dual-class structures, essentially imposing the market discipline available to active funds through listing requirements rather than individual stock selection and showing the ability of passive investors to affect governance practices.²⁴⁸

B. Concentration of Ownership

A second concern raised by the growth of passive investors is concentration of ownership. As John Coates explains, indexation has created organizations—large mutual fund sponsors—“controlled by a small number of individuals with unsurpassed power.”²⁴⁹ The Big Three are the largest shareholders in 40% of U.S. listed corporations and 88% of the largest companies.²⁵⁰ Coates warns that

²⁴⁵ See Abe M. Friedman, Bob McCormick, Allie M. Rutherford & Rob Zivnuska, *S&P and FTSE Russell on Exclusion of Companies with Multi-Class Shares*, HARV. L. SCH. F. ON CORP. GOVERNANCE & FIN. REG. (Aug. 5, 2017), <https://corpgov.law.harvard.edu/2017/08/05/sp-and-ftse-russell-on-exclusion-of-companies-with-multi-class-shares/> [<https://perma.cc/LX8J-APEU>] (describing the index providers’ new policies, which included “partially or fully includ[ing] companies with multiple-class share structures”); see also Chris Dieterich, Maureen Farrell & Sarah Krouse *Stock Indexes Push Back Against Dual-Class Listings*, WALL ST. J. (Aug. 2, 2017), <https://www.wsj.com/articles/stock-indexes-push-back-against-dual-class-listings-1501612170> [<https://perma.cc/79LQ-SS2R>] (reporting S&P’s decision that Snap and other dual class companies would not be eligible for inclusion in the S&P 500 index).

²⁴⁶ Rachel Evans, *MSCI Rejects Calls to Ban Dual-Class Stocks From its Indexes*, BLOOMBERG (Oct. 30, 2018, 5:05 PM), <https://www.bloomberg.com/news/articles/2018-10-30/msci-rejects-calls-to-ban-dual-class-stocks-from-its-indexes> [<https://perma.cc/294C-QFG5>].

²⁴⁷ Ning Chiu, *BlackRock Wants Equal Voting Rights but Opposes Exclusion from Indexes*, DAVIS POLK BRIEFING: GOVERNANCE (Oct. 23, 2017), <https://www.briefinggovernance.com/2017/10/blackrock-wants-equal-voting-rights-but-opposes-exclusion-from-indexes/> [<https://perma.cc/EV2F-ETKY>] (citing BlackRock’s concern that excluding dual-class companies from the index would deprive their index-based clients of “opportunities for returns”).

²⁴⁸ See, e.g., *Dual-Class Stock*, COUNCIL OF INST. INV’RS (2019), https://www.cii.org/dualclass_stock [<https://perma.cc/6YBC-NSWN>] (explaining that “[s]tock exchanges could voluntarily address the matter by ensuring their listing standards bar companies with dual-class structures”).

²⁴⁹ Coates, *supra* note 8, at 3.

²⁵⁰ Griffith & Lund, *supra* note 123, at 1156.

this concentration has resulted in the ownership rights for most portfolio companies being concentrated in the hands of a small number of individuals who work for the major fund sponsors,²⁵¹ thereby raising legitimacy, accountability, and other concerns associated with the concentration of economic power in a small group of individuals.

Coates' observation is correct in that the increased ownership concentration resulting from the growth of passive investing will change the nature of corporate governance, but is this a cause for concern? We suggest that, although this concentration may present challenges, it may also provide benefits.

The rise of sponsors with significant ownership stakes has the potential to reduce the collective action problems that modern corporations have faced since the 1930s.²⁵² Berle and Means identified the managerial agency costs that arise when professional managers control corporations with dispersed public ownership.²⁵³ These managerial agency costs have been the central focus of corporate law for almost a century.²⁵⁴ The reconcentration of ownership in the hands of the major mutual fund families offers the potential to reduce these agency costs.²⁵⁵ The engagement that we document and the empirical studies finding passive investor ownership increases hedge fund activism and monitoring support this conclusion.²⁵⁶

Moreover, the investment horizon of passive investors is likely to be longer than those of active funds and activists.²⁵⁷ Thus, for those concerned with the possibility that short-termism may accompany greater monitoring by active mutual funds and hedge funds, passive investors with a significant ownership stake serve as a valuable antidote. Ironically, this reconcentration and empowerment of mutual funds may partially overcome some of the management entrenchment motivation that led to the regulation of the

²⁵¹ See Coates, *supra* note 8, at 14 (“It is not an exaggeration to say that even if this mega-trend begins to taper off, the majority of the 1,000 largest U.S. companies will be controlled by a dozen or fewer people over the next ten to twenty years.”).

