Working Draft, Comments Welcome First Draft: June 2018, Last Revised: November 2018

INDEX FUNDS AND THE FUTURE OF CORPORATE GOVERNANCE: THEORY, EVIDENCE, AND POLICY

Lucian Bebchuk* & Scott Hirst**

^{*} James Barr Ames Professor of Law, Economics, and Finance, and Director of the Program on Corporate Governance, Harvard Law School.

^{**} Associate Professor, Boston University School of Law; Director of Institutional Investor Research, Harvard Law School Program on Corporate Governance.

For helpful suggestions and discussions, we are grateful to Alon Brav, Alma Cohen, Jesse Fried, Assaf Hamdani, Kobi Kastiel, Leo Strine, Roberto Tallarita, and participants in two workshops at Harvard Law School. We have also benefitted from conversations with many members of the institutional investor and corporate governance advisory communities. Jordan Figueroa, Aaron Haefner, David Mao, Matthew Stadnicki, and Zoe Piel provided invaluable research assistance. Finally, we gratefully acknowledge financial support from Harvard Law School and the Boston University School of Law.

Abstract

Index funds own an increasingly large proportion of American public companies, currently more than one fifth and steadily growing. The stewardship decisions of index fund managers—how they monitor, vote, and engage with their portfolio companies can be expected to have a profound impact on the governance and performance of public companies and the economy. Understanding index fund stewardship, and how policy making can improve it, is critical for corporate law scholarship. This Article contributes to such understanding by providing a comprehensive theoretical, empirical, and policy analysis of index fund stewardship.

We begin by putting forward an agency-costs theory of index fund incentives. Stewardship decisions by index funds depend not just on the interests of index fund investors but also the incentives of index fund managers. Our agency-costs analysis shows that index funds have strong incentives to (i) under-invest in stewardship, and (ii) defer excessively to the preferences and positions of corporate managers.

We then provide the first comprehensive and detailed evidence of the full range of stewardship activities that index funds do and do not undertake. This body of evidence, we show, is inconsistent with a no-agency-costs view but can be explained by our agency-cost analysis.

We next put forward a set of policy reforms that should be considered in order to encourage index funds to invest in stewardship, to reduce their incentives to be deferential to corporate managers, and to address the concentration of power in the hands of the largest index fund managers. Finally, we discuss how our analysis should reorient important ongoing debates regarding common ownership and hedge fund activism.

The policy measures we put forward, and the beneficial role of hedge fund activism, can partly but not fully address the incentive problems that we analyze and document. These problems are expected to remain a significant aspect of the corporate governance landscape, and should be the subject of close attention by policymakers, market participants, and scholars.

JEL Classification: G23; G34; K22.

Keywords: Index funds, passive investing, institutional investors, corporate governance, stewardship, engagement, monitoring, agency problems, shareholder activism, hedge fund activism.

INTRODUCTION	1
I. THE PROMISE OF INDEX FUND STEWARDSHIP	8
A. The Potential Advantages of Index Fund Stewardship	8
B. The No-Agency-Costs Premise	10
II. AN AGENCY-COSTS THEORY OF INDEX FUND INCENTIVES	11
A. Index Funds and their Managers	11
B. Stewardship	
1. The Scope of Stewardship Activities	
2. Value-Enhancing Stewardship	14
C. Incentives to Under-invest in Stewardship	17
1. The Tiny Fraction of Value Increases Captured	17
2. The Limited Effects of Competition for Funds	19
D. Incentives to be Excessively Deferential	21
1. The Effects of Private Benefits from Deference	21
2. Business Ties with Corporate Managers	23
3. Avoiding Section 13(d) Filer Status	25
4. Fears of Backlash	27
E. Limits on the Force of Distorting Incentives	29
1. Fiduciary Norms	29
2. Stewardship Quality Image	30
III. EVIDENCE	31
A. Investments in Stewardship	
1. Current Levels of Stewardship Investments	
2. Assessing Current Levels	
B. Private Engagements	
C. Limited Attention to Performance	
D. Pro-Management Voting	
E. Avoiding Shareholder Proposals	
<i>F. Avoiding Involvement in Director Nominations and Schedule 13D Filings</i>	
G. Limited Involvement in Corporate Governance Reforms	
H. Avoiding Lead Plaintiff Positions	
IV. POLICY	
A. Encouraging Investment in Stewardship	
B. Business Relationships with Public Companies	
C. Bringing Transparency to Private Engagements	
D. Size Limits	
E. The Debate on Common Ownership	
<i>F. The Debate on Common Ownership</i> <i>F. The Debate on Hedge Fund Activism</i>	
G. Recognition and Reality	
CONCLUSION	68
BIBLIOGRAPHY	69

