

3-2019

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Repository Citation

Fisch, Jill E.; Hamdani, Asaf; and Davidoff Solomon, Steven, "The New Titans of Wall Street: A Theoretical Framework for Passive Investors" (2019). *Faculty Scholarship at Penn Law*. 1983.

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

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March 2019 draft
Forthcoming __ U. Penn L. Rev. __ (2019)

“If index funds underperform active funds, then assets will flow out from passives to actives.”
-- Bill Ackman, CEO, Pershing Square International¹

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

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¹ Email from Steve Fraidin, General Counsel Pershing Square Capital to Steven Davidoff Solomon dated May 30, 2018.

the net asset value of their ownership interest. Consequently, the sponsors of passive funds must compete on both price and performance with other investment options – including both other passive funds and actively-managed funds -- for investor dollars. As we explain, this competition provides passive fund sponsors with a variety of incentives to engage. Furthermore, the size of the major fund sponsors and the breadth of their holdings affords them economies of scale enabling 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.

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 An increasing number of retail investors invest through exchange-traded funds (*ETFs*) and indexed mutual funds (collectively, *index funds* or *passive funds*), 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 This shift has concentrated a growing portion of the public capital

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*, (Oct. 12, 2015), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2672755 (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, investible 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 investment strategies. See Adriana Robertson, *Passive in Name Only: Delegated Management and 'Index' Investing*, 36 *YALE J. REG.* ___ (forthcoming 2019). For purposes of this Article, we do not interrogate these issues and employ the popular terminology of “passive investors” and focus on traditional index funds and *ETFs*.

³ The popular press makes a broad claim 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, (reporting that “Over the last 15 years, 92.2% of large-cap funds lagged a simple S&P 500 index fund.”), available at <https://www.marketwatch.com/story/why-way-fewer-actively-managed-funds-beat-the-sp-than->

markets in the hands of the sponsors that operate these index funds, particularly the so-called big three of BlackRock, Vanguard and State Street.⁴ 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.⁵

Commentators have expressed concern, even alarm, over the growth of passive investors and its implications for capital market efficiency and corporate governance.⁶ This literature, however, largely misconstrues or ignores the institutional structure of passive funds and the market context in which they operate.⁷ 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 — shareholders that do not exercise discretion over buying or selling shares — in corporate governance. We then explore the overall implications of the increasingly influential role enjoyed by passive investors for corporate law, including the allocation of power between management and shareholders, the regulation of voting, and the concentration of economic power.

[we-thought-2017-04-24](#). The story in the finance literature is more complex. *See infra* notes __ through __ and accompanying text. *See also* Diane Del Guercio & Jonathan Reuter, *Mutual Fund Performance and the Incentive to Generate Alpha*, 69 J. FIN. 1673 (2014) (finding “strong support . . . that actively managed funds earn the same after-fee alphas as index funds” within the “direct sold segment” of the mutual fund market).

⁴ *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. 238, 304 (2017) (explaining that BlackRock, Vanguard and State Street dominate the passive fund industry and terming them the “big three”).

⁵ *See* Trevor Hunnicutt, *Index funds to surpass active fund assets in U.S. by 2024: Moody's*, REUTERS, Feb. 2, 2017, available at <https://www.reuters.com/article/us-funds-passive/index-funds-to-surpass-active-fund-assets-in-u-s-by-2024-moodys-idUSKBN15H1PN>.

⁶ *See, e.g.*, Lucian A. Bebchuk, Alma Cohen & Scott Hirst, *The Agency Problems of Institutional Investors*, 31 J. ECON. PERS. 89, 90 (2017) (arguing that the rise of index investing has “systemwide adverse consequences on governance”); Dorothy Lund Shapiro, *The Case Against Passive Shareholder Voting*, __ J. CORP. L. __ (forthcoming 2018) (arguing that passive investors lack adequate incentives to become informed and should therefore not be able to vote their shares); Shawn Langlois, *Robert Shiller: Passive investing is a ‘pseudoscience’ and it’s bad for markets*, MARKETWATCH, Nov. 15, 2017, available at <https://www.marketwatch.com/story/robert-shiller-passive-investing-is-a-pseudoscience-and-its-bad-for-markets-2017-11-14> (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* Eric A. Posner, Fiona M. Scott Morton & E. Glen Weyl, *A Proposal to Limit the Anti-Competitive Power of Institutional Investors*, ANTITRUST L. J. (forthcoming 2017) (arguing that ownership concentration by the largest passive investors will undermine product market competition); Fiona Scott Morton & Herbert Hovenkamp, *Horizontal Shareholding and Antitrust Policy*, 127 YALE L.J. 1742 (2018) (same).

⁷ We note that, since we posted the initial draft of this article, scholars have posted several other pieces exploring the role and incentives of passive investors in more depth. *See* Lucian A. Bebchuk & Scott Hirst, *The Index Funds and the Future of Corporate Governance: Theory, Evidence and Policy*, (December 27, 2018). ECGI - Law Working Paper No. 433/2018. Available at SSRN: <https://ssrn.com/abstract=3282794>; John C. Coates, *The Future of Corporate Governance Part I: The Problem of Twelve*, Sept. 20 2018, available at SSRN: <https://ssrn.com/abstract=3247337>; Edward Rock & Marcel Kahan, *Index Funds and Corporate Governance: Let Shareholders be Shareholders* (December 2018) NYU Law and Economics Research Paper No. 18-39, available at SSRN: <https://ssrn.com/abstract=3295098>.

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.⁸ Second, passive funds compete against other passive funds primarily on cost.⁹ Firm-specific research is costly, and passive funds cannot exploit that research to improve their performance. Critics therefore argue that it is irrational for passive investors to research and monitor their portfolio companies.¹⁰

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. Although some indexes like the S&P 500 index are tracked by a large number of funds, other funds track a bespoke index that is created just for that fund.¹¹ Some passive funds also afford their managers a degree of discretion in choosing among the stocks on the index or deviating from that index. Finally, although many passive funds have very low fees, those fees vary substantially.

We then 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.¹² A mutual fund's actions are undertaken by third parties who have a contractual relationship with the fund.¹³ These third parties, whom we term "passive investors" are the fund sponsor, which establishes the fund and the investment adviser, which makes the fund's operational decisions and which is typically a related entity.

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.¹⁴ Fidelity Management & Research Company is the investment advisor for Fidelity's family of

⁸ See Anat R. Admati & Paul Pfleiderer, *The "Wall Street Walk" and Shareholder Activism: Exit as a Form of Voice*, 22 REV. FIN. STUD. 2445 (2009) (explaining how shareholders can respond to poor performance through exit).

⁹ The literature notes that passive funds also compete on tracking quality. See, e.g., Ari Weinberg, *Watch an Index Fund's 'Tracking Error'*, WALL ST. J., Jul. 9, 2012 (explaining tracking error and how it can vary among index funds).

¹⁰ See, e.g., Bebchuk, Cohen & Hirst, *supra* note 6, 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 6.

¹¹ Roberston, *supra* note 2.

¹² See Jill E. Fisch, *Rethinking the Regulation of Securities Intermediaries*, 158 U. PA. L. REV. 1961, 1968 (2010).

¹³ *Id.*

¹⁴ Fidelity, *Fidelity by the Numbers: Corporate Statistics*, <https://www.fidelity.com/about-fidelity/fidelity-by-numbers/corporate-statistics>.

mutual funds. BlackRock, Inc., a publicly-traded corporation is the sponsor of the BlackRock mutual funds, and its funds are managed by BlackRock Capital Investment Advisors LLC.¹⁵ For simplicity, we will generally refer collectively to the fund sponsor and the investment adviser as the sponsor.

The incentives of these third parties drive fund behavior. Most significantly, sponsors and advisers 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.¹⁶ That revenue, in turn, is a product of both assets under management and fund fees. Importantly, 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.¹⁷

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.¹⁸ As a result of this exit option, mutual funds compete for investors. Moreover, there is no reason to believe that index funds compete for investors only against other index funds tracking the same index. Rather, index funds compete, on an ongoing basis, with other passive (i.e. index) funds,¹⁹ with actively-managed funds,²⁰ and with other investment options. This competition is not based solely on cost. Since mutual fund inflows are based on fund

¹⁵ BlackRock Advisors LLC is the sole managing partner of BlackRock Capital Investment Advisors LLC and is a wholly-owned subsidiary of BlackRock, Inc. BlackRock Capital Investment Advisors LLC, SEC filing dated Mar. 30, 2018, <https://www.lfg.com/wcs-static/pdf/BlackRock%20Investment%20Management%20LLC.pdf> at 1.

¹⁶ We observe that the other components of the business of mutual fund sponsors and advisers 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 [company's] retirement plan assets."). See *Disclosure of Proxy Voting Policies and Proxy Voting Records By Registered Management Investment Companies*, 68 Fed. Reg. 6564 (Feb. 7, 2003) at 20–21

¹⁷ Incentives operate somewhat differently at the level of the individual portfolio manager. Because passive investors, especially the Big Three, most commonly vote and engage at the level of the fund family, these incentives do not present a significant concern for our analysis, but we flag potential issues in Part ____, *infra*.

¹⁸ 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 mutual fund shareholders can exit at net asset value, which is not affected by expected returns).

¹⁹ For example, Adriana Robertson collected data indicating that, in 2017, US mutual funds tracked 557 separate indexes. Robertson, *supra* note 2.

²⁰ For evidence that active funds compete with passive ones, see generally Martijn Cremers et al., *Indexing and Active Fund Management: International Evidence*, 120 J. FIN. ECON. 539 (2016).

performance,²¹ passive investors risk losing assets if the performance of passive funds lags that of actively-managed funds on a cost-adjusted basis.²²

In addition, a mutual fund shareholder is typically the customer of the entire mutual fund family. Individuals are likely both to invest in a single fund family and to own multiple funds offered by that family.²³ Investing in a single fund family offers customers advantages such as a consolidated statement and easy mechanisms for transferring assets between funds.²⁴ As a result, the business model of a passive investor can be understood as competing both for assets and for customers. This explains why it may be rational for Fidelity to offer four index funds that charge no management fee at all²⁵ -- even though Fidelity does not receive any direct revenue from the assets that are invested in those funds.²⁶ Indeed, when Fidelity began offering these funds, it was the stock of other predominantly active fund sponsors that suffered.²⁷

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 passive investors, incentives to engage in stewardship, and that fund families that manage a substantial amount of assets in passive funds have a distinctive need to preserve the attraction of passive funds relative to active funds on a cost-adjusted basis.

²¹ See, e.g., Jonathan Lewellen & Katharina Lewellen, *Institutional investors and corporate governance: The incentive to increase value*, working paper dated April 2018 (reporting that “a one percentage point increase in an institution’s benchmark-adjusted quarterly return predicts 1.31 percentage point (standard error of 0.13) increase in net inflow over the subsequent ten quarters”).

²² 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 (2014) (reviewing empirical literature on the factors that influence the flow of funds into and out of mutual funds); Lewellen & Lewellen, *supra* note 21 (concluding that “inflows contribute significantly to institutions’ incentives”).

²³ 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. & QUANT. ANAL. 257 (2007) (“Individuals often make all of their mutual fund investments within one family of mutual funds.”).

²⁴ See, e.g. Joshua Kennan, *What is a Mutual Fund Family?*, THE BALANCE, June 1, 2018, <https://www.thebalance.com/what-is-a-mutual-fund-family-358178> (describing the advantages of investing within a single fund family).

²⁵ Fidelity initially offered two zero-fee index funds. Eric Rosenbaum, *Fidelity's new no-fee index funds bring in \$1 billion in first month*, CNBC, Sept. 4, 2018, available at <https://www.cnbc.com/2018/09/04/fidelity-offers-first-ever-free-index-funds-and-1-billion-follows.html> (describing Fidelity’s launch of zero fee funds). It subsequently expanded its offerings to include four zero fee funds. See Fidelity, *We're raising the bar on value*, available at https://www.fidelity.com/mutual-funds/investing-ideas/index-funds?imm_pid=700000001009773&immid=100611&imm_eid=ep35415530159&gclid=CjwKCAiA4t_iBRAPeivAn-vt-ymCpDfC43wE3RjhNoxvZN-L7XKqa0qhwVQHHsP2TILXW69W-VW1wRoCmp8QAvD_BwE&gclsrc=aw.ds.