²⁵² Berle and Means most notably identified the problem of dispersed small ownership and the resulting empowerment of management. See generally ADOLF A. BERLE, JR. & GARDINER C. MEANS, *THE MODERN CORPORATION AND PRIVATE PROPERTY* (1932).

²⁵³ *Id.*

²⁵⁴ See, e.g., Jesse M. Fried, *The Uneasy Case for Favoring Long-Term Shareholders*, 124 *YALE L.J.* 1554, 1624 (2015) (“[S]hareholders’ ability to minimize managerial agency costs is one of the most important challenges in the corporate governance of widely held firms.”).

²⁵⁵ See, e.g., Edmans, *supra* note 218, at 25-33 (reviewing the literature on the various ways in which large shareholders engage in corporate governance and reduce agency costs).

²⁵⁶ See *supra* notes 194-196 and accompanying text.

²⁵⁷ See, e.g., Jeffrey A. Busse, Lin Tong, Qing Tong & Zhe Zhang, *Trading Regularity and Fund Performance*, 32 *REV. FIN. STUD.* 374, 388-90 (2019) (explaining that active funds trade more frequently in response to information and finding that such trading correlates with performance); Bidisha Chakrabarty, Pamela C. Moulton & Charles Trzcinka, *The Performance of Short-term Institutional Trades*, 52 *J. FIN. & QUANTITATIVE ANALYSIS* 1403, 1406 (2017) (identifying the concern that mutual fund managers engage in short-term trading to “look active”).

mutual fund industry and the variety of requirements that have the effect of fragmenting mutual fund ownership of portfolio companies.²⁵⁸

In addition, our analysis of the institutional context suggests that the major sponsors are unlikely to act as a monolithic single owner; their interests vary substantially depending on the composition of the fund, and the business model and other business activities of the fund's sponsor.²⁵⁹ As a result, while the major fund sponsors will play a greater role in the oversight of large portfolio companies, there is little reason to believe that fund sponsors will vote or otherwise act as a block.²⁶⁰

Moreover, the increased influence of passive investors does not operate in a vacuum. As noted above, actively managed funds continue to dominate the mutual fund market, and they have the ability to use the information obtained through their firm-specific analysis to influence by means of both their voting power and their trading decisions. In the same way that passive investors are a check on hedge fund activism, hedge funds are a powerful check on the influence of passive investors. Hedge funds continue to make concentrated investments in a limited number of portfolio companies and to engage in highly substantive analysis, often bringing value-enhancing operational insights to those companies.²⁶¹ Indeed, activist activity continues to rise. As of early 2019, there were more than 100 activist hedge funds, and they engaged in a record level of activity in 2018.²⁶²

Finally, the most important counterbalance to passive investor influence is the continued role of corporate management. In the previous Part, we explained that, as pivotal shareholders, passive investors need not resort to aggressive tactics to influence management. This analysis, however, does not mean that passive investors can control specific business or operational decisions. Corporate law vests ultimate control of corporate decision making in the hands of the board of directors, and shareholders lack both the legal

²⁵⁸ For development of the argument that regulation of the mutual fund industry was a result of political pressure designed to prevent institutions that potentially could influence industry from becoming too big and powerful, see Mark J. Roe, *Political Elements in the Creation of a Mutual Fund Industry*, 139 U. PA. L. REV. 1469, 1470-71 (1991).

²⁵⁹ See, e.g., Fichtner et al., *supra* note 5, at 307 ("These portfolios may have different interests when it comes to shareholder vote.").

²⁶⁰ Indeed, even those who criticize passive owners observe that they do not all vote their shares the same way. See, e.g., Bebchuk & Hirst, *supra* note 8 (manuscript at 41-42); Griffith & Lund, *supra* note 123, at 1179-80.