TABLE OF CONTENTS

LIST OF TABLES

Table 1. Big Three Positions of \$1 Billion or More	16
Table 2. Stewardship Personnel and Portfolio Companies	32
Table 3. Stewardship Investments Relative to Equity Investments and Estimated Fees	33
Table 4. Stewardship Per Portfolio Company	35
Table 5. Private Engagement	38
Table 6. Big Three "No" Votes in S&P 500 Say-on-Pay Votes	42
Table 7. Submission of Shareholder Proposals	44
Table 8. Actual and Proposed Director Nominations	46
Table 9. Big Three Positions of 5% or More	47
Table 10. Involvement in SEC Proposed Rules Regarding Corporate Governance	50
Table 11. Amicus Curiae Briefs, 2008–2017	52
Table 12. Securities Class Action Cases	54

INTRODUCTION

Index funds—investment funds that mechanically track the performance of an index¹ hold an increasingly large proportion of the equity of U.S. public companies. The sector is dominated by three index fund managers—BlackRock, State Street Global Advisors (SSGA), and Vanguard, often referred to as the "Big Three".² The Big Three manage over \$5 trillion of U.S. corporate equities, collectively vote about 20% of the shares in all S&P 500 companies, and each holds a position of 5% or more in a vast number of companies.³ The proportion of assets in index funds has risen dramatically over the past two decades, reaching more than 20% in 2017, and is expected to continue growing substantially over the next decade.⁴

The large and steadily growing share of corporate equities held by index funds, and especially the Big Three, has transformed ownership patterns in the U.S. public market. How index funds make stewardship decisions—how they monitor, vote in, and engage with portfolio companies—has a major impact on the governance and performance of public companies and the economy. Understanding these stewardship decisions, as well as the policies that can enhance them, is a key challenge for the field of corporate governance. This Article contributes to such an understanding by providing a systematic theoretical, empirical, and policy analysis of index fund stewardship.

Leaders of the Big Three have repeatedly stressed the importance of responsible stewardship, and their strong commitment to it. For example, Vanguard's then-CEO William McNabb stated that "We care deeply about governance", and that "Vanguard's vote and our voice on governance are the most important levers we have to protect our clients' investments."⁵ Similarly, BlackRock's CEO Larry Fink stated that "our responsibility to engage and vote is more important than ever" and that "the growth of indexing demands that we now take this function to a new level."⁶ The Chief Investment

¹ For a more detailed definition of index funds, see Section II.A, *infra*.

² For an account of the dominant role of the Big Three, see Jan Fichtner, Eelke M. Heemskerk & Javier Garcia-Bernardo, *Hidden Power of the Big Three? Passive Index Funds, Re-Concentration of Corporate Ownership, and New Financial Risk*, 19 BUS. & POL. 298 (2017).

³ See Lucian Bebchuk & Scott Hirst, *The Rise of the Big Three*, Working Paper (2018).

⁴ See *Id*.

⁵ William McNabb, *The ultimate long-term investors*, VANGUARD BLOG FOR ADVISORS (Jul. 6, 2017), https://vanguardadvisorsblog.com/2017/07/06/the-ultimate-long-term-investors/.