²⁶ Fund sponsors receive additional revenue from the funds they manage both through commissions charged on securities transactions and through securities lending. These revenues are less a product of the fund’s investment strategy than the fund’s turnover rate and the borrowing demand for the securities held in the fund’s portfolio.

²⁷ See Rosenbaum, *supra* note 25 (observing that “[s]ome 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.”).

Specially, 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.²⁸ 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.²⁹ If active managers sell or underweight the securities of low-quality firms, and passive investors are forced to hold the entire market, they will underperform active funds even on a cost-adjusted basis. Passive investors address that problem by engaging in broad-based efforts to improve the overall performance of the market, addressing cross-cutting issues such as corporate governance, risk management, cybersecurity and sustainability.

By way of 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. Governance initiatives by passive investors such as improved board quality, conflict of interest policies and appropriately structured executive compensation plans similarly 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,³⁰ for example, funds that were forced to continue to hold Enron stock as it lost more than 99% of its value before being removed from the index,³¹ suffered substantial losses that investors in some active funds were able to avoid.³²

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.

²⁸ See, e.g., Del Guercio & Reuter, *supra* note 3 (demonstrating that active funds expend resources to generate alpha in circumstances in which investor inflows are responsive to alpha).

²⁹ Institutional investors are well aware of this limitation and note it frequently in communications with investors and firms. See, e.g., Lawrence D. Fink, *Larry Fink's Annual Letter to CEO's A Sense of Purpose*, <https://www.blackrock.com/corporate/investor-relations/larry-fink-ceo-letter> (“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.”)

³⁰ See Lawrence C. Strauss, *The Enron Verdict: Always Diversify*, BARRON’S, May 8, 2006, <https://www.barrons.com/articles/SB114687148778645481> (noting the losses suffered by investors in the S&P 500 index fund when Enron collapsed).

³¹ 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. Luisa Beltran, *Enron failure may be biggest*, CNN Money, Nov. 29, 2001, <https://money.cnn.com/2001/11/29/companies/enron/>.

³² See Strauss, *supra* note 30 (explaining that, although some actively-managed funds held Enron through its collapse, others were able to reduce or exit their positions and avoid the largest losses).

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 coordinating with and mediating the efforts of shareholder activists. We cite the evidence, albeit preliminary, from a number of empirical studies that the effect of this behavior has been to improve both firm governance and performance.³³

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 investors due to governance concerns are misguided, the rise of passive investors raises other potential concerns that have been overlooked by the literature. The rise of passive investing has led to an increased concentration of publicly-traded stock in the hands of a small group of sponsors who could use their immense influence over to pursue pecuniary or nonpecuniary private benefits of control.³⁴ Passive investors 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 exclusively by attempting to minimize fees. 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

³³ See, e.g., Ian Appel, Todd A. Gormley & Donald B. Keim, *Standing on the Shoulders of Giants: The Effect of Passive Investors on Activism* (Feb. 2, 2018), available at SSRN: <https://ssrn.com/abstract=2693145> (finding that higher passive ownership is associated with more vigorous hedge fund activism in seeking director positions, proxy fights, settlements and the sale of the firm); Ian Appel, Todd A. Gormley & Donald B. Keim, *Passive investors, not passive owners*, 121 J. FIN. ECON. 111 (2016) (finding that the presence of increased ownership by passive investors results in more independent directors, removal of takeover defenses, and more equal voting rights as well as better long-term performance); Andrew Bird & Stephen Karolyi, *Do institutional investors demand public disclosure?*, 29 REV. OF FIN. STUD. 3245 (2016) (finding that increased ownership by passive investors “significantly increases the information content of 8-K filings”); Audra Boone and Joshua T. White, *The effect of institutional ownership on firm transparency and information production*, 117 J. FIN. ECON. 508 (2015) (finding that increased passive ownership is associated with “greater management disclosure, analyst following, and liquidity, resulting in lower information asymmetry”).

³⁴ For an extended analysis of this concern see Coates, *supra* note 7.

A mutual fund or ETF³⁵ is a pool of assets – assets that may include, stocks, bonds, cash, and other types of investments.³⁶ The value of the mutual fund, commonly described as net asset value or NAV, is the value of the assets owned by the fund divided by the number of outstanding shares.³⁷ Mutual funds have no independent operations or employees, and the operational decisions of the fund are made by external service providers.³⁸ 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.³⁹ The mutual fund sponsor is the entity, typically a financial services company,⁴⁰ that establishes and sells mutual fund shares. It is important to distinguish the interests of the fund itself from those of its sponsor.⁴¹ Sponsors, with the exception of Vanguard,⁴² are typically public companies such as BlackRock⁴³ or private companies, such as Fidelity Investments.⁴⁴ 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 – assets under management.⁴⁵ 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

³⁵ Technically, both mutual funds and ETFs are investment companies. See Eric D. Roiter, *Disentangling Mutual Fund Governance from Corporate Governance*, 6 HARV. BUS. L. REV. 1, 12 (2016) (explaining that “[t]he term ‘mutual fund’ is a market term” as is the term ‘ETF.’”).

³⁶ See Fisch, *supra* note 12, at 1968.

³⁷ See Jill Fisch & Eric Roiter, *A Floating NAV for Money Market Funds: Fix or Fantasy?*, 2012 U. ILL. L. REV. 1003, 1008 (explaining the calculation of NAV).

³⁸ See Fisch, *supra* note 12, at 1968.

³⁹ Shares in the mutual fund are offered by fund sponsors, which offer investors a menu of different types of funds. See generally SEC, *Mutual Funds*, Dec. 14, 2010, available at <https://www.sec.gov/fast-answers/answersmutfundhtm.html> (explaining that shares in a mutual fund are offered by fund sponsors, which offer investors a menu of different types of funds).

⁴⁰ Most fund sponsors are independent fund advisers, but mutual funds are also sold by banks, insurance companies and brokerage firms. See INVESTMENT COMPANY INSTITUTE, 2016 ICI FACTBOOK, at 15.

⁴¹ See, e.g., John Morley, *Too Big to be Activist*, working paper (2018) (noting that it is “easy to conflate Fidelity with its various clients, but we must nevertheless keep them conceptually distinct”).

⁴² 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 Vanguard, *Why Ownership Matters*, available at <https://about.vanguard.com/what-sets-vanguard-apart/why-ownership-matters/> (describing Vanguard’s ownership structure).

⁴³ See BlackRock, *Our History*, available at <https://www.blackrock.com/corporate/about-us/blackrock-history> (explaining that BlackRock became a public company in 1999 and that its shares are listed on the New York Stock Exchange).

⁴⁴ See Tim McLaughlin, *How the owners of Fidelity get richer at everyday investors’ expense*, REUTERS, Oct. 5, 2016, <https://www.reuters.com/investigates/special-report/usa-fidelity-family/> (explaining that “Fidelity Investments is owned by privately held FMR LLC, which is controlled by the Johnson family.”).

⁴⁵ Some funds also charge other types of fees such as loads and 12b-1 fees. See Fisch, *supra* note 12 at 1961 (discussing loads and 12b-1 fees). This article focuses on the expense ratio which reflects the ongoing cost to investors and the ongoing revenue to fund sponsors.

substantially but typically include a mixture of passive and active funds.⁴⁶ Some sponsors such as Vanguard specialize in passively-managed funds;⁴⁷ others, such as Fidelity⁴⁸ and T. Rowe Price, focus more on active management.⁴⁹

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 relative role of passive funds and active funds in generating revenues for this fund sponsor.⁵⁰ 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.⁵¹ 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 three quarters of that money in passive funds.⁵² Yet the fees generated by BlackRock's actively-

⁴⁶ Sponsors vary tremendously. 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 banking, investment banking and more. For example, both Goldman Sachs and Deutsche Bank offer ETFs. See Asjlynn Loder, *Goldman's \$3 Billion Drop in the ETF Bucket*, WALL ST. J., Mar. 2, 2017, <https://www.wsj.com/articles/goldmans-3-billion-drop-in-the-etf-bucket-1488483434>; Asjlynn Loder, *ETFs Provide Some Good News at Deutsche Bank*, WALL ST. J., Feb. 27, 2017, <https://www.wsj.com/articles/etfs-provide-some-good-news-at-deutsche-bank-1488191402>.

⁴⁷ Even Vanguard, which is typically considered a pure passive investor, offers a mix of active and passive funds. For example, as of March 2018, Vanguard offered 129 mutual funds, of which, according to its website, 67 were actively-managed funds. See *Vanguard Mutual Funds*, <https://investor.vanguard.com/mutual-funds/list#/mutual-funds/asset-class/month-end-returns>. Active assets account for approximately 30% of Vanguard's total assets under management, with a dollar value of more than \$1 trillion. See Vanguard, *Vanguard believes in active management*, <https://institutional.vanguard.com/VGApp/iip/site/institutional/researchcommentary/article/InvComActiveMgmtInfoGraphic>

⁴⁸ As of early 2019, Fidelity offered investors over 200 mutual funds of which 27 were index funds. Fidelity, *Why Invest in Fidelity Index Funds?*, available at <https://www.fidelity.com/mutual-funds/fidelity-funds/why-index-funds>. 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. Tirthankar Chakraborty, *Vanguard vs Fidelity: Fee War Heats Up*, NASDAQ, Aug. 25, 2017, <https://www.nasdaq.com/article/vanguard-vs-fidelity-fee-war-heats-up-cm837199>.

⁴⁹ See T. Rowe Price, *Time-tested and disciplined. The T. Rowe Price approach to active management*, available at <https://corporate.troweprice.com/ccw/jsp/pages/active-management/investment-approach.jsp> (describing T. Rowe Price's "commitment to active management"). Even T. Rowe Price, however, offers several index funds. See, e.g., T. Rowe Price, *Mutual Fund Research Tool*, available at <https://www3.troweprice.com/fb2/mfpathways/pathways.otc?facets=domesticStock,intStock> (describing T. Rowe Price Equity Index 500 Fund).

⁵⁰ 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.

⁵¹ See Vanguard, *Why Ownership Matters*, available at <https://about.vanguard.com/what-sets-vanguard-apart/why-ownership-matters/> (noting that Vanguard's average asset-weighted expense ratio in 2016 was .12% and that the industry average was .62%). See also Owen Walker, *Vanguard's Campaign to Drive Down Fees Runs Out of Road*, FIN. TIMES, March 17, 2018 (noting that Vanguard "has led the way in cutting fees over the past decade").

⁵² Chris Flood, *BlackRock's rivers of gold from active management*, FIN. TIMES, Oct. 14, 2017, <https://www.ft.com/content/f62ed0c2-ada1-11e7-beba-5521c713abf4>.

managed products are roughly equivalent to those generated by its much larger passive funds.⁵³ Fidelity, which is known primarily for its active funds, offers four passive funds that do not charge a fee at all.⁵⁴ 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.⁵⁵ For a given family then, the business model involves both navigating the potential loss of assets to other fund families and maximizing the potential revenue from existing customers.⁵⁶

These business decisions are made in the context of a highly competitive market.⁵⁷ As of the end of 2016, there were approximately 850 fund sponsors.⁵⁸ These sponsors competed to offer over 9,500 different mutual funds to investors.⁵⁹ The asset class of passive funds itself demonstrates substantial variation.⁶⁰ Although the term passive fund typically evokes an S&P 500 index fund, the universe of market indexes has exploded to the point where there are now more indexes than publicly-traded U.S. stocks.⁶¹ 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 active investment strategy into a rule-based approach,⁶² using custom

⁵³ 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).

⁵⁴ Fidelity, *supra* note 48.

⁵⁵ See Bailey McCann, *Surprising Cry from an Index Firm: 'Go Active,'* WALL ST. J., Apr. 8, 2018.

⁵⁶ For some fund complexes, 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> ("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.").

⁵⁷ See generally John C. Coates IV & R. Glenn Hubbard, *Competition in the Mutual Fund Industry: Evidence and Implications for Policy*, 33 IOWA J. CORP. L. 151, 153 (2007) ("review[ing] the structure, performance and dynamics of the mutual fund industry, and show[ing that] they are consistent with competition")

⁵⁸ *Id.* at 16.