²⁶¹ See Fisch & Sepe, *supra* note 198 (manuscript at 14).

²⁶² Martin Lipton, *Dealing with Activist Hedge Funds and Other Activist Investors*, HARV. LAW SCH. F. ON CORP. GOVERNANCE & FIN. REG. (Jan. 25, 2019), <https://corpgov.law.harvard.edu/2019/01/25/dealing-with-activist-hedge-funds-and-other-activist-investors-2/> [<https://perma.cc/9F9Q-47KQ>].

authority and the ability to make operational decisions.²⁶³ The corporate board is both the first mover and holds veto power with respect to shareholder initiatives, and courts have defended the board's veto power in a variety of contexts.²⁶⁴ Both in Delaware and elsewhere, statutory and decisional law gives corporate boards foundational control over corporate decisions, and shareholder power is limited to voting on a small number of issues designated by the statute and exercising influence through engagement.²⁶⁵ Even hedge fund activists typically seek board representation because of their inability to effect changes in their capacity as shareholders.²⁶⁶ Other regulatory restrictions also limit the ability of funds to exercise control, such as section 13(d) of the Securities Exchange Act.²⁶⁷

The analysis above assumes that fund sponsors—and the individuals that make decisions on their behalf—use their power for the benefit of their beneficiaries. However, sponsors may also face conflicts of interest.²⁶⁸ We address this concern next.

C. Conflicts of Interest

A third concern is the potential for conflicts of interest. Like other institutional investors, passive funds are managed by entities and individuals that have their own incentives and interests. The mutual fund sponsors and investment advisors, who make decisions on behalf of passive investors, do not own the assets that they manage, and instead “invest other people’s money.”²⁶⁹

²⁶³ See, e.g., James D. Cox, *Corporate Law and the Limits of Private Ordering*, 93 WASH. U. L. REV. 257, 291 (2015) (explaining that board of directors has broad statutory authority and that shareholders' powers are limited).

²⁶⁴ See, e.g., *Air Prods. & Chems., Inc. v. Airgas, Inc.*, 16 A.3d 48, 55 (Del. Ch. 2011) (upholding board's authority to reject a tender offer despite widespread shareholder support).

²⁶⁵ See, e.g., Stephen M. Bainbridge, *Director Primacy: The Means and Ends of Corporate Governance*, 97 NW. U. L. REV. 547, 557-59 (2003) (describing exclusive board authority as essential to overcome shareholder collective action problems).

²⁶⁶ See Fisch & Sepe, *supra* note 198 (manuscript at 16-18) (describing increasing number of hedge fund-nominated directors and defending board representation as a mechanism by which issuers and hedge funds can aggregate information).

²⁶⁷ See, e.g., Morley, *supra* note 46, at 1423-30 (observing that section 13(d) is one of several reasons why mutual funds cannot engage effectively in activism).

²⁶⁸ As Coates suggests, the few individuals who control the sponsors of the largest passive funds might use their power to advance their own private benefits (pecuniary or nonpecuniary). The potential for self-dealing by mutual fund managers is a standard agency problem which, although legitimate, does not differ conceptually from the potential for self-dealing by corporate managers, and the standard legal tools for minimizing such self-dealing such as independent boards and fiduciary duties apply. *But cf.* Eric D. Roiter, *Disentangling Mutual Fund Governance from Corporate Governance*, 6 HARV. BUS. L. REV. 1, 4-5 (2016) (identifying distinctions between mutual fund governance and standard corporate governance).

²⁶⁹ Bebchuk, Cohen & Hirst, *supra* note 7, at 93.

Although scholars have analyzed the agency costs and moral hazard problems associated with institutional investors generally, passive investors are distinctive. On the one hand, agency costs are less likely to influence investment decisions because the fund's portfolio composition is constrained by the applicable index.²⁷⁰ On the other hand, the size and voting power of passive funds gives their sponsors substantial power to influence their portfolio companies. The concern then is that fund sponsors will leverage this power in ways that benefit the sponsors' other funds or business activities. The motivation for doing so is that these other activities are more lucrative for the sponsor than the fees generated by passive funds. We identify three concerns: first, conflicts of interest arising from business ties between sponsors and portfolio companies; second, the incentive to favor active over passive funds; third, the effect of cross ownership on voting.