⁶ See, e.g. Letter from Larry Fink, Annual Letter to CEOs (Jan. 16, 2018).

Officer (CIO) of SSGA stated that "SSGA's asset stewardship program continues to be foundational to our mission."⁷

The Big Three leaders have also stated both their willingness to devote the necessary resources to stewardship, and their belief in the governance benefits that their investments produce. For example, Vanguard's McNabb has said, of governance, that "We're good at it. Vanguard's Investment Stewardship program is vibrant and growing."⁸ Similarly, BlackRock's Fink has stated that BlackRock "intends to double the size of [its] investment stewardship team over the next three years. The growth of [BlackRock's] team will help foster even more effective engagement."⁹

The stewardship promise of index funds arises from their large stakes and their longterm commitment to the companies in which they invest. Their large stakes provide these funds with significant potential influence, and imply that by improving the value of their portfolio companies they can help bring about significant gains for their portfolios. Furthermore, because index funds have no "exit" from their positions in portfolio companies as long as the companies remain in the index, they have a long-term perspective, and are not tempted by short-term gains at the expense of long-term value. This long-term perspective has been stressed by Big Three leaders,¹⁰ and applauded by commentators.¹¹ Vanguard's founder, the current elder statesman of index investing, has said that "index funds are the … best hope for corporate governance."¹²

Will index funds deliver on this promise? Do any significant impediments stand in the way? How do the legal rules and policies affect index fund stewardship? Given the dominant and growing role that index funds play in the capital markets, these questions are of first-order importance, and are the focus of our Article.

⁷ See, e.g. State St. Global Advisors, *Annual Stewardship Report 2016 Year End* 3 Mar. 7, 2017 [hereinafter, State St. Global Advisors, *Annual Stewardship Report*].

⁸ McNabb, *supra* note 5 (emphasis in original).

⁹ See, e.g., 2017 Letter from Larry Fink, *supra* note 6.

¹⁰ See notes 20 to 22, *infra*, and accompanying text.

¹¹ See, e.g., Martin Lipton, *Engagement—Succeeding in the New Paradigm for Corporate Governance*, HARV. L. SCH. F. ON CORP. GOVERNANCE & FIN. REG. (Jan. 23, 2018), https://corpgov.law.harvard.edu/2018/01/23/engagement-succeeding-in-the-new-paradigm-for-corporate-governance/ ("the BlackRock letter is a major step in rejecting activism and short-termism"). For a detailed account by one of us of the appeal that "long-termism" has had to corporate law scholars and practitioners, see Lucian A. Bebchuk, *The Myth That Insulating Boards Serves Long-Term Value*, 113 COLUM. L. REV. 1637 (2013)

¹² Christine Benz, *Bogle: Index Funds the Best Hope for Corporate Governance*, MORNINGSTAR.COM (Oct. 24, 2017), http://www.morningstar.com/videos/830770/bogle-index-funds-the-best-hope-for-corporate-gove.html.

In particular, we seek to make three contributions. First, we provide an analytical framework for understanding the incentives of index fund managers. Our analysis demonstrates that index funds managers have strong incentives to (i) under-invest in stewardship and (ii) defer excessively to the preferences and positions of corporate managers.

Our second contribution is to provide the first comprehensive evidence of the full range of stewardship choices made by index fund managers, especially the Big Three. We find that this evidence is, on the whole, consistent with the incentive problems that our analytical framework identifies. The evidence thus reinforces the concerns suggested by this framework.