⁵⁹ At the end of 2016, there were 9,511 mutual funds in the U.S. See *Number of mutual funds in the United States from 1997 to 2016*, Statista, <https://www.statista.com/statistics/255590/number-of-mutual-fund-companies-in-the-united-states/>

⁶⁰ Recently, for example, the 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, available at <https://www.cnbc.com/2018/02/28/legendary-oilman-t-boone-pickens-inspires-new-etf-with-the-boon-fund.html>.

⁶¹ See, e.g., *There Are Now More Indexes Than Stocks*, BLOOMBERG NEWS, May 12, 2017 <https://www.bloomberg.com/news/articles/2017-05-12/there-are-now-more-indexes-than-stocks> (documenting that, as of May 2017, there were almost 5000 stock indexes).

⁶² Robertson, *supra* note 2. There are also funds which contain passive components but allow for a measure of active investing, See, e.g., Fidelity U.S. Sustainability Index Fund ("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.").

criteria such as high dividends or low volatility.⁶³ 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.⁶⁴ 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.”⁶⁵

B. Passive Fund Competition

Competition among funds is commonly perceived as providing sponsors with incentives to engage with their portfolio companies.⁶⁶ Critics of passive funds, however, argue that, because passive funds compete with each other only on fees, they lack a reason to try to increase firm value.⁶⁷ This conventional view focuses on the competition between passive funds that track the same index. It assumes that an investor’s preference to invest in a passive fund that tracks a specific index is exogenously determined, and thus, that passive funds that track this index compete to attract investors based exclusively on cost⁶⁸ and tracking error.⁶⁹

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.

Much of the competition takes place within the framework of employer-sponsored retirement plans. These plans typically give participants a menu of investment options that include passive funds, actively-managed funds, stable value funds and other products.⁷⁰ Significantly, whether they invest directly or through a retirement account, mutual fund investors

⁶³ Some of these strategies, which are labeled as passive, are termed “smart beta” strategies. See Jason Stoneberg & Bradley Smith, *Getting smart about beta*, Invesco white paper, <https://www.invesco.com/static/us/financial-professional/contentdetail?contentId=634ff6163339f410VgnVCM100000c2f1bf0aRCRD> (describing smart beta strategies and evidence suggesting they outperform traditional indexing).

⁶⁴ *Id.*

⁶⁵ Dani Burger *Investing in Index Funds Is No Longer Passive*, BLOOMBERG, Feb. 27, 2018, <https://www.bloomberg.com/news/articles/2018-02-27/passive-becomes-the-new-active-as-indexing-rules-everything>.

⁶⁶ See Lewellen & Lewellen, *supra* note 21.

⁶⁷ See, e.g., Bebchuk & Hirst, *supra* note 7, at 10 (“Competition with other index funds gives index fund managers precisely zero additional incentive to invest in stewardship for any of their portfolio companies.”)

⁶⁸ See, e.g., Tirthankar Chakraborty, *Vanguard vs Fidelity: Fee War Heats Up*, Nasdaq, Aug. 25, 2017, available at <https://www.nasdaq.com/article/vanguard-vs-fidelity-fee-war-heats-up-cm837199> (describing competitive cost-cutting between Fidelity and Vanguard’s S&P 500 index funds).

⁶⁹ See, e.g., Weinberg, *supra* note 9 (observing that returns of two otherwise identical index funds can differ due to tracking error).

⁷⁰ See, e.g. *The BrightScope/ICI Defined Contribution Plan Profile: A Close Look at 401(k) Plans*, 2014, at 32 (Dec. 2016), available at https://www.ici.org/pdf/ppr_16_dcplan_profile_401k.pdf (reporting that, in 2014 the average 401(k) plan offered investors 21 investment options (counting target date funds as a single investment option)).

are not locked into a particular mutual fund.⁷¹ Instead, they have an ongoing option to exit the fund at fair value or NAV, and a fund's NAV is unaffected by investors' expectations about the fund's future fees or performance.⁷² Indeed, many 401(k) plan participants are able to shift their assets from one fund to another without paying transaction costs or taxes.⁷³

Although the finance literature has documented the competition between active and passive funds,⁷⁴ 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.⁷⁵ 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. For example, a portfolio manager who researched Enron and determined that it was a massive fraud would underweight or sell Enron stock, hoping to benefit when the market identified the fraud.⁷⁶ 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.⁷⁷

If investors believe that passive funds cannot offer a better rate of return than active funds, they will flee to active funds. 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.⁷⁸ 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

⁷¹ 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*, 25 YALE L.J. FORUM 163 (2015); Morley & Curtis, *supra* note 18.

⁷² See, e.g., *id.* at 89 (explaining that a mutual fund's "NAV is unaffected by expectations about future fees or portfolio changes").

⁷³ 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> (explaining that selling mutual funds in a 401(k) plan does not generate any taxes at all).

⁷⁴ See generally Cremers et al., *supra* note 20 (finding that increased presence of index funds reduces fees and increases alpha for active funds).

⁷⁵ See Paolo Guasoni, Gur Huberman & Zhenyu Wang, *Performance Maximization of Actively Managed Funds*, Fed. Res. Bank of NY Staff Report, 2010, https://www.newyorkfed.org/medialibrary/media/research/staff_reports/sr427.pdf (explaining alpha).

⁷⁶ See, e.g., Jen Wiczner, *Hedge Fund Manager Who Spotted Fraud at Enron Calls Tesla 'The Anti-Amazon'*, FORTUNE, Sept. 13, 2016 (describing Jim Chanos, the hedge fund manager who famously identified the Enron fraud before the market and profited by selling Enron stock short).

⁷⁷ 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 (2009) (demonstrating that mutual funds whose holdings differ most from their benchmark tend to outperform that benchmark net of fees).

⁷⁸ See, e.g., Peter Coy, *Index Funds Are King, But Some Indexers Are Passive-Aggressive*, BLOOMBERG BUSINESSWEEK, Jan. 24, 2019 ("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.").

mutual fund assets flows respond to past performance.⁷⁹ It also provides reasons to believe that performance-chasing by mutual fund investors is reasonable.⁸⁰ That this competition persists, even with the dramatic recent inflows into passive funds 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.⁸¹

This institutional reality under which the sponsors of passive funds compete for investors sharply contrasts with the view of some scholars that passive investors are largely indifferent to the performance of companies in their portfolio.⁸² Our analysis suggests that passive fund sponsors are in competition not only with other passive fund sponsors and but also with active fund sponsors and that they compete along the dimensions of both cost and performance.⁸³ Passive 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 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 these factors create an incentive for fund sponsors to engage with their portfolio companies.

A few points of clarification. One, 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.⁸⁴ 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. In

⁷⁹ See, e.g., Jonathan Berk & Jules H. van Binsbergen, *Mutual Funds in Equilibrium* (Feb. 9, 2017), <https://ssrn.com/abstract=2914669> (“fund flows into mutual funds are known to be highly predictable based on past performance”); C. Wei Liy, Ashish Tiwariz & Lin Tong, *Investment Decisions under Ambiguity: Evidence from Mutual Fund Investor Behavior*, 63 MGMT. SCI. 2509 (2016) (describing the “the well-documented phenomenon of performance-chasing by fund investors”).

⁸⁰ See, e.g., Jonathan B. Berk & Richard C. Green, *Mutual Fund Flows and Performance in Rational Markets*, 112 J. POLIT. ECON. 1269 (2004) (providing rational explanation for investors to chase past performance by mutual funds). Indeed, scholars have documented that assets flow into a successful fund but that, because the fund adviser's ideas are finite, eventually investors will no longer receive an excess return.

⁸¹ See, e.g., Lee Conrad & Andrew Shilling, *Fund flows: Who's the big winner YTD?*, FINANCIAL PLANNING, Dec. 13, 2017, available at <https://www.financial-planning.com/slideshow/mutual-funds-and-etfs-with-the-biggest-net-flows-ytd#slide-1> (documenting funds with substantial inflows in 2017).

⁸² See, e.g., Lund, *supra* note 6, at 18 (stating that a passive fund “lacks a financial incentive to ensure that the companies in their [sic] portfolio are well run”). An increase in company value of course has a direct effect on fund fees, as it increases assets under management. This direct effect, however, does not provide mutual funds with powerful stewardship incentives given collective action problems and the fact that sponsor fees are not based on investment returns. See Kahan & Rock, *supra* note 7.

⁸³ And to a degree, with other passive funds.

⁸⁴ See, e.g., Jill E Fisch, *Relationship Investing: Will It Happen? Will It Work?*, 55 OHIO ST. L.J. 1009, 1024 (1994) (arguing that, because its competitors are able to free-ride on an institutional investor's monitoring, that monitoring “diminishes the institutional investor's returns relative to the market as a whole.”).

addition, as noted above, passive sponsors typically offer a variety of passive funds, and the holdings of those funds differ in the same way that holdings of one active fund differ from those of another.

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.⁸⁵ There are several countervailing considerations, however. First, 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. Second, because of their size, the Big Three enjoy substantial economies of scale with respect to corporate governance and market-wide initiatives. The size of the Big Three enables them to capture outside benefits from those investments.⁸⁶ Third, governance engagement may give fund sponsors another dimension on which to compete for assets.⁸⁷ Finally, and perhaps most important, although this article focuses on economic incentives, fund sponsors also act as fiduciaries for the shareholders in their funds.⁸⁸ Sponsors' fiduciary duties include taking reasonable measures to maximize the value of the assets that they invest and create an additional reason for funds to behave as responsible owners.⁸⁹

Two, the effect of the competition between active and passive funds may vary across fund sponsors. On the one hand, those sponsors with a higher proportion of assets in passive funds may be more concerned about the comparative advantage of active funds. For a similar reason, these incentives are likely to become more meaningful as the industry becomes more concentrated. 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.

Three, as noted above, there are other levels of competition between fund sponsors. For example, a substantial proportion of mutual fund assets are invested through defined contribution plans, otherwise known as 401(k) plans. Many fund sponsors, including primarily passive

⁸⁵ The more resources an active fund 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.

⁸⁶ See Lewellen & Lewellen, *supra* note 21, at 17.

⁸⁷ 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 29. See also Arno Riedl & Paul Smeets, *Why Do Investors Hold Socially Responsible Mutual Funds?*, 72 J. FIN. 2505 (2017) (reporting that investors are willing to pay higher fees and earn lower returns for investing in social responsible mutual funds).

⁸⁸ We explore the role of fiduciary duties in Part II.E., *infra*.

⁸⁹ We note that the UK has attempted to formalize the stewardship obligations of institutional investors through the adoption of the Stewardship Code. See, e.g., Iris H-Y Chiu, *Institutional Investors as Stewards: Toward a New Conception of Corporate Governance*, 6 BROOK. J. CORP. FIN. & COM. L. 387 (2012) (describing the UK Stewardship Code).

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.⁹⁰ In this model, index funds compete within the fund complex for investment fund flows but also enable the sponsor to compete for the administrator position by lowering the average fee level of the 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.⁹¹

C. *Passive Funds and Governance*

Passive funds must hold both the good and bad companies in their index. They do not have the option of exit and thus lack the ability 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 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.⁹² The NYC Comptroller incurred a minimal marginal cost in submitting its proxy access shareholder proposal to 75 portfolio companies.⁹³

Unlike active funds, passive investors cannot take advantage of issuer mis-pricing, but they can try to reduce it in a variety of ways. They may do so directly 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 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.⁹⁴ High

⁹⁰ See Ken Thune, *The 7 Best Mutual Funds to Hold in a 401k Plan*, InvestorPlace, Aug. 18, 2017, available at <https://investorplace.com/2017/08/best-mutual-funds-401k-plan-401k-funds/> (terming Vanguard, Fidelity and American Funds the "biggest players in the employer-sponsored-plan business").

⁹¹ See, e.g., Clemens Sialm et al., *Defined Contribution Pension Plans: Sticky or Discerning Money?*, 70 J. FIN. 805 (2015) (finding that that flows into funds from 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).

⁹² 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. APP. CORP. FIN. 78 (1994) (describing CalPERS' strategy of targeting underperforming companies for governance reform).

⁹³ See Nikita Stewart, *City Comptroller Reaches Deals with 5 Companies on Giving Shareholders Say on Directors*, THE N.Y. TIMES, Mar. 10, 2015.