One concern is that potential business ties between sponsors and companies' management may affect passive funds' voting behavior. Commentators have identified some of the potential conflicts arising from business ties between public companies and fund sponsors.²⁷¹ For example, as discussed previously, Vanguard and Fidelity provide extensive services to employer-sponsored 401(k) plans.²⁷² These services create the risk that Vanguard and Fidelity will vote the shares of their funds in favor of management rather than in the best interests of the fund shareholders, in order to curry favor from management and win or retain 401(k) plan business. The literature explores the potential impact of a fund sponsor's relationships with its portfolio companies on fund voting decisions, and there is at least some evidence that these relationships increase the frequency with which the sponsor's funds will support management.²⁷³

A second concern is that sponsors will use the power provided by the large holdings of passive investors for the benefit of the more lucrative active funds

²⁷⁰ Fund sponsors and advisors face the potential of conflicts whenever they allocate investment opportunities because of their ability to favor one client or fund over another. See, e.g., McLaughlin, *supra* note 49 (describing as a conflict Fidelity's decision to invest in a variety of pre-IPO companies through its private venture funds, which are owned by the Johnson family, rather than through its mutual funds).

²⁷¹ See, e.g., Gerald F. Davis & E. Han Kim, *Business Ties and Proxy Voting by Mutual Funds*, 85 J. FIN. ECON. 552, 553 (2007) (studying voting patterns of mutual funds whose sponsors manage employee benefit plans for public companies).

²⁷² See, e.g., Greg Iacurci, *Fidelity Pushes Vanguard to Compete on Brand in 401(k) Plans*, INV. NEWS (Jan. 24, 2018, 2:48 PM), <http://www.investmentnews.com/article/20180124/FREE/180129959/fidelity-pushes-vanguard-to-compete-on-brand-in-401-k-plans> [https://perma.cc/RLH5-ZVUS] (describing competition between Fidelity and Vanguard both for revenue from administering 401(k) plans and for investment funds in such plans).

²⁷³ See, e.g., Rasha Ashraf, Narayanan Jayaraman & Harley E. Ryan, Jr., *Do Pension-Related Business Ties Influence Mutual Fund Proxy Voting? Evidence from Shareholder Proposals on Executive Compensation*, 47 J. FIN. & QUANTITATIVE ANALYSIS 567, 587 (2012).

within the same family. Because its actively managed funds generate higher fees, a sponsor's management of multiple funds creates the risk that active managers will cause passive funds to act in ways that favor the interests of the active funds. The literature has noted the possibility that mutual fund sponsors will favor the interests of some funds over others, but it has not fully explored the issue.²⁷⁴

There are a variety of situations in which the interests of individual mutual funds offered by a fund sponsor may differ.²⁷⁵ Two funds offered by a single sponsor may own different proportions of competing firms such that improving governance at one firm reduces the advantage of its competitor. A passive fund might be long in a portfolio company in which its sponsor's hedge fund has a short position. In either case, the passive fund might vote against value-enhancing measures at the firm.²⁷⁶

Sponsors might also use the access provided by their holdings to obtain information about their portfolio companies and then use that information to inform trading decisions for the benefit of investors in their other products, such as actively managed funds or hedge funds. For example, sponsors could use negative information to short or underweight their holdings in particular companies, enabling their active funds to outperform the benchmark.²⁷⁷

Similarly, passive fund sponsors may value the access to management afforded by the substantial stakes held by their passive funds, access that provides value to their actively managed funds. To the extent that sponsors can leverage this access into better-informed stock-picking by active managers, it will enable them to charge higher fees for their actively managed funds. There is some evidence that fund sponsors tend to favor funds that

²⁷⁴ See, e.g., José-Miguel Gaspar, Massimo Massa & Pedro Matos, *Favoritism in Mutual Fund Families? Evidence on Strategic Cross-Fund Subsidization*, 61 J. FIN. 73, 74 (2006).

²⁷⁵ See, e.g., John Morley, *The Separation of Funds and Managers: A Theory of Investment Fund Structure and Regulation*, 123 YALE L.J. 1228, 1261 (2014) (terming such conflicts "pervasive" and observing that "[f]inancial economists and legal scholars have thus found the conflicts that arise from the simultaneous management of multiple funds in investment management companies extremely alarming").