Our third contribution is to explore the policy implications of the incentive problems of index fund managers that we identify and document. We put forward a number of policy measures to address these incentive problems. These measures should be considered to improve index fund stewardship—and thereby, the governance and performance of public companies. We also explain how these incentive problems shed light on important ongoing debates about common ownership and hedge funds.¹³

¹³ Most closely related to our project are three recent or in-progress works that focus on index fund stewardship but differ considerably from this Article in terms of scope, methodology, approach, and conclusions. Jill E. Fisch, Assaf Hamdani & Steven Davidoff Solomon, *Passive Investors*, SSRN Scholarly Paper ID 3192069 (Soc. Sci. Res. Network), Jun. 4, 2018 view the current stewardship activities of index funds favorably but, as we note in various places below, fail to recognize important considerations developed in our analysis. Dorothy Shapiro Lund, *The Case Against Passive Shareholder Voting*, 43 J. CORP. L. 101 (2018), shares our concerns about how little the Big Three spend on stewardship, but otherwise overlaps little with our incentive analysis, empirical investigation, or policy recommendations. John C. Coates, *The Future of Corporate Governance Part I: The Problem of Twelve*, SSRN Scholarly Paper ID 3247337 (Soc. Sci. Res. Network), Sept. 20, 2018 focuses on the increasing concentration of power in the financial sector and, unlike our work, appears to oppose greater investment in stewardship, and to favor greater deference in stewardship.

There is a large literature on the rise of institutional investors and their potential benefits and agency costs. For early and well-known works in this literature, see Bernard S. Black, *Shareholder Passivity Reexamined*, 89 MICH. L. REV. 520 (1990); Bernard S. Black, *Agents Watching Agents: The Promise of Institutional Investor Voice*, 39 UCLA L. REV. 811 (1991–1992) [hereinafter, Black, *Agents Watching Agents*]; John C. Coffee, Jr., *Liquidity Versus Control: The Institutional Investor As Corporate Monitor*, 91 COLUM. L. REV. 1277 (1991); and Edward B. Rock, *The Logic and (Uncertain) Significance of Institutional Shareholder Activism*, 79 GEO. L. J. 445 (1990–1991). For recent works in this literature, see, e.g., Leo E. Strine, *One Fundamental Corporate Governance Question We Face: Can Corporations Be Managed for the Long Term Unless Their Powerful Electorates Also Act and Think Long Term?*, 66 BUS. LAW. 1 (2010); Leo E. Strine, Jr., *Can We Do Better by Ordinary Investors; A Pragmatic Reaction to the Dueling Ideological*

Our analysis is organized as follows. Part I discusses the features of index funds that have given rise to high hopes for index fund stewardship. The views of Big Three leaders and supporters of index fund stewardship, we explain, are premised on a belief that index fund decisions can be largely understood as being focused on maximizing the long-term value of their investment portfolios, and that agency problems are not a key driver of those decisions.

By contrast to this "no-agency-costs" view, Part II puts forward an alternative "agencycosts" view. Stewardship decisions for an index fund are not made by the index fund's own beneficial investors, which we refer to as the "index fund investors," but rather by its investment adviser, which we label the "index fund manager." As a result, the incentives of index fund managers are critical. We identify two types of incentive problems that push the stewardship decisions of index fund managers away from those that would best serve the interests of index fund investors.

Incentives to Under-Invest in Stewardship. Stewardship that increases the value of portfolio companies will benefit index fund investors. However, index fund managers are remunerated with a very small percentage of their assets under management (AUM) and thus would capture a correspondingly small fraction of such increases in value. They therefore have much more limited incentives to invest in stewardship than their beneficial investors would prefer. Furthermore, if stewardship by an index fund manager increases the value of a portfolio company, rival index funds that track the same index (and investors in those funds) will receive the benefit of the increase in value without any expenditure of their own. As a result, an interest in improving financial performance relative to rival index fund managers does not provide any incentive to invest in stewardship. Furthermore, we explain that competition with actively managed funds cannot be expected to address the substantial incentives to under-invest in stewardship that we identify.

Incentives to be Excessively Deferential. When index fund managers face qualitative stewardship decisions, we show that they have incentives to be excessively deferential—relative to what would best serve the interests of their own beneficial investors—toward the preferences and positions of the managers of portfolio companies. This is because the choice between deference to managers and nondeference not only affects the value of the index fund's portfolio, but could also affect the private interests of the index fund manager.