⁹⁴ Fox et al. observe that the signaling value of good governance matters more "in times when managerial quality is more difficult to observe directly"). See *id.* at 3.

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.⁹⁵ In addition, firm-specific problems may have spillover effects on the other companies in a passive fund's portfolio.⁹⁶ Generic governance improvements that improve board oversight and managerial accountability such as annual election of directors and proxy access thus offer the potential for reducing underperformance.

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 reduce the effective costs of engagement to a trivial amount on a per-company basis. Their large holdings also allow them to gain substantially from the value-enhancing changes. As a result, despite facing the competitive pressure of fee competition, engagement remains rational.⁹⁷ 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 the large passive investors highly attractive to customers and has led to dramatic growth in the quantity of assets they manage. Economies of scale enable large sponsors to charge lower fees, making their funds more attractive for investors.⁹⁸ The three largest asset managers today are the big three -- BlackRock, Vanguard and State Street -- and the majority of the assets that they manage are invested in passive funds.⁹⁹ Because of their substantial 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.¹⁰⁰ 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.¹⁰¹

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 very low. The same governance provisions are likely to be in play at multiple companies within the passive fund's portfolio.

⁹⁵ See generally Robert B. Thompson and Hillary A. Sale, *Securities Fraud as Corporate Governance: Reflections Upon Federalism*, 56 VANDERBILT L. REV. 859 (2003).

⁹⁶ See Madison Condon, *Externalities and the Universal Owner* (2018) (explaining that passive funds' exposure to systemic risk gives them an incentive to engage in order to reduce that risk).

⁹⁷ See Lewellen & Lewellen, *supra* note 21 (observing that "the largest institutional investors—because of their size—actually have stronger incentives to be engaged than many activist funds").

⁹⁸ 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.").

⁹⁹ See Mutual Fund Directory.Org, <http://mutualfunddirectory.org/> (reporting that, as of 3/12/18, the largest three mutual fund companies were BlackRock, Vanguard and State Street.). Notably, the next three, in terms of size, Fidelity, JP Morgan and BNY Mellon, rely more heavily on active management.

¹⁰⁰ 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, 2111-12 (1995) (explaining, analogously, that institutional investors' large stakes make it rational for them to participate actively in shareholder litigation).

¹⁰¹ See Lewellen & Lewellen, *supra* note 21.

Thus, passive investors are particularly well-placed to evaluate provisions such as proxy access, forum-selection bylaws, or staggered boards and to determine whether these provisions are likely, as a general matter, to increase or decrease firm value at the majority of portfolio companies. They are more likely to internalize any spillover effects that may arise from governance provisions.¹⁰²

Second, the fact that passive investors are likely to be pivotal voters facilitates their engagement with portfolio companies. The increasing importance of shareholder voting rights enables passive investors to exercise influence directly through voting, but also indirectly through the power to cast a substantial number of votes in opposition to a management position or policy with which they disagree¹⁰³ Dodd-Frank, for example, implements a requirement that issuers allow shareholders the opportunity to vote on executive compensation.¹⁰⁴ Shareholder proposals have broadened in scope, putting a wide range of topics before the shareholders.¹⁰⁵ Modifications to the process of electing directors, such as proxy access and majority voting, have made shareholder votes on director elections more significant.¹⁰⁶ And changes to state 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.¹⁰⁷ 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.¹⁰⁸

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

¹⁰² See, e.g., Andrea Pawliczek & A. Nicole Skinner, *Common Ownership and Voluntary Disclosure* (Jan. 22, 2018) available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3002075; Jie He, Jiekun, & Shan Zhao, *Internalizing Governance Externalities: The Role of Institutional Cross-Ownership* (May 12, 2017) available at SSRN: <https://ssrn.com/abstract=2940227> or <http://dx.doi.org/10.2139/ssrn.2940227>

¹⁰³ See, e.g., Jill E. Fisch, *Standing Voting Instructions: Empowering the Excluded Retail Investor*, 102 MINN. L. REV. 11, 14 (2017) (observing that "Recent regulatory changes and the rise of shareholder activism have made shareholder voting power increasingly important.").

¹⁰⁴ See Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 951, 124 Stat. 1376 (2010) (codified at 15 U.S.C. § 78n-1).

¹⁰⁵ See, e.g., *Trinity Wall St. v. Wal-Mart Stores, Inc.*, 792 F.3d 323 (3d Cir. 2015) (evaluating obligation of issuer to include shareholder proposal seeking to have issuer develop standards regarding the sale of firearms); *Deere & Company*, 2015 SEC No-Act. LEXIS 481 (Dec. 3, 2015) (considering 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, <http://www.cnbc.com/2017/05/31/exxon-steps-up-efforts-to-sway-shareholders-on-climate-report-vote.html> (reporting on shareholder proposal requesting that the company report on "the impact on its business of compliance with global climate change guidelines.").

¹⁰⁶ See, e.g., Stephen Choi, Jill Fisch, Marcel Kahan & Edward Rock, *Does Majority Voting Improve Board Accountability?*, 83 U. CHI. L. REV. 1119 (2016) (describing shift from plurality to majority voting).

¹⁰⁷ See, e.g., *Corwin v. KKR Financial Holdings*, 125 A.3d 304, 306 (Del. 2015) (limiting litigation exposure for merger approved by fully-informed shareholder vote); *Cambridge Ret. Sys. v. Bosnjak*, 2014 Del. Ch. LEXIS 107 (Del. Ch. 2014) (applying waste standard of review to dismiss challenges to outside directors' equity awards where awards had been approved by shareholder vote).

¹⁰⁸ See, e.g., Jill Fisch, Darius Palia & Steven Davidoff Solomon, *Is Say on Pay All About Pay? The Impact of Firm Performance*, HARV. BUS. L. REV. (forthcoming 2018) (documenting responsiveness of say on pay voting to both characteristics of compensation plans and issuers' overall economic performance).

proposals. The potential impact of the power to vote their holdings in opposition to management increases the likelihood that management will respond to their concerns with negotiated resolutions. This explains the observation by some commentators that passive investors are less likely to vote against management;¹⁰⁹ because of their leverage, such votes are often unnecessary.¹¹⁰ Studies show that issuers are responsive to the interests of large investors and will frequently modify their policies rather than putting issues to a vote that they expect to lose.¹¹¹ As a result, it is often unnecessary for passive investors to vote against an executive compensation plan or in favor of a shareholder proposal.¹¹²

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 be responsive to their requests for information. Similarly, because the support of passive investors is necessary for activist campaigns to be successful, activists are likely to approach them voluntarily in order to share their ideas and enlist their support. A well-documented highway of information runs between activist shareholders and the Big Three, as each trades information about underperforming firms.¹¹³

Passive funds also play a complementary role in the more focused engagement provided by hedge funds by serving as gatekeepers for activism. 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).¹¹⁴ Passive investors mediate activist efforts by evaluating the hedge fund's strategy and providing support only if they believe it is likely to be successful. Notably, because of the limited number of a passive investor's portfolio companies that are involved in mergers, activist campaigns and the like, the cost of conducting a firm-specific analysis in such cases is limited. Notably, although passive investors may benefit from the firm-specific information possessed by their actively-managed fund managers, sponsors with substantial passive holdings

¹⁰⁹ See, e.g., Sean Griffith & Dorothy S. Lund, *Conflicted Shareholder Voting in the Age of Intermediated Capitalism* (2018) (criticizing passive investors because they vote against management less frequently than recommended by proxy advisors ISS and Glass Lewis).

¹¹⁰ See, e.g., Reshma Kapadia, *Passive Investors Are the New Shareholder Activists*, BARON'S, July 8, 2017 (explaining that, for passive investors, "a proxy vote isn't a good gauge of their activism, but rather, a last resort")

¹¹¹ 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. GOV. AN INT'L REV. 472 (2015) (documenting that managers proactively settle with large shareholders by changing corporate practices rather than putting proposals to a vote and losing).

¹¹² 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 109 at 28.

¹¹³ See David R. Beatty, How activist investors are transforming the role of public-company boards, McKinsey Client Alert (Sept. 2017) ("Collaboration between activists and traditional asset managers is changing the boardroom") available at <https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/how-activist-investors-are-transforming-the-role-of-public-company-boards>.

¹¹⁴ 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, 897 (2013) ("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 . . .").

may exercise their voting power with a longer term focus because, unlikely 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.¹¹⁵

Finally, passive fund sponsors are aided, in all these efforts, by the fact that their product mix includes a mixture of 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 benefit from the governance expertise of passive funds, expertise that it would not be efficient 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, 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 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.¹¹⁶ We agree with other commentators that passive investors lack the expertise and the resources to do so effectively.¹¹⁷ 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).¹¹⁸ 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 generate improvements to market-wide returns that are sufficient to prevent capital flight to active funds or alternatively composed competing indexes.

II. The Passive Investor in Practice

¹¹⁵ 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.”).

¹¹⁶ We readily acknowledge that passive funds lack the research necessary to engage based on fundamental analysis. See, e.g., Sharon E. Fay, *The Megaphone Effect*, AB Equity Insights at 3, June 2018, avail. at https://www.alliancebernstein.com/sites/library/Instrumentation/FINAL_EQU-7697-0618.pdf (observing that “index funds are noticeably absent from engagement based on fundamental research”).

¹¹⁷ 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 expanded 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.

¹¹⁸ See, e.g., Fisch, *supra* note 103 at 1024; Bernard S. Black, *Shareholder Passivity Reexamined*, 89 MICH. L. REV. 520, 523 (1990) (arguing that “institutional shareholders are hobbled by a complex web of legal rules that make it difficult, expensive, and legally risky to own large percentage stakes”).

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 large public pension funds – most visibly CalPERS.¹¹⁹ 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.¹²⁰

The SEC's 2003 adoption of a rule requiring mutual funds to disclose how they vote their portfolio company shares changed the situation.¹²¹ 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 now vote virtually all of their shares.¹²² BlackRock for example states that it aims to vote 100% of its shares in 17,000 firms across 90 markets.¹²³ 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.¹²⁴

¹¹⁹ 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 (2008) (describing CalPERS' leadership role and empirical research studying its effectiveness).

¹²⁰ 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).

¹²¹ *Disclosure of Proxy Voting Policies and Proxy Voting Records by Registered Management Investment Companies*, Securities Act Release No. 8188, Exchange Act Release No. 47,304, Investment Company Act Release No. 25,922 (Jan. 31, 2003).

¹²² See Proxy Pulse 2017 Proxy Season Review (reporting that institutional investors voted 91% of their shares in the 2017 proxy season).

¹²³ See Blackrock, *Proxy Voting and Shareholder Engagement Q&A*, available at <https://www.blackrock.com/corporate/literature/fact-sheet/blk-responsible-investment-faq-global.pdf> (“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 across more than 90 markets each year.”).

¹²⁴ See Final Rule: *Disclosure of Proxy Voting Policies and Proxy Voting Records by Registered Management Investment Companies*, 17 CFR Parts 239, 249, 270, and 274 Release Nos. 33-8188, 34-47304, IC-25922; File No. S7-36-02 (2003). See generally Martijn Cremers & Roberta Romano, *Institutional Investors and Proxy Voting: The Impact of the 2003 Mutual Fund Voting Disclosure Regulation* (August 23, 2007). Yale ICF Working Paper No. 07-10; Yale Law & Economics Research Paper No. 349; ECGI - Law Working Paper No. 83/2007. Available at SSRN: <https://ssrn.com/abstract=982493>

Mutual fund sponsors structure their voting operations in different ways.¹²⁵ Many large fund complexes centralize voting decisions through the use of a voting or governance staff that makes voting decisions on behalf of the entire fund complex.¹²⁶ In some complexes, voting takes place through a centralized governance committee. For example, each Vanguard mutual fund delegates voting authority to its Investment Stewardship Oversight Committee.¹²⁷

Alternatively, individual fund managers may retain voting authority. In such cases, however, fund sponsors provide mechanisms for their managers to share information and coordinate their voting decisions. For example, BlackRock centralizes its voting decisions, but individual fund managers retain ultimate voting authority.¹²⁸ 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.¹²⁹ Invesco uses an innovative voting platform to allow its individual fund managers to debate upcoming votes at their portfolio companies and to reach consensus.¹³⁰ Even funds that centralize voting decisions in general may give voting authority to fund managers with respect to particular issues such as mergers or election contests where firm-specific information is important. Finally, a fund may outsource its voting decisions.¹³¹ A

¹²⁵ See generally Bonnie Saynay & Henning Stein, *Proxy Voting: The Hallmark of Active Ownership*, Invesco Whitepaper at 6, 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 (describing voting strategies as “absolve, resolve or devolve”).