²⁷⁶ Fidelity's unique policy of delegating the voting of its index funds to a third-party advisor is one way to address this concern. See *supra* note 150.

²⁷⁷ The extent to which this occurs is unclear. We note, however, that BlackRock received attention in connection with the January 2018 collapse of Carillion in the U.K. See Emma Rumney, Ben Martin & Alasdair Pal, *Carillion Collapse Hits Banks and Investors, Boosts Short Sellers*, REUTERS (Jan. 15, 2018, 11:31 AM), <https://uk.reuters.com/article/uk-carillion-restructuring-funds/carillion-collapse-hits-banks-and-investors-boosts-short-sellers-idUKKBN1F424D> [<https://perma.cc/NCF3-VU7L>]. Moreover, to the extent this latter scenario is based on a fund sponsor's ability to access material nonpublic information, both the issuer and the sponsor have strong incentives to avoid conduct that would amount to illegal insider trading.

charge higher fees and are therefore more profitable for them.²⁷⁸ This favoritism could, in theory, lead a mutual fund sponsor to refrain voting its substantial passive fund holdings against or criticizing management if the vote would harm the active fund, even when such opposition would be warranted. Similarly, contrary to the interests of its beneficiaries, a passive fund might support an activist campaign that is likely to produce only short-term value if the actively managed funds in its fund sponsor hold substantial positions in shares of the target company.

We do not believe that these possibilities lead to the conclusion that fund sponsors must segregate the engagement and voting decisions of their passive and active funds. Under our framework, fund sponsors' operation of their funds in a way that maximizes their common interests is generally an advantage of the fund family structure rather than a bug. The ability of fund managers to pool the informational advantages of their multiple funds and fund managers generates economies of scale. The ability to leverage passive fund voting power and active fund expertise creates valuable synergies. Indeed, it is misleading to portray managers' ability to manage their fund families collectively as a conflict of interest. Because, as noted above, the investment fund industry is highly competitive, sponsors are limited in their ability to retain rents from this behavior; rather it is the fund customers who reap the benefits from the implicit cross-subsidization among funds. An example is Fidelity's recent adoption of zero-fee mutual funds, funds that can only exist by virtue of the cross-subsidies that the assets in those funds provide to Fidelity's other business operations.

In addition, analyzing interests and incentives from the perspective of an individual fund mistakenly conflates the interest of the fund and its customers. As noted above, customers often invest in multiple funds offered by a single fund family. To the extent that Fidelity customers own shares in its zero-fee Large Cap fund, they benefit if the operations of that fund are subsidized by the higher-fee Magellan fund. But those same customers may also own shares in the Magellan fund and benefit from the increased leverage that fund enjoys because its portfolio company holdings are aggregated with those in other Fidelity funds.²⁷⁹ Likewise, many Fidelity customers invest in Fidelity mutual funds because Fidelity is the administrator of their employer's 401(k) plan, thereby benefiting from the coordinated business operations of the retirement services and the mutual funds.

²⁷⁸ See Gaspar et al., *supra* note 274, at 74; see also Diane Del Guercio, Egemen Genç, Hai Tran, *Playing Favorites: Conflicts of Interest in Mutual Fund Management*, 128 J. FIN. ECON. 535 (2018) (finding that funds whose managers also manage hedge funds underperform peer mutual funds).

²⁷⁹ In fact, given the potential for cross-subsidization, if the Magellan fund can charge higher fees as a result of this leverage, that benefit inures even to the benefit of Fidelity customers who only invest in the zero-fee funds.

A third issue that has received recent attention is the potential conflict created by cross-ownership.²⁸⁰ Each mutual fund is likely to own positions in a large number of portfolio companies, and the business interests of those companies may conflict. There are a variety of issues on which a fund's vote at one portfolio company can potentially benefit or harm the interests of another portfolio company. How, then, should the fund take those interests into account when making its voting decisions?