We then identify and analyze three significant ways in which index fund managers could well benefit privately from such deference. First, we show that existing or potential business relationships between index fund managers and their portfolio companies give the

Mythologists of Corporate Law Essay, 114 COLUM. L. REV. 449 (2014); 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 (2013); Lucian A. Bebchuk, Alma Cohen & Scott Hirst, *The Agency Problems of Institutional Investors*, 31 J. ECON. PERSP. 89 (2017). All current work on index funds, including this Article, necessarily builds on this literature.

index fund managers incentives to adopt principles, policies, and practices that defer to corporate managers. Second, we explain that, in the many companies where the Big Three have positions of 5% or more of the company's stock, taking certain nondeferential actions would trigger obligations that would impose substantial additional costs on the index fund manager. Finally, and importantly, the growing power of the Big Three means that a nondeferential approach would likely encounter significant resistance from corporate managers, which would create a significant risk of regulatory backlash.

We focus on understanding the structural incentive problems that motivate index fund managers to under-invest in stewardship and defer to corporate managers, thereby impeding their ability to deliver on their governance promise. We stress that in some cases, fiduciary norms, or a desire to do the right thing, could lead well-meaning index fund managers to take actions that differ from those suggested by a pure incentive analysis. Furthermore, index fund managers also have incentives to be perceived as responsible stewards by their beneficial investors and by the public—and thus, to avoid actions that would make salient their under-investing in stewardship and deferring to corporate managers. These factors could well constrain the force of the problems that we investigate. However, these structural problems should be expected to have significant effects; the evidence we present in Part III demonstrates that this is, in fact, the case.

As with any other economic theory, the test for whether the no-agency-costs view or the agency-costs view are valid is the extent to which they are consistent with and can explain the extant evidence. Part III therefore puts forward evidence on the actual stewardship activities that the Big Three index funds do and do not undertake. We combine hand-collected data and data from various public sources to piece together a broad and detailed picture of index fund stewardship. In particular, we investigate eight dimensions of stewardship:

1. Actual Stewardship Investments. Our analysis provides estimates of the stewardship personnel, both in terms of workdays and dollar cost, devoted to particular companies. Whereas supporters of index fund stewardship have focused on recent increases in stewardship staff of the Big Three,¹⁴ our analysis examines personnel resources in the context of the Big Three's assets under management and their number of portfolio companies. We show that the Big Three devote an economically negligible fraction of their fee income to stewardship, and that their stewardship staffing enables only limited and cursory stewardship for the vast majority of their portfolio companies.

2. *Behind-the-Scenes Engagements*. Supporters of index fund stewardship view private engagements by the Big Three as explaining why they refrain from using certain other stewardship tools available to shareholders.¹⁵ However, we show that the Big Three engage with a very small proportion of their portfolio companies, and only a small proportion of

¹⁴ See notes 76 to 78, *infra*, and accompanying text.

¹⁵ See notes 84 to 88, *infra*, and accompanying text.

these engagements involve more than a single conversation. Furthermore, refraining from using other stewardship tools also has an adverse effect on the small minority of cases in which private engagements do occur. The Big Three's private engagement thus cannot constitute an adequate substitute for the use of other stewardship tools.

3. Limited Attention to Performance. Our analysis of the voting guidelines and stewardship reports of the Big Three indicates that their stewardship focuses on governance structures and processes and pays limited attention to financial underperformance. While portfolio company compliance with governance best practices serves the interests of index funds investors, those investors would also benefit substantially from stewardship aimed at identifying, addressing, and remedying financial underperformance.