¹²⁶ 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 n. 85 (2014) (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).

¹²⁷ Vanguard, *Vanguard’s proxy voting guidelines*, <https://about.vanguard.com/investment-stewardship/policies-and-guidelines/>; Hortense Bioy, Jose Garcia-Zarate & Alex Bryan, *Passive Fund Providers and Investment Stewardship*, Harv. Law Sch. Forum on Corp. Gov. & Fin. Reg., Dec. 21, 2017, <https://corpgov.law.harvard.edu/2017/12/21/passive-fund-providers-and-investment-stewardship/> (observing that at “Vanguard, SSgA, and LGIM, . . . the corporate-governance teams have ultimate authority on the final votes”).

¹²⁸ See BlackRock, *Proxy Voting and Shareholder Engagement*, supra note 40 (outlining how Blackrock votes shares through its Investor Stewardship Committee).

¹²⁹ See T. Rowe Price, *Proxy Voting Guidelines*, available at https://www3.troweprice.com/usis/content/trowecorp/en/utility/policies/_jcr_content/maincontent/polices_row_1/pa-ra-mid/thiscontent/pdf_link/pdffile (stating that proxy vote recommendations are made by the Proxy Committee and that fund managers ultimately have the discretion to vote). 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 Anderson, *T. Rowe Price’s Investment Philosophy on Shareholder Activism*, Harv. L. Sch. F. on Corp. Governance & Fin. Reg., June 18, 2018, <https://corpgov.law.harvard.edu/2018/06/18/t-rowe-prices-investment-philosophy-on-shareholder-activism/> (“It is not uncommon for T. Rowe Price portfolios to cast different votes on proxy matters”).

¹³⁰ Saynay & Stein, supra note 125, at 8.

¹³¹ For example, Fidelity outsources the voting by its index funds to subadvisor Geode. Bioy, et al., supra note 127.

number of small fund complexes appear to delegate voting decisions to a proxy advisor such as Institutional Shareholder Services (ISS).¹³²

Centralized governance committees, voting platforms and consultation among fund managers enable 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.¹³³ Notably, fund voting involves ongoing interaction between the governance groups and between passive and active fund managers.¹³⁴ 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.¹³⁵

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.¹³⁶ Moreover, each individual fund sponsor has its own policies and practices and, the result is in the way that fund complexes vote and the frequency with which they vote against management.¹³⁷ Empirical evidence indicates that funds that have a greater percentage of an issuer's equity are more likely to engage in active voting,¹³⁸ more likely to devote resources to making voting decisions¹³⁹ and less likely to follow the recommendations of ISS. Critically this suggests that, for the votes in which passive investors are most influential, they are most likely to be informed.¹⁴⁰

A variety of studies, both empirical and anecdotal, have documented the effect of mutual fund voting on corporate governance and operational decisions.¹⁴¹ Most of these studies do not

¹³² See Choi et al., *supra* note 126, at 53, 55 (reporting that mutual fund voting that is most closely aligned with ISS recommendations accounts for a relatively small proportion of mutual fund assets).

¹³³ 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 125, at 6 (explaining that Invesco's passive funds engage in echo-voting to "leverage active equity expertise").

¹³⁴ See, e.g., *id.* at 7 (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.").

¹³⁵ See, e.g., Choi et al., *supra* note 126 (documenting the degree of centralization in voting decisions within fund families).

¹³⁶ The failure of fund complexes 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., Posner et al., *supra* note 6.

¹³⁷ See Bioy, et al., *supra* note 127, exhibit 3 (detailing differences across fund complexes).

¹³⁸ See Michelle Lowry & Peter Iliev, *Are Mutual Funds Active Voters?*, 28 REV. FIN. STUD. 446, 458 (2015) (finding that fund families and funds that hold a larger fraction of the company's equity are more likely to engage in "active" voting).

¹³⁹ See *id.* at 455 (finding that larger fund families are less likely to follow ISS voting recommendations); see also Choi, et al., *supra* note 126, 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).

¹⁴⁰ This contrasts with Professor Lund's claim that passive funds adhere to a "a low-cost, unthinking approach to governance." See Lund, *supra* note 6, at 20.

¹⁴¹ 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. PENN. L. REV. 649 (2016); 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 (reporting that BlackRock and Vanguard

distinguish between active and passive investors. One recent study, however, by Appel, Gormley and Kim,¹⁴² focuses specifically on the effect of passive ownership by using a discontinuity analysis based on stock assignments in the Russell 1000 and 2000 indexes.¹⁴³ 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.¹⁴⁴

Critically, 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 to encourage changes.¹⁴⁵ Passive funds have shown increased willingness to vote against management, an approach that increases the effectiveness of their private engagements.¹⁴⁶ Evidence shows that this willingness coupled with the leverage provided by their substantial ownership is often sufficient to lead to management responsiveness.¹⁴⁷

In recent years, private engagement by mutual funds has grown dramatically.¹⁴⁸ Mutual funds have increasingly made direct contact, by letter, phone, electronic communication and,

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).

¹⁴² See Appel, et al., *supra* note 33.

¹⁴³ The use of the Russell 2000/1000 as an IV method has been ubiquitous and has now been used in at least six different studies. See Ian Appel, Todd Gormley & Donald B. Keim, *Identification using Russell 1000/2000 index assignments: A discussion of methodologies* (March 29, 2016), available at <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, evidence which is buttressed by extensive anecdotal evidence.

¹⁴⁴ In addition, Appel, et al. find that passive ownership is associated with not just observed governance differences, but improved performance as measured by return on assets and Tobin's Q. Appel, et al., *supra* note 33

¹⁴⁵ 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. See Fidelity, *Fidelity Launches First Two Sustainability-Focused Index Funds*, May 15, 2017, <https://www.fidelity.com/about-fidelity/institutional-investment-management/first-two-sustainability-focused-index-funds> (announcing the launch of the two ESG funds).

¹⁴⁶ See, e.g., Kapadia, *supra* note 110 (explaining that "there appears to be an increasing willingness to act when talks don't progress").

¹⁴⁷ *Id.*

¹⁴⁸ This engagement takes various forms. See, e.g., Sarah Krouse, *At BlackRock, Vanguard and State Street, 'Engagement' Has Different Meanings*, WALL ST. J., Jan. 20, 2018, <https://www.wsj.com/articles/at-blackrock-vanguard-and-state-street-engagement-has-different-meanings-1516449600> (noting that engagement takes different forms for different passive investors); State Street Global Advisors, *Proxy Voting and Engagement Guidelines United States March 2017*, <https://www.ssga.com/investment-topics/environmental-social-governance/2017/Proxy-Voting-and-Engagement-Guidelines-US-20170320.pdf> (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.").

direct meetings, with the officers and directors of their portfolio companies.¹⁴⁹ One recent survey reports that 63 percent of large institutional investors engaged in direct discussions with management over the past five years, and 45 percent had private discussions with a company's board outside of management presence.¹⁵⁰ Similarly, the percentage of S&P 500 companies reporting investor engagement rose from six percent in 2010 to 72 percent as of June 2017.¹⁵¹

The engagement of the large passive investors has particularly increased. During 2017, BlackRock had over 1600 engagements with its portfolio companies, Vanguard participated in more than 800 engagements and State Street participated in more than 600.¹⁵² In addition to in-person engagements, State Street reported sending hundreds of letters to its portfolio companies.¹⁵³ BlackRock, Vanguard and State Street all have dedicated corporate governance teams that are responsible for engagement with their portfolio companies.¹⁵⁴ BlackRock explains, for example, that its governance specialists engage “in thousands of conversations with companies each year,” conversations that build on the new amount and access to information that investors have gained in recent years “to glean investment insights.”¹⁵⁵ Vanguard explained that, in 2016, its engagements represented nearly \$1 trillion in fund assets and reflected an increase in engagement volume of 67% over the prior three years.¹⁵⁶

As with voting, the mixture of passive and active funds within the same fund complex creates complementarity with respect to engagement.¹⁵⁷ 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

¹⁴⁹ Engagement is, of course, not limited to passive investors, but also utilized 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”).

¹⁵⁰ Joseph McCahery, Zacharias Sautner & Laura Starks, *Behind the Scenes: The Corporate Governance Preferences of Institutional Investors*, 71 J. FIN. 2905, 2906 (2016).

¹⁵¹ Ernst & Young, *2017 Proxy Season Review*, available at [http://www.ey.com/Publication/vwLUAssets/ey-2017-proxy-season-review/\\$File/ey-2017-proxy-season-review.pdf](http://www.ey.com/Publication/vwLUAssets/ey-2017-proxy-season-review/$File/ey-2017-proxy-season-review.pdf) (last visited Oct. 9, 2017).

¹⁵² Sarah Krouse, *At BlackRock, Vanguard and State Street, ‘Engagement’ Has Different Meanings*, WALL ST. J., Jan. 20, 2018, <https://www.wsj.com/articles/at-blackrock-vanguard-and-state-street-engagement-has-different-meanings-1516449600>.

¹⁵³ *Id.*

¹⁵⁴ 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> (observing that, as of Jan. 2017, BlackRock had increased the size of its governance staff to 31 persons, Vanguard had 20 governance employees, and State Street had 11).

¹⁵⁵ BlackRock - Viewpoint, *Exploring ESG: A Practitioner’s Perspective 2* (Jun. 2016), <https://www.blackrock.com/corporate/en-gb/literature/whitepaper/viewpoint-exploring-esg-a-practitionersperspective-june-2016.pdf> (last visited Oct. 12, 2017).

¹⁵⁶ Vanguard, *Our engagement efforts and proxy voting: An update For the 12 months ended June 30, 2016*, <https://about.vanguard.com/investment-stewardship/update-on-voting/>

¹⁵⁷ See, e.g., Ann Lipton, *Shareholder Divorce Court*, 44 J. CORP. L. ____ (forthcoming 2019) (observing that “though large asset managers hold their shares across multiple funds, they coordinate their governance and engagement policies, so that the funds speak with a single voice, amplifying their power”).

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.

Despite these activities, some commentators have criticized passive investors for the limited size of their governance staffs.¹⁵⁸ We have three responses. First, as their level of engagement increases, passive investors are increasing the size of the governance staffs.¹⁵⁹ Second, given the fact that passive funds do not focus on individual firm-specific characteristics, the size of their governance staffs offers substantial manpower to analyze governance issues. By way of comparison, the total number of employees at many hedge funds, which engage in significantly greater firm-specific research, is not dramatically higher than full-time governance staff at the major passive investors.¹⁶⁰ Finally, these critiques ignore the shareholder ecosystem today where individual fund complexes interact and rely upon not only proxy advisory firms but 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.

Issuers and shareholders are also developing private initiatives to promote board-shareholder engagement. Again, passive investors have been 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."¹⁶¹ 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.¹⁶² The "Investor Stewardship Group," (ISG), a collective of 16 large asset managers including Vanguard and BlackRock, was formed "to establish a framework of basic standards of investment stewardship and corporate governance for U.S. institutional investor and boardroom conduct."¹⁶³

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 firm governance by developing governance policies that serve as the basis of

¹⁵⁸ See, e.g., Lund, *supra* note 6, at 23; Bebchuk et al., *supra* note 6, at 100.

¹⁵⁹ See *supra* note 154 (reporting increased size of governance staffs).

¹⁶⁰ See, e.g., Svea Herbst-Bayliss, *Ackman cuts staff, shuns limelight as he seeks to turn around fund*, REUTERS, Jan. 22, 2018, <https://www.reuters.com/article/us-hedgefunds-ackman-exclusive/exclusive-ackman-cuts-staff-shuns-limelight-as-he-seeks-to-turn-around-fund-idUSKBN1FB32Y> (reporting Pershing Square's decision to reduce its total number of employees to 46).

¹⁶¹ 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/>; see also SDX Protocol, About SDX, <http://www.sdxprotocol.com/about-sdx/> (last visited Oct. 14, 2017).