The effect of cross-ownership is particularly apparent in the context of merger voting, in which an individual mutual fund may own stock in both the acquirer and the target company. When both bidder and target are public companies that belong to an index, it is common for passive funds to hold shares of both.²⁸¹ A merger may present a direct conflict between the interests of the merging companies, as the terms of the merger may be beneficial for the target but not for the acquirer, or vice versa. Alternatively, the merger may decrease value overall but serve the interests of one of the merger companies.²⁸²

Shareholder voting is becoming increasingly important in the merger context due to developments in Delaware case law that reduce the level of judicial scrutiny when a transaction has been approved by an informed vote of the independent shareholders.²⁸³ In the recent litigation challenging Tesla's merger with SolarCity, plaintiffs made the novel argument that the largest shareholders in both Tesla and SolarCity (i.e., the Big Three and other mutual

²⁸⁰ See, e.g., Griffith & Lund, *supra* note 123, at 1157 (describing the fact that an institution has "interests on both sides of a transaction" as a "conflict of interest").

²⁸¹ Notably, however, this is an issue that is common to all mutual funds, not simply passive funds, although the rise of passive investing increases the frequency of cross-ownership. See Chris Brooks, Zhong Chen & Yeqin Zeng, *Institutional Cross-Ownership and Corporate Strategy: The Case of Mergers and Acquisitions*, 48 J. CORP. FIN. 187, 189 (2018) (finding that, in a sample of 2604 mergers between U.S. public firms from 1984 to 2014, on average, 18% of acquirer stocks are held by target institutional owners and 21% of target stocks are held by acquirer institutional owners).

²⁸² Some commentators have argued that the Tesla SolarCity merger, for example, was a value-decreasing merger. See Griffith & Lund, *supra* note 123, at 1153. Similar concerns were raised about the HP-Compaq merger and, indeed, Walter Hewitt, a substantial HP shareholder, successfully filed litigation challenging the merger. *Hewlett v. Hewlett-Packard Co.*, No. 19513-NC, 2002 Del. Ch. LEXIS 35 (Del. Ch. Apr. 30, 2002). In retrospect, the HP-Compaq merger appeared to be value-enhancing for both companies. See, e.g., Alice LaPlante, *Compaq and HP: Ultimately, the Urge to Merge Was Right*, STAN. GRADUATE SCH. BUS.: INSIGHTS (June 1, 2007), <https://www.gsb.stanford.edu/insights/compaq-hp-ultimately-urge-merge-was-right> [<https://perma.cc/CJ5J-SEWT>] (reporting "the consensus is that the merger was indeed a good idea").

²⁸³ See, e.g., *Corwin v. KKR Fin. Holdings, LLC*, 125 A.3d 304, 312-13 (Del. 2015). For a further discussion of Delaware's redefinition of these standards to an arguably lower level, see generally Steven Davidoff Solomon & Randall S. Thomas, *The Rise and Fall of Delaware's Takeover Standards*, in *THE CORPORATE CONTRACT IN CHANGING TIMES: IS THE LAW KEEPING UP?* (Steven Davidoff Solomon & Randall Stuart Thomas eds., 2019); Zohar Goshen & Sharon Hannes, *The Death of Corporate Law*, 94 N.Y.U. L. REV. 263 (2019).

fund sponsors) were not disinterested for purposes of the Tesla vote to approve the merger due to this cross-ownership.²⁸⁴ Plaintiffs argued that these investors—“unlike other Tesla stockholders who did not own SolarCity stock—had a powerful economic incentive to use Tesla’s capital to bail out SolarCity”²⁸⁵ They argued that this conflict of interest “distort[ed] an effective exercise of the franchise” and that, accordingly, their votes to approve the merger should be excluded as not independent.²⁸⁶

We do not address the plaintiffs’ argument that the mutual fund votes in *Tesla* should not qualify as disinterested under the *Corwin* standard except to note that Delaware law does not generally inquire into the motivations of non-controlling shareholders when they are exercising their voting rights.²⁸⁷ We are unpersuaded, however, that from the perspective of the mutual funds’ customers, the voting reflected a conflict of interest. Mutual funds’ fiduciary duties require them to vote in a manner that benefits their *investors*, not each *company* that they hold in their portfolio.²⁸⁸ For a mutual fund, as with an ordinary investor, cross-ownership complicates voting decisions. There is no single right answer, but a mutual fund, like any investor, is entitled to vote in whatever way maximizes the interests of its investors without regard to whether that vote is calculated to maximize the value of the portfolio company.²⁸⁹ Thus, in voting on a merger, a rational investor might vote to support a merger that is welfare-increasing overall, an investor might vote in