4. Pro-Management Voting. We examine data on votes cast by the Big Three on matters of central importance to managers, such as executive compensation and proxy contests with activist hedge funds. We show that the Big Three's votes on these matters reveals considerable deference to corporate managers. For example, the Big Three very rarely oppose corporate managers in say-on-pay votes, and are less likely than other investors to oppose managers in proxy fights against activists.

5. Avoiding Shareholder Proposals. Shareholder proposals have proven to be an effective stewardship tool for bringing about governance changes at broad groups of public companies. Many of the Big Three's portfolio companies persistently fail to adopt the best governance practices that the Big Three support. Given these failures, and the Big Three's focus on governance processes, it would be natural for the Big Three to submit shareholder proposals to such companies aimed at addressing such failures. However, our examination of shareholder proposals over the last decade indicates that the Big Three have completely refrained from submitting such proposals.

6. Avoiding Engagement Regarding Companies' Nomination of Directors. Index fund investors could well benefit if index fund managers communicated with the boards of underperforming companies about replacing or adding certain directors. However, our examination of director nominations and Schedule 13D filings over the past decade indicates that the Big Three have refrained from such engagements.

7. Limited Involvement in Governance Reforms. Index fund investors would benefit from involvement by index fund managers in corporate governance reforms—such as supporting desirable changes and opposing undesirable changes—that could materially affect the value of many portfolio companies. We therefore review all of the comments submitted on proposed rulemaking regarding corporate governance issues by the Securities and Exchange Commission (SEC), and the filing of amicus briefs in precedential litigation. We find that the Big Three have contributed very few such comments and no amicus briefs over the past decade, and were much less involved in such reforms than asset owners with much smaller portfolios.

8. Lead Plaintiff Positions. Legal rules encourage institutional investors with "skin in the game" to take on lead plaintiff positions in securities class actions; this serves the

interests of their investors by monitoring class counsel, settlement agreements and recoveries, and the terms of governance reforms incorporated in such settlements. We therefore examine the lead plaintiffs selected in the large set of significant class actions over the past decade. Although the Big Three's investors often have significant skin in the game, we find that the Big Three refrained from taking on lead plaintiff positions in any of these cases.

Taken together, the body of evidence that we document is difficult to reconcile with a "no-agency-cost" view under which stewardship choices are made to maximize the value of managed portfolios. Rather, the evidence is, on the whole, consistent with, and can be explained by, the agency-costs view and its incentive analysis described in Part II.

In the course of examining the evidence on index fund stewardship, we consider the argument that some types of stewardship activities are outside the "business model" of the Big Three. This argument raises the question of *why* this is the case. The "business models" of the Big Three and the stewardship activities they choose to undertake are not exogenous; rather, they are a product of choices made by index fund managers, and thus they follow from the incentives we analyze.

In Part IV we consider the policy implications of our theory and evidence. We begin by examining several approaches to address the incentives of index fund managers to under-invest in stewardship and defer excessively to corporate managers. In particular, we consider measures to encourage stewardship investments, as well as to address the distortions arising from business ties between index fund managers and public companies. We also examine measures to bring transparency to the private engagements conducted by index fund managers and their portfolio companies—transparency that, we argue, is necessary to provide material information to investors, and can provide beneficial incentives to those engaged in such engagements.

We further discuss placing limits on the fraction of equity of any public company that could be managed by a single index fund manager. The expectation that the proportion of corporate equities held by index funds will keep rising makes it especially important to consider the desirability of continuing the Big Three's dominance. For instance, we explain that if the index fund sector continues to grow and index fund managers control 45% of corporate equity, having a "Giant Three" each holding 15% would be inferior to having a "Big-ish Nine" each holding 5%.

Part IV also discusses the significant implications of our analysis for two important ongoing debates. One such debate concerns influential claims that the rise in common ownership patterns—whereby institutional investors hold shares in many companies in the same sector—can be expected to have anticompetitive effects and should be a focus of antitrust regulators. Our analysis indicates that these claims are not warranted. The second debate concerns activist hedge funds. Our analysis undermines claims by opponents of hedge fund activism that index fund stewardship is superior to—and should replace—hedge fund activism. We show that, to the contrary, the incentive problems of index fund

managers that we identify and analyze make the role of activist hedge funds especially important.