¹⁶² Tim Armour et al., *Commonsense Corporate Governance Principles*, available at <http://www.governanceprinciples.org>.

¹⁶³ David A. Katz & Laura A. MacIntosh, *Common-Sense Capitalism*, Harv. L. Sch. Forum on Corp. Gov. & Fin. Reg., July 28, 2017, <https://corpgov.law.harvard.edu/2017/07/28/common-sense-capitalism/>.

their voting recommendations. The advisor voting policies are, however, heavily influenced by the viewpoints of the fund complexes.¹⁶⁴ ISS explicitly uses the viewpoints of its institutional customers to develop its voting guidelines.¹⁶⁵ 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.¹⁶⁶

Finally, passive investors can affect the composition of the indexes themselves, thus providing a limited degree of control over the companies in which they must invest.¹⁶⁷ For example, the big three were influential in persuading some index providers to exclude the issuers of dual class stock from their indexes.¹⁶⁸ 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.¹⁶⁹ Investors have been successful in influencing index providers both to waive filters that would otherwise exclude popular or profitable firms¹⁷⁰ and in persuading them to exclude companies that investors view as problematic.¹⁷¹

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

¹⁶⁴ See, e.g., David F. Larcker, Allan L. McCall & Brian Tayan, *And Then A Miracle Happens!: How Do Proxy Advisory Firms Develop Their Voting Recommendations?*, Stanford Closer Look Series, Feb. 25, 2013, <https://www.gsb.stanford.edu/sites/gsb/files/publication-pdf/cgri-closer-look-31-proxy-firms-voting-recommendations.pdf> (summarizing and criticizing policy formulation procedures of ISS and Glass Lewis).

¹⁶⁵ See Institutional Shareholder Services, Policy Formulation Process, available at <https://www.issgovernance.com/policy-gateway/policy-formulation-application/> (describing process by which ISS formulates its voting policies).

¹⁶⁶ See Lowry & Iliev, *supra* note 138 (finding that “[e]ngaged mutual funds frequently disagree with ISS recommendations on contentious votes: a one standard deviation increase in a fund’s predicted net benefits of voting is associated with a 12 to 17% increase in the tendency to disagree with ISS”).

¹⁶⁷ We are grateful to Andrew Verstein for bringing this point to our attention.

¹⁶⁸ See Joann S. Lublin, *Big Investor Group to Push for End to Dual-Class Shares*, WALL ST. J., Jan. 31, 2017 (reporting effort by a group including BlackRock, State Street and Vanguard to obtain a ban on dual class shares).

¹⁶⁹ See Gabriel Rauterberg & Andrew Verstein, *Index Theory: The Law, Promise and Failure of Financial Indices*, 30 YALE J. ON REG. 1, 18-19 (2012) (describing the broad degree of interpretive discretion exercised by index providers).

¹⁷⁰ *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”).

¹⁷¹ 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-11e1-8e86-00144feabdc0> (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).

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, they may purchase substantially less. 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 are frequently decisive in determining the success of an activist campaign.. For example, in activist Nelson Peltz’s fund Trian’s recent activist campaign at Du Pont, none of the big three voted in favor of Trian. 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 Peltz a victory.¹⁷² In post-mortems on the vote, Du Pont’s advisors cited engagement with passive investors as a factor in Du Pont’s win.¹⁷³

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. Importantly, passive investors have a critical role in screening activism because their incentives may differ from those of the activists. 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,¹⁷⁴ because passive investors, unlike active investors, cannot exit before that happens. 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.¹⁷⁵

Early empirical evidence supports the role of passive investors in intermediating hedge fund activism. Greater passive ownership is associated with a greater likelihood of the firm being targeted by activist shareholders.¹⁷⁶ A second study authored by Appel, Gormley and Kim finds that higher passive investor ownership is associated with greater activism and increased proxy fights.¹⁷⁷ 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.¹⁷⁸

¹⁷² Stephen Gandel, *DuPont nearly lost its war with activist Nelson Peltz*, FORTUNE, Jun. 4, 2015, <http://fortune.com/2015/06/04/dupont-nelson-peltz-vote/>.

¹⁷³ Andrew R. Brownstein, *Winning a Proxy Fight—Lessons from the DuPont-Trian Vote*, Harvard Corp. Gov. Blog, dated May 18, 2015, available at <https://corpgov.law.harvard.edu/2015/05/18/winning-a-proxy-fight-lessons-from-the-dupont-trian-vote/>.

¹⁷⁴ See, e.g., *In re PLX Tech. Inc. Stockholders’ Litig.*, No. 9880-VCL, Del. Ch., Sept. 3, 2015, transcript ruling at 27 (citing the concern that “particular types of investors may espouse short-term investment strategies and structure their affairs to benefit economically from those strategies.”).

¹⁷⁵ Factset Sharkrepellent reports that in 2016 and 2017, activists hedge funds had a 55% and 53% success rate, respectively in dissident proxy contests. For a specific example in the recent case of Marcato’s proxy contest with Deckers Outdoor Corp., BlackRock and Vanguard which were 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. While passive funds may take a more individualistic approach to hedge fund activism, active funds may systematically prefer to avoid activism as inhibiting their ability to obtain alpha.

¹⁷⁶ See Appel, et al., *supra* note 33.

¹⁷⁷ *Id.*

¹⁷⁸ *Id.*

These findings run contrary to anecdotal evidence suggesting that passive investors are unwilling to support activists.¹⁷⁹

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.¹⁸⁰ These settlements typically do not involve a shareholder vote, and there are reasons to be concerned that such settlements reduce management accountability.¹⁸¹ Some passive funds have recently objected to the issuer practice of settling election contests without seeking the input of longer-term institutional investors.¹⁸² These conclusions also suggest that passive investors will be able to develop reputational sanctions to constrain destructive hedge fund activism.¹⁸³

C. *The Role of Policy*

Passive investors increasingly have a role in politics and regulation.¹⁸⁴ They actively engage in policy discussions and generally push for greater voice for investors. They also engage with policymakers with respect to 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.

One place where passive investors have actively influenced regulatory policy is with respect to their ability to exercise voice at their portfolio companies. Passive investors regularly comment upon and call for change to the rules adopted by SEC under the 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.¹⁸⁵ Institutional investors broadly supported the reforms, which reduced the regulatory burdens for investor communication and collective action, and the SEC enacted these changes in 1992.¹⁸⁶ Institutional investors have been active in a variety of other SEC reforms to enhance the effectiveness of shareholder voting rights. Most recently institutional investors have been active

¹⁷⁹ See Lund, *supra* note 6.

¹⁸⁰ See, e.g., Gail Weinstein, et al., *Shareholder Activism: 1H 2018 Developments and Practice Points*, Harvard Law School Forum on Corporate Governance and Financial Regulation, Oct. 14, 2018 (“Few Activist Campaigns Go to A Shareholder Vote”), available at <https://corpgov.law.harvard.edu/2018/10/14/shareholder-activism-1h-2018-developments-and-practice-points/>

¹⁸¹ See Jill Fisch & Simone Sepe, *Collaborative Shareholders* (2019).

¹⁸² Liekefett & Elbaum, *supra* note 174.

¹⁸³ See Kapadia, *supra* note 110.

¹⁸⁴ See Asaf Eckstein, *The Upside of Common Ownership in Corporate Law*, working paper (2018).

¹⁸⁵ See Alicia McElhaney, *Fight for Your Right to Proxy*, INSTIT. INV., Nov. 10, 2017, available at <https://www.institutionalinvestor.com/article/b15kfxz7qzdrpy/fight-for-your-right-to-proxy>.

¹⁸⁶ Regulation of Communications Among Shareholders, Exchange Act Release No. 31,326, 1992 SEC LEXIS 2470, *7 (Oct. 16, 1992).

in shaping and attempting to forestall regulation of proxy advisor services currently pending before Congress.¹⁸⁷

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 rule-making and participate in roundtables and other policy discussions as well as private meetings with lawmakers.¹⁸⁸ Eckstein notes that some executives at some passive investors have testified before Congress.¹⁸⁹ Passive investors participate in trade groups like the Council for Institutional Investors to develop and support corporate governance best practices as well as other policy positions.¹⁹⁰ Institutional investors now regularly file amicus briefs and take policy positions on legislation.¹⁹¹ Institutional investors were active in the negotiation and passage of the Dodd-Frank Act and subsequent legislative efforts.¹⁹² Recently institutional investors, including fund complexes with primarily passive funds, have been active in the fight against climate change.¹⁹³

This policy work includes both broad-based policy initiatives and firm-specific efforts. The big mutual fund complexes regularly issue out policy letters and missives, and several have begun using an annual letter to issuers to highlight their policy concerns. For example, BlackRock's chairman Larry Fink recently issued a letter to the CEOs of all of the public companies in which the fund complex invests in calling for more sustainable business practices.¹⁹⁴ Similarly, a number of institutional investors have issued announcements calling for more gender diversity on corporate boards.¹⁹⁵

III. The Implications of the Theory

¹⁸⁷ See Letter sent by the Council of Institutional Investors to the United States Senate Committee on Banking, Housing, and Urban Affairs, regarding the legislation of H.R. 5311, the Corporate Governance Reform and Transparency Act of 2016, available at <https://corpgov.law.harvard.edu/2016/09/26/the-regulation-of-proxy-advisory-firms/>. On the perils of regulating proxy advisors, see Asaf Eckstein, *Great Expectations: The Peril of an Expectations Gap in Proxy Advisory Firm Regulation*, 40 DEL. J. CORP. L. 77 (2015).

¹⁸⁸ See Eckstein, *supra* note 184, at 44-45.

¹⁸⁹ *Id.*

¹⁹⁰ See Council of Institutional Investors, Associate Members, https://www.cii.org/associate_members (listing BlackRock, Vanguard and State Street as among the CII's associate members).

¹⁹¹ 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/> (reporting that BlackRock signed an amicus brief to the U.S. Supreme Court arguing for marriage equality for same sex couples).

¹⁹² See, e.g., Council of Institutional Investors, *Dodd-Frank Act*, available at https://www.cii.org/dodd_frank_act (explaining that the Council of Institutional Investors "as a leading voice for long-term, patient capital, advocated vigorously for many elements of the Dodd-Frank Act").

¹⁹³ See, e.g., Ken Silverstein, *More Institutional Investors Throw Weight Into Fight Against Climate Change*, FORBES, Dec. 12, 2017, <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>

¹⁹⁴ Fink, *supra* note 29.

¹⁹⁵ See, e.g., Brianna Castro, *Raising the Stakes on Board Gender Diversity*, Harv. L. Sch. Forum on Corp. Gov. & Fin. Reg., Jan. 8, 2018, <https://corpgov.law.harvard.edu/2018/01/08/raising-the-stakes-on-board-gender-diversity/> (reporting announcements by State Street, BlackRock and Vanguard).

As the foregoing Parts detail, we challenge the claim that passive investors are unengaged and uninformed.¹⁹⁶ Instead, we provide evidence 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.¹⁹⁷ Our critiques of this literature, however, do not mean there is no reason to be concerned about the rise of passive investors.¹⁹⁸ 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 will reduce “efficient price finding on equity markets.”¹⁹⁹ This concern arises because passive investors do not engage in information-based trading and have no discretion over buying and selling shares.

The premise that stock prices reflect firm value is what drives the market for corporate control and guides courts and independent directors.²⁰⁰ 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).²⁰¹ Passive investors, however, have no investment discretion: even if they believe some shares in their portfolio to be overpriced, passive investors cannot sell them. With passive investors comprising an increasingly large

¹⁹⁶ Cf. Lund, *supra* note 6 (arguing that active funds have better incentives to monitor and that, as a result, passive funds should not be allowed to vote the shares of their portfolio companies).

¹⁹⁷ We also provide a description of the channels for passive investor engagement that is inconsistent with academic claims that passive investor common ownership raises antitrust concerns. See, e.g., Posner, et al., *supra* note 6.

¹⁹⁸ We do not make the claim that passive investors engage in stewardship that is socially optimal. See, e.g., David C. Brown & Shaun Williams Davies, *Moral Hazard in Active Asset Management*, 125 J. FIN. ECON. 311 (2017) (arguing that competition from passive funds creates a moral hazard problem and reduces the effort expended by active fund managers).