²⁸⁴ Plaintiffs’ Answering Brief in Opposition to Defendants’ Motion to Dismiss the Second Amended Complaint at 23-24, *In re Tesla Motors, Inc. Stockholder Litig.*, No. 12711-VCS, 2018 WL 1560293 (Del. Ch. Mar. 28, 2018) (No. 12711-VCS), 2017 WL 3316057 [hereinafter *Tesla Motors Plaintiffs’ Answer*]. Tesla’s top 25 institutional shareholders, which collectively held 45.7% of Tesla’s stock, also owned shares in Solar City. See *In re Tesla Motors, Inc. Stockholder Litig.*, No. 12711-VCS, 2018 WL 1560293, at *10 n.183 (Del. Ch. Mar. 28, 2018).

²⁸⁵ *Tesla Motors Plaintiffs’ Answer*, *supra* note 284, at 34.

²⁸⁶ *Id.* at 35 (quotation omitted).

²⁸⁷ See, e.g., Fisch, *Standing Voting Instructions*, *supra* note 117, at 47-48 (observing that Delaware courts have “recognized a shareholder’s right to act selfishly in exercising its voting power [and that shareholders] are under no obligation to vote their shares in the best interests of the corporation”).

²⁸⁸ See, e.g., *Tanzer v. Int’l Gen. Indus., Inc.*, 379 A.2d 1121, 1124 (Del. 1977) (quoting WILLIAM MEADE FLETCHER ET AL., *FLETCHER CYCLOPEDIA OF THE LAW OF PRIVATE CORPORATIONS* § 2031 (perm. ed., rev. vol. 1976)) (“At a stockholders’ meeting, each stockholder represents himself and his own interests solely and in no sense acts as a trustee or representative of others”), *overruled by* *Weinberger v. UOP, Inc.*, 457 A.2d 701 (Del. 1983).

²⁸⁹ The fact that cross-ownership does not imply a clear voting strategy may explain why the existing evidence on the effect of cross-ownership on mergers is mixed. At least one study found that institutional investors’ ownership of both bidders and targets affects their voting on acquisitions. See Gregor Matvos & Michael Ostrovsky, *Cross-ownership, Returns, and Voting in Mergers*, 89 J. FIN. ECON. 391, 400 (2008); see also Brooks et. al., *supra* note 281, at 197-202 (finding that acquirers with higher institutional cross-ownership pay lower premiums for targets and tend to use stock as the method of payment). In contrast, a study focusing on the years 1984-2006 found no effect on vote outcomes or deal characteristics. See Jarrad Harford, Dirk Jenter & Kai Li, *Institutional Cross-holdings and Their Effect on Acquisition Decisions*, 99 J. FIN. ECON. 27, 27 (2011).

accordance with the relative size of its holdings in the target and acquiring company, or an investor might vote the stock of each portfolio company in accordance with its view of the best interest of that company, considered on a stand-alone basis.

Cross-ownership can occur at the sponsor level as well as the individual fund level, and different issues arguably arise when different funds within the same sponsor own different stock.²⁹⁰ One might argue that cross-ownership among funds is particularly problematic for sponsors that centralize their voting decisions because, in making a voting decision for a specific fund, a fund sponsor might not consider only the interests of that fund's beneficiaries, but instead might consider the interests of other funds within the fund family, the overall value or surplus created by the merger, or the interests of the funds' shareholders across the entire portfolio.²⁹¹

Our preceding analysis concerning sponsors that manage multiple funds addresses this issue as well. Outside the merger context, votes that raise conflicts between funds are rare, and fund sponsors have the flexibility to leverage the advantages of running multiple funds while limiting potential conflicts. The more complex analysis applicable in the merger context likely explains why even sponsors that generally centralize their voting decisions make exceptions for merger votes.²⁹²

Moreover, our analysis suggests that, particularly in the merger context, an analysis of the duties owed by fund sponsors in connection with their voting decisions is more nuanced. Because individual mutual fund customers may own different funds within the family, it is impossible to adopt a voting rule that would maximize value for all the funds' customers.²⁹³ A sponsor that managed funds owning shares in both Tesla and SolarCity, for example, might determine that the merger would be good for SolarCity and bad for Tesla.²⁹⁴ That determination, we argue, should neither prevent the sponsor from

²⁹⁰ See generally Ann M. Lipton, *Family Loyalty: Mutual Fund Voting and Fiduciary Obligation*, 19 TRANSACTIONS: TENN. J. BUS. L. 175 (2017).