Although the policy measures we put forward would improve matters, they should not be expected to eliminate the incentive problems that we identify. Similarly, although activist hedge funds make up for some of the shortcomings of index fund stewardship, we explain that they do not and cannot fully address these shortcomings. The problems that we identify and document can be expected to remain an important element of the corporate governance landscape. Obtaining a clear understanding of these problems—to which this this Article seeks to contribute—is critical for policy makers and market participants.

I. THE PROMISE OF INDEX FUND STEWARDSHIP

This Part discusses the promise of index funds for governance: the potential benefits for corporate governance that come from having such large and permanent investors in public companies, and the aspirations of index funds to bring about such benefits. This Part also discusses how those expressing optimism about index fund stewardship assume that index fund managers focus on maximizing the long-term value of managed portfolios and that agency problems are not first-order drivers of decisions.

A. The Potential Advantages of Index Fund Stewardship

The large and growing ownership of corporate equity by index funds—and the Big Three in particular—provides those funds with significant power and influence over public companies. In particular, we discuss several characteristics of index funds that the leaders of the Big Three and other supporters of index fund stewardship have highlighted as important: (i) the large and growing stakes that the Big Three own in publicly traded companies; (ii) the inability of index funds to exit poorly-performing companies, rather than trying to fix their governance problems; and (iii) the long-term focus of index funds.

Large and Growing Stakes. The substantial and growing stakes held by each of the Big Three give them significant influence over the outcomes of corporate votes. This influence leads, in turn, to their substantial influence over the decisions of corporate managers, even before matters come to a vote.

A priori, we would expect the large stakes that each of the Big Three hold in their portfolio companies to motivate them to improve the value of those companies. In the standard corporate free-rider problem, the benefits of improving corporate value are shared with other investors.¹⁶ A major index fund is able to capture a larger fraction of these benefits for its own beneficial investors than an institutional investor with a smaller

¹⁶ For a well-known discussion of the free-rider problem, see ROBERT C. CLARK, CORPORATE LAW 389–400 (1986).

portfolio can. For instance, compare a major index fund manager that holds (across all of the funds that it manages) a 5% stake in an S&P 500 company,¹⁷ with a smaller investment manager that holds 0.5% of the same company. If the larger index fund manager generates value improvements at such a company, the share of those improvements that is captured by the larger index fund manager's beneficial investors is ten times larger than the share captured by the beneficial investors of the smaller investment manager.

No Exit. In Albert Hirschman's classic framework, "exit" is one way that those that are dissatisfied with the quality of products they receive can respond to that dissatisfaction; other ways are "loyalty" and "voice".¹⁸ Exit is also one option available to investors that are dissatisfied with the quality of the governance in their portfolio companies: they can make the "Wall Street walk" and simply sell their shares.¹⁹ However, because index funds replicate their benchmark index, they are unable to exit from particular portfolio companies (unless the company is also dropped from the benchmark index).

Indeed, index fund managers have stated that their inability to exit from portfolio companies gives them greater incentives to use their "voice" to address governance problems within those companies. For instance, BlackRock's CEO Larry Fink has stated that "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."²⁰ SSGA's CIO has referred to SSGA as representing "near-permanent capital"²¹, and Vanguard's then-CEO, William McNabb, has similarly described Vanguard's index funds as being "permanent shareholders."²²

Long-term Perspective. A third characteristic of index funds that is potentially attractive to supporters of their stewardship is their long investment horizon.²³ There is significant debate in the literature about the extent to which the presence of investors with

¹⁷ See Table 9, *infra*.

¹⁸ Albert O. Hirschman, Exit, Voice, and Loyalty; Responses to Decline in Firms, Organizations, and States 21 (1970).