¹⁹⁹ Fichtner, et al., *supra* note 4.

²⁰⁰ 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 (2007) (independent directors look to stock prices as a signal of company value).

²⁰¹ 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 (2009); Alex Edmans, *Blockholders and Corporate Governance*, 6 Ann. Rev. Fin. Econ. 23 (2014) (blockholders’ informed exit can lead share price to reflect firm value). See also McCahery, et al., *supra* note 150 (reporting survey findings suggesting that selling shares because of dissatisfaction with performance or governance is quite prevalent; 49% of respondents sold because of the former and 39% the latter).

fraction of the market, the concern is that there will not remain enough investors to engage in information and price discovery and that market prices will become less efficient.²⁰²

These concerns find some *indirect* support in research showing that index inclusion can lead to stock price changes that do not necessarily reflect fundamentals,²⁰³ that the prices of stock included in an index exhibit co-movement, as passive funds buy and sell all the stock comprising an index in response to fund inflows and outflows,²⁰⁴ and that passive investment can produce some temporary pricing distortions.²⁰⁵ There is scant evidence, however, on the *direct* effect of passive investors on the informational efficiency of stock prices.²⁰⁶

Our theory, however, 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.²⁰⁷ Actively-traded mutual funds and hedge funds can exploit these gains²⁰⁸ and, as a result, increase the fees that they charge relative to the fees charged by passive funds.²⁰⁹ This will increase the incentive of active

²⁰² See, e.g. Steven D. Bleiberg, William W. Priest & David N. Pearl, *The Impact of Passive Investing on Market Efficiency*, white paper dated May 2017, <http://www.nylinvestments.com/polos/MSEP38II-051768130.pdf> (reporting results of three studies claiming that the increase in passive investing is reducing the efficiency of market prices).

²⁰³ See, e.g., Stijn Claessens & Yishay Yafeh, *Comovement of Newly Added Stocks with National Market Indices: Evidence from Around the World*, 17 REV. FIN. 203 (2012); Eric Belasco, Michael Finke & David Nanigian, *The Impact of Passive Investing on Corporate Valuations*, 38 MANAGERIAL FIN. 1067 (2012) (flows into S&P 500 index funds affect valuations of companies within this index).

²⁰⁴ See Vladyslav Sushko & Grant Turner, *The Implications of Passive Investing for Securities Markets*, BIS QUARTERLY REV. 113, 119 (March 2018).

²⁰⁵ See, e.g., Jeffrey L. Coles, Davidson Heath & Matthew C. Ringgenberg, *On Index Investing* (Oct. 19, 2017), available at <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).

²⁰⁶ One study, for example, found that an increase in holding 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 (2017) (finding that an increase in ETF is associated with increased trading costs and reduced firm-level pricing efficiency). Another study arrived at more positive findings: that passive investors lead to better incorporation of systematic earning information. See Lawrence R. Glosten, Suresh Nallareddy & Yuan Zou, *ETF Activity and Informational Efficiency of Underlying Securities* (Jan. 5, 2017), available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2846157 (ETF activity increases informational efficiency as a result of timely incorporation of systematic earnings information).

²⁰⁷ See *id.* (“in 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”).

²⁰⁸ See Sushko & Turner, *supra* note 204, at 120 (“greater 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 (1980) (a model showing that market efficiency depends on the availability of gains from acquiring information).

²⁰⁹ Several studies document the ability of some fund managers to outperform the market consistently. See, e.g., Robert Kosowski et al., *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); 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 & QUANT. ANAL. 1111 (2010) (finding evidence that mutual fund managers can trade profitably due to their ability to forecast earnings-related fundamentals).

funds to acquire information that will give them a trading advantage over index funds,²¹⁰ and further increase the competition between active and passive funds.²¹¹

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, for the reasons described above, estimating the precise percentage of equity securities that are passively invested is difficult, most commentators estimate that percentage as 15-20%, meaning that the overwhelming majority of stock is still subject to information-based trading strategies.²¹² Additionally, empirical and theoretical research has shown that price discovery and efficiency only require a small number of active traders.²¹³ Even if passive investing comprised 60% or 70% of the market there would still be sufficient trading for price discovery.²¹⁴

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.²¹⁵ 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.²¹⁶ The growth of passive investing, however, may reduce IPO-stage market discipline.²¹⁷

²¹⁰ 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> (quoting Morningstar analyst James Xiong as stating that “the question of whether increased indexing creates exploitable opportunities for active investors remains open”).

²¹¹ 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*, REV. FIN. STUD. (forthcoming 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. *See id.*

²¹² *See, e.g.,* Sushko & Turner, *supra* note 204 (explaining complexity of measuring the percentage of the U.S. equity market held by passive funds but estimating that they hold 15% of the total).

²¹³ *See* Berk & van Binsbergen, *supra* note 79; Bradford Cornell, *Passive investing and Market Efficiency*, J. OF INVESTING 7 (2017)

²¹⁴ *Cf.* Jason Zweig, *Are Index Funds Eating the World?*, WALL ST. J. BLOG, Aug. 26, 2016, <http://jasonzweig.com/are-index-funds-eating-the-world/> (claiming that, because active funds trade so frequently, they will still set market prices even if the levels of passive ownership continue to rise).

²¹⁵ *See, e.g.,* John C. Coates IV, *Explaining Variation in Takeover Defenses: Blame the Lawyers*, 90 CAL. L. REV. 1301 (2001) (explaining that companies adopt a variety of takeover defenses at the IPO stage that they would have difficulty adopting after going public).

²¹⁶ *See, e.g.,* Michael C. Jensen & William H. Meckling, *Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure*, 3 J. FIN. ECON. 305, 306 (1976) (discussing the founders' incentives to choose efficient corporate governance arrangements at the IPO stage).

²¹⁷ Commentators have challenged this description of the IPO process as factually inaccurate and suggested that IPO investors may not price governance terms. *See* Robert Daines & Michael Klausner, *Do IPO Charters Maximize Firm Value? Antitakeover Protection in IPOs*, 17 J.L. ECON. & ORG. 83 (2001).

Specifically, passive investors cannot avoid purchasing the shares of an issuer that is to become part of their index,²¹⁸ whatever the quality of its corporate governance.²¹⁹ Passive investors, therefore, are forced buyers.²²⁰ 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.²²¹

Governance provisions introduced at the IPO stage may also limit subsequent efforts by passive investors ability to use their voice.²²² For example, dual class stock has become increasing popular in technology companies at the IPO stage.²²³ The IPO of SNAP on March 2, 2017 is an extreme example.²²⁴ SNAP was the first no-vote IPO listed on the New York Stock Exchange since 1940.²²⁵ A number of institutional investors had been objecting 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 their concerns to “carry less weight with management.”²²⁶

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

²¹⁸ The problem may be more severe in non-U.S. markets, where it may be easier for companies to get included in major stock indices. 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*, THE GUARDIAN (Dec. 6, 2011), <https://www.theguardian.com/business/2011/dec/06/ftse-russian-miners-governance-concerns>.

²¹⁹ 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 *Council of Institutional Investors Letter to NYSE Chief Regulation Officer*, Oct. 2, 2012.

²²⁰ We note, however, that most indexes require that an issuer be public for a period of time before they are included in an index. See, e.g., Ari I. Weinberg, *Why Index Funds Have a Limited Presence in the IPO Market*, WALL ST. J., Sept. 4, 2017, <https://www.wsj.com/articles/why-index-funds-have-a-limited-presence-in-the-ipo-market-1504577040> (noting that “indexes themselves generally do not include shares of IPOs on Day 1” and describing waiting periods for inclusion in various popular indexes). In such a case, index inclusion would not address the issuer’s ability to sell their stock at the IPO stage.

²²¹ See *id.*; S&P U.S. Indices Methodology 5 (Aug. 2017) (initial public offerings should be traded on an eligible exchange for at least 12 months before being considered for addition to an S&P index).

²²² See also Scott Hirst, *Frozen Charters*, 34 YALE J. ON REG. 93 (2017) (explaining how voting rules can limit issuers’ ability to amend disfavored charter terms); Jill E. Fisch, *Governance by Contract: The Implications for Corporate Bylaws*, 106 CAL. L. REV. 373 (2018) (identifying various limitations on effective shareholder voting that are inconsistent with a contractual understanding of the corporation).

²²³ For example, FINRA reports that “between 2013 and late 2015, 98 companies newly listed on U.S. exchanges had dual class IPOs.” FINRA Staff, *Supervoters, Stocks and Silicon Valley: What Investors Should Know About Dual Class Voting Structures*, Dec. 1, 2015, available at <http://www.finra.org/investors/supervoters-stocks-and-silicon-valley-what-investors-should-know-about-dual-class-voting>.

²²⁴ Ken Bertch, *Snap and the Rise of No-Vote Common Shares*, HARV. LAW SCHOOL FOR. ON CORP. GOV. & FIN. REG., May 26, 2017k <https://corp.gov.law.harvard.edu/2017/05/26/snap-and-the-rise-of-no-vote-common-shares/>
²²⁵ *Id.*

²²⁶ Rakki Kumar, et al., *State Street Global Advisors, Shareholder Rights in the Age of Snap*, MARKET COMMENTARY, 2017, <https://www.ssga.com/investment-topics/environmental-social-governance/2017/Shareholder-Rights-in-the-Age-of-Snap.pdf>.

exclude dual class companies.²²⁷ 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 indexes.²²⁸ 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.²²⁹

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.²³⁰ 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.²³¹

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 complexes, “controlled by a small number of individuals with unsurpassed power.”²³² The largest mutual fund families, BlackRock, Vanguard and State Street are the largest shareholders in 40% of U.S. listed corporations and 90% of the largest companies.²³³ Coates warns that this concentration has resulted in the ownership rights for most portfolio companies being

²²⁷ See *Council of Institutional Investors, Letter to MSCI Equity Index Committee*, Aug. 3, 2017 (“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”).

²²⁸ See, e.g., *CamberView Partners, S&P and FTSE Russell on Exclusion of Companies with Multi-Class Shares*, HARV. LAW SCHOOL FORUM ON CORP. GOV. & FIN. REG., Aug. 4, 2017, <https://corpgov.law.harvard.edu/2017/08/05/sp-and-ftse-russell-on-exclusion-of-companies-with-multi-class-shares/> (describing the index providers’ new policies); 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> (reporting S&P’s decision that Snap and other dual class companies would not be eligible for inclusion in the S&P 500 index).

²²⁹ Rachel Evans, *MSCI Rejects Calls to Ban Dual-Class Stocks From its Indexes*, BLOOMBERG, Oct. 30, 2018, <https://www.bloomberg.com/news/articles/2018-10-30/msci-rejects-calls-to-ban-dual-class-stocks-from-its-indexes>

²³⁰ 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/> (citing BlackRock’s concern that excluding dual class companies from the index would deprive their index-based clients of “opportunities for return.”).

²³¹ See, e.g., *Council of Institutional Investors, Dual Class Stock*, available at https://www.cii.org/dualclass_stock (explaining that “Stock exchanges could address the problem by ensuring their listing standards bar companies with dual-class structures.”).

²³² Coates, *supra* note 7.

²³³ Griffith & Lund, *supra* note 109.

concentrated in the hands of a small number of individuals who work for the major fund sponsors.²³⁴

Coates' observation is correct. 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 institutions with significant ownership stakes has the potential to reduce the collective action problems that modern corporations have faced since the 1930s.²³⁵ Berle-Means identified the managerial agency costs that arise in corporations with dispersed public ownership,²³⁶ and these managerial agency costs have been the central focus of corporate law for almost a century.²³⁷ The reconcentration of ownership in the hands of the major mutual fund families offers the potential to reduce these agency costs.²³⁸

Moreover, the investment horizon of passive investors is likely to be longer than those of active funds and activists.²³⁹ Thus, for those concerned with the short-termism that 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 mutual fund industry and the variety of requirements that have the effect of fragmenting mutual fund ownership of portfolio companies.²⁴⁰

In addition, our more nuanced analysis of the institutional context suggests that the major mutual fund complexes 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.²⁴¹ As a result, while the major fund complexes will

²³⁴ See Coates, *supra* note 7 (“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.”).