²⁹¹ See Lipton, *supra* note 175, at 309 (observing that institutional investors increasingly face "conflicts between investor preferences in their shareholder and non-shareholder capacities").

²⁹² See *supra* note 143 and accompanying text.

²⁹³ As with other shareholders, a mutual fund's customers may also have interests in the merger that are unrelated to their ownership of that fund, including other securities positions, hedging, status as an employee in one of the companies in the merger, and so forth.

²⁹⁴ A fund sponsor could also rationally determine that the merger was in the interests of both Tesla and SolarCity. We note that ISS endorsed the merger, concluding that Tesla was paying a low premium and finding it to be a "necessary step" for Tesla to become an integrated sustainable-energy company. Claudia Assis, *SolarCity Jumps After Tesla Merger Receives ISS Endorsement*, MARKETWATCH (Nov. 4, 2016, 3:04 PM), <https://www.marketwatch.com/story/solarcity-jumps-after-tesla-merger-receives-iss-endorsement-2016-11-04> [<https://perma.cc/T48A-7YGW>]. Alternatively, a sponsor may have concluded that voting in favor of a merger supported by Tesla's innovative and powerful CEO Elon Musk was appropriate.

voting the shares of all the funds in favor of the merger nor compel the sponsor to vote against the merger.²⁹⁵ To the extent that a sponsor votes in a way that maximizes value across the sum of the sponsors' holdings, that approach is both predictable and desirable. We note that evaluating a merger at the level of the fund sponsor is consistent with centralization of all voting decisions at the sponsor level, and we argue that although such centralization should not be required, it is permissible.

CONCLUSION

Passive investors are the new kings of our capital markets, at least for the time being. The recent and continued growth of passive investing will no doubt change our capital markets, and commentators are already responding to these changes with alarm. In this Article, we provide the first theoretical framework for passive investment as a basis for further study of this new phenomenon.

The core of our analysis is a theoretical understanding of the institutional context in which passive investors operate. In particular, we explain three critical features of this institutional context. First, although index funds are locked into their investments, the shareholders who invest in these funds are not. Second, the existing literature analyzes the behavior and incentives of passive investors at the level of the individual mutual fund but fails to recognize that fund sponsors are the drivers of fund behavior and that they have incentives to maximize revenue across their entire menu of funds. Finally, individual investors are often customers of a fund sponsor, and their interests cannot be analyzed only by reference to their holdings in a single fund. For all these reasons, recent criticism of passive investors and their incentives is incomplete and, we argue, deficient.

Our fundamental insight is that because of the competition faced by mutual fund sponsors, the sponsors that offer passive funds need to exercise their governance rights in an informed manner to promote firm value. Passive investors must do this by relying on voice, rather than exit. We highlight the structural advantages of passive investors with respect to certain types of engagement, particularly market-wide initiatives such as improving corporate governance. We also explain the role that passive investors can play in mediating shareholder activism. We document the growing evidence that passive investors are behaving in ways that are consistent with this theory.

We further analyze the implications of our theory for several potential concerns raised by the increase in passive investing, including its effect on

²⁹⁵ Voting the shares of each fund in a way that is rational on a stand-alone basis or using "mirror" voting to vote proportionately to the votes cast by other shareholders would also be rational approaches.

market discipline, its role in market concentration, and the potential it creates for conflicts of interest. A more nuanced understanding of the institutional context suggests that a number of these concerns are, at present, overstated. We caution the need for regulators to incorporate our analysis and to resist calls for a regulatory response before the role and ownership scope of passive investors are more fully understood. While it is too early to resolve the net effect of passive investors on economic outcomes, this Article provides a theoretical framework for analyzing future passive investor conduct and any proposed policies to address their extraordinary rise.

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