²³⁵ Berle and Means most notably identified the problem of dispersed small ownership and the resulting empowerment of management. See ADOLF A. BERLE & GARDINER C. MEANS, *THE MODERN CORPORATION AND PRIVATE PROPERTY* (1932).

²³⁶ *Id.*

²³⁷ See, e.g., Jesse 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”).

²³⁸ See, e.g., Edmans, *supra* note 201 (reviewing the literature on the various ways in which large shareholders engage in corporate governance).

²³⁹ See, e.g., Jeffrey Busse, Lin Tong & Qing Tong, *Trading Regularity and Fund Performance*, __ *REV. FIN. STUD.* __ (2018) (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. & QUANT. ANAL.* 1403 (2017) (identifying the concern that mutual fund managers engage in short term trading to “look active”).

²⁴⁰ 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 Roe, *Political Elements in the Creation of a Mutual Fund Industry*, 139 *U. PA. L. REV.* 1469 (1991).

²⁴¹ See, e.g., Fichtner, et al, *supra* note 4, at 307 (“These portfolios may have different interests when it comes to shareholder vote.”).

play a greater role in the oversight of large portfolio companies, there is little reason to believe that they will vote or otherwise act as a block.²⁴²

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.²⁴³ 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 2018.²⁴⁴

Finally, the most important counterbalance to passive investor influence is the continued role of corporate management. Corporate law vests ultimate control of corporate decision-making in the hands of the board of directors, and shareholders lack both the legal authority and a mechanism for making operational decisions.²⁴⁵ 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.²⁴⁶ 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 seeking to exercise influence through engagement.²⁴⁷ Even hedge fund activists typically seek board representation because of their inability to effect changes in their capacity as shareholders.²⁴⁸ Other regulatory restrictions also limit the ability of funds to exercise control, such as section 13(d) of the Securities Exchange Act.²⁴⁹

²⁴² Indeed, even those who criticize passive owners observe that they do not all vote their shares the same way. *See, e.g.,* Griffith & Lund, *supra* note 109; Bebchuk & Hirst, *supra* note 7.

²⁴³ *See* Fisch & Sepe, *Collaborative Shareholders*, *supra* note 181.

²⁴⁴ Martin Lipton, *Dealing with Activist Hedge Funds and Other Activist Investors*, Harv. Law Sch. Forum on Corp. Gov. & Fin. Reg., Jan. 25, 2019, <https://corpgov.law.harvard.edu/2019/01/25/dealing-with-activist-hedge-funds-and-other-activist-investors-2/> (“Activists set new records in 2018, targeting the largest number of companies (nearly 300), deploying more capital and winning a greater number of board seats (161) than ever before.”).

²⁴⁵ *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).

²⁴⁶ *See, e.g.,* Air Prods. & Chems., Inc. v. Airgas, Inc., 16 A.3d 48, 88-89 (Del. Ch. 2011) (upholding board's authority to reject a tender offer despite widespread shareholder support).

²⁴⁷ *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).

²⁴⁸ *See* Fisch & Sepe, *supra* note 181. (describing increasing number of hedge fund-nominated directors and defending board representation as a mechanism by which issuers and hedge funds can aggregate information).

²⁴⁹ *See, e.g.,* Morley, *supra* note 41 (observing that section 13(d) is one of several reasons why mutual funds cannot engage effectively in activism).

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. 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 “[i]nvestment managers invest other people’s money.”²⁵⁰

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.²⁵¹ 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.

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.²⁵² For example, Vanguard and Fidelity provide extensive services to employer-sponsored 401(k) plans.²⁵³ 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. A 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 likelihood the frequency with which the sponsor’s funds will support management.²⁵⁴

²⁵⁰ Bebhuk, et al., *supra* note 6, at 93.

²⁵¹ 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.*, Tim McLaughlin, *How the owners of Fidelity get richer at everyday investors’ expense*, REUTERS, Oct. 5, 2016, <https://www.reuters.com/investigates/special-report/usa-fidelity-family/> (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).

²⁵² *See, e.g.*, Gerald F. Davis & E. Han Kim, *Business Ties and Proxy Voting by Mutual Funds*, 85 J. FIN. ECON. 552 (2007).

²⁵³ *See, e.g.*, Greg Iacurci, *Fidelity pushes Vanguard to compete on brand in 401(k) plans*, INV. NEWS, Jan. 24, 2018, <http://www.investmentnews.com/article/20180124/FREE/180129959/fidelity-pushes-vanguard-to-compete-on-brand-in-401-k-plans> (describing competition between Fidelity and Vanguard both for revenue from administering 401(k) plans and for investment funds in such plans).

²⁵⁴ *See, e.g.*, Rasha Ashraf, Narayanan Jayaraman & Harley E. Ryan, *Do Pension-Related Business Ties Influence Mutual Fund Proxy Voting? Evidence from Shareholder Proposals on Executive Compensation*, 47 J. FIN. & QUAN.

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 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.²⁵⁵

There are a variety of situations in which the interests of individual mutual funds may differ.²⁵⁶ Two funds in a single family 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.²⁵⁷

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.²⁵⁸

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 charge higher fees and are therefore more profitable for them.²⁵⁹ This favoritism could, in theory, lead a mutual fund family to refrain voting its substantial passive fund holdings against or criticizing management, 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

ANAL. 567, 587 (2012) (reporting that mutual funds with pension-related business ties are less willing to support shareholder-sponsored executive compensation proposals).

²⁵⁵ See, e.g., Jose-Miguel Gaspar et al., *Favoritism in Mutual Fund Families? Evidence on Strategic Cross-Fund Subsidization*, 61 J. FIN. 73 (2006).

²⁵⁶ See, e.g., *id.* at 1261 (terming such conflicts "pervasive" and observing that "Financial economists and legal scholars have thus found the conflicts that arise from the simultaneous management of multiple funds in investment management companies extremely alarming").

²⁵⁷ 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 131 (describing Fidelity's approach to voting by its index funds).

²⁵⁸ 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, <https://uk.reuters.com/article/uk-carillion-restructuring-funds/carillion-collapse-hits-banks-and-investors-boosts-short-sellers-idUKKBN1F424D> (describing BlackRock's ownership of Carillion). Moreover, to the extent this latter scenario is based on a fund sponsor's ability to access material non-public information, both the issuer and the sponsor have strong incentives to avoid conduct that would amount to illegal insider trading.

²⁵⁹ See Jose-Miguel Gaspar et al., *Favoritism in Mutual Fund Families? Evidence on Strategic Cross-Fund Subsidization*, 61 J. FIN. 73 (2006); see also Diane Del Guercio et. al. *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).

short-term value if that actively-managed funds in its fund family 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, it is typical for customers to 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.²⁶⁰ 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.

A third issue that has received recent attention is the potential conflict created by cross-ownership.²⁶¹ 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

²⁶⁰ And in fact, given the potential for cross-subsidization, if the Magellan fund is able to 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.

²⁶¹ See Griffith & Lund, *supra* note 109 (describing the fact that an institution has "interests on both sides of a transaction" as a "conflict of interest").

passive funds to hold shares of both.²⁶² A merger may present a direct conflict between the interest 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.²⁶³

Shareholder voting is becoming increasingly important in the merger context due to developments in Delaware case law such as the *Corwin* decision,²⁶⁴ that reduce the level of judicial scrutiny when a transaction has been approved by an informed vote of the independent shareholders.²⁶⁵ In the recent litigation about Tesla’s merger with SolarCity, plaintiffs challenging the merger made the novel argument that the mutual funds holding shares in both Tesla and SolarCity were not disinterested for purposes of the Tesla vote to approve the merger due to this cross-ownership.²⁶⁶ 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.”²⁶⁷ 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.²⁶⁸

We do not address 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.²⁶⁹ We are unpersuaded, however, that from the perspective of the mutual funds’ customers, the voting reflected a conflict of interest. Mutual funds’ fiduciary duties

²⁶² 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 Brooks et. al., *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).

²⁶³ Some commentators have argued that the Tesla SolarCity merger, for example, was a bad merger. See Griffith & Lund, *supra* note 109. 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.*, 2002 Del. Ch. LEXIS 35 (Del. Ch. Apr. 30, 2002). In retrospect, the merger appeared to be value-enhancing for both companies. See, e.g., *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> (reporting “the consensus is that the merger was indeed a good idea”).

²⁶⁴ *Corwin v. KKR Fin. Hldgs. LLC*, 125 A.3d 304 (Del. 2015).

²⁶⁵ See Steven Davidoff Solomon & Randall S. Thomas, *The Rise and Fall of Delaware’s Takeover Standards*, ECGI Law Working Paper 309/2016; Zohar Goshen & Sharon Hanes, *The Death of Corporate Law*, ECGI Law Working Paper 402/2018.

²⁶⁶ *In re Tesla Motors, Inc. Stockholder Litig.*, Plaintiffs’ Answering Brief in Opposition to Defendants’ Motion to Dismiss the Second Amended Complaint, C.A. 12711-VCS (July 27, 2017). Tesla’s top 25 institutional shareholders, which collectively held 45.7% of Tesla’s stock, also owned shares in Solar City. *In re Tesla Motors, Inc., Stockholder Litig.*, C.A. No. 12711-VCS, memorandum op. at 32, n.183 (Del. Ch. Mar. 28, 2018).

²⁶⁷ *Id.* at 34.

²⁶⁸ *Id.* at 35.

²⁶⁹ See, e.g., Jill E. Fisch, *Standing Voting Instructions: Empowering the Excluded Retail Investor*, 102 MINN. L. REV. 11, 47-48 (2017) (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”).

require them to vote in a manner that benefits their *investors*, not each *company* that they hold in their portfolio.²⁷⁰ For a mutual fund, as with an ordinary investor, cross-ownership complicates voting decisions and, as with an ordinary investor, there is no single right answer, but a mutual fund, like any investor, is entitled to vote in whatever way it determines maximizes its interests without regard to whether that vote is calculated to maximize the value of its portfolio company.²⁷¹ Thus, in voting on a merger, an investor might rationally vote to support a merger that is welfare-increasing overall, an investor might vote in 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 family own different stock.²⁷² 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 may 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.²⁷³

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.²⁷⁴

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.

²⁷⁰ See, e.g., *Tanzer v. Int'l Gen. Indus., Inc.*, 379 A.2d 1121, 1124 (Del. 1977), overruled by *Weinburger v. UOP, Inc.*, 457 A.2d 701 (Del. 1983) (quoting William Meade Fletcher, *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”)

²⁷¹ 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) (finding that cross ownership of bidder and target might affect mutual funds' merger votes); see also Brooks et. al., *Institutional Cross-ownership and Corporate Strategy: The Case of Mergers and Acquisitions*, 48 J. CORP. FIN. 187, 189 (2018) (acquirers with higher institutional cross-ownership pay lower premiums for targets and tend to use more stock as the method of payment). In contrast, a study focusing on the years 1984-2006 found no effect of on vote outcomes or deal characteristics. Jarrad Harford et al., *Institutional Cross-holdings and Their Effect on Acquisition Decisions*, 99 J. FIN. ECON. 27 (2011) (finding that investors with cross-holdings were not influential enough to impact most bids).

²⁷² See generally Ann M. Lipton, *Family Loyalty: Mutual Fund Voting and Fiduciary Obligation*, 19 TENN. J. BUS. L. 175 (2017).

²⁷³ See *id.* (observing that institutional investors increasingly face “conflicts between investor preferences in their shareholder and nonshareholder capacities”).

²⁷⁴ See text accompanying note 131, *supra*.

Because customers may have different holdings among multiple funds within the family, it is impossible to adopt a voting rule that would maximize value for all the funds' customers.²⁷⁵ 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.²⁷⁶ That determination, we argue should neither prevent the sponsor from voting the shares of all the funds in favor of the merger nor compel the sponsor to vote against the merger.²⁷⁷ 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 family is consistent with centralization of all voting decisions at the family level, although we do not argue that such centralization is required.

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 this further study.

The core of our analysis is a new 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 customers of a fund complex, 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 with respect to certain types

²⁷⁵ 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.

²⁷⁶ 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, <https://www.marketwatch.com/story/solarcity-jumps-after-tesla-merger-receives-iss-endorsement-2016-11-04>. 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.

²⁷⁷ 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.

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 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.