¹⁹ For an excellent review of the financial economics literature on exit, see Alex Edmans, *Blockholders and Corporate Governance*, 6 ANN. REV. OF FIN. ECON. 23, 28–32 (2014).

²⁰ 2017 Letter from Larry Fink, *supra* note 6.

²¹ State St. Global Advisors, Annual Stewardship Report, *supra* note 7, at 3.

²² William McNabb, *Getting to Know You: The Case for Significant Shareholder Engagement*, HARV. L. SCH. F. ON CORP. GOVERNANCE & FIN. REG. (Jun. 24, 2015), https://corpgov.law.harvard.edu/2015/06/24/getting-to-know-you-the-case-for-significant-

shareholder-engagement/. Vanguard's Annual Stewardship Report also states that Vanguard's index funds are "structurally permanent holders of companies". Vanguard, *Investment Stewardship 2017 Annual Report* 3 Aug. 31, 2017 [hereinafter, Vanguard, *Annual Stewardship Report*].

²³ See, e.g., Fisch, Hamdani & Davidoff Solomon, *supra* note 13, at 36.

short-term horizons has adverse effects on corporate governance.²⁴ The long-term investment horizons of index funds obviates any such concerns and therefore makes stewardship by index fund managers especially attractive to commentators that are concerned about short-termism.²⁵

Leaders of the Big Three have also stressed their funds' long-term investment horizons and how those horizons connect to their stewardship activities. They have stated, for example, that "index investors are the ultimate long-term investors" (BlackRock);²⁶ that they "actively engage with [their] portfolio companies to promote the long-term value of [their clients'] investments" (SSGA);²⁷ and that their "emphasis on investment outcomes over the long term is unwavering" (Vanguard).²⁸

B. The No-Agency-Costs Premise

By referring to index funds as "long-term investors," supporters of index fund stewardship and index fund leaders implicitly assume that the managers of an index fund (or a family of index funds) largely act to maximize the long-term value of the portfolios they manage. That is, index fund managers are assumed to act similarly to how a sole owner that owned the same portfolio for the long term would act. Those that hold this view attach limited significance to potential incentive problems within index funds. For this reason, we refer to this view as "the no-agency-costs-view."

How much significance should we then attach to agency problems? Can the larger stakes of index funds, their lack of exit options, and their long-term perspective combine to enable them to deliver on the promise of governance that is discussed above? As we explain below, an index fund should not be viewed as equivalent to a long-term investors

²⁴ For an exchange on this subject between one of us and Chief Justice Leo Strine, Jr., see Bebchuk, *supra* note 11 and Strine, *supra* note 13.

²⁵ For instance, Martin Lipton has stressed that "BlackRock, State Street and Vanguard have continued to express support for sustainable long-term investment". Martin Lipton, *Activism: The State of Play*, HARV. L. SCH. F. ON CORP. GOVERNANCE & FIN. REG. (Sept. 23, 2017), https://corpgov.law.harvard.edu/2017/09/23/activism-the-state-of-play/. For a detailed review by one of us of the many academics, practitioners, and public officials that express short-termism concerns, see Bebchuk, *supra* note 11.

²⁶ See, e.g., 2017 Letter from Larry Fink, *supra* note 6.

²⁷ State St. Global Advisors, Annual Stewardship Report, *supra* note 7, at 3.

²⁸ Vanguard, Annual Stewardship Report, *supra* note 22, at 3. Vanguard has also stated that "[a]s major and practically permanent holders of most companies ... we have a vested interest in ensuring that governance ... practices support the creation of long-term value for investors". Glenn Booraem, *Passive Investors, Not Passive Owners*, HARV. L. SCH. F. ON CORP. GOVERNANCE & FIN. REG. (May 10, 2013), https://corpgov.law.harvard.edu/2013/05/10/passive-investors-not-passive-owners/.

with no meaningful internal incentive problems. Index funds are likely to have significant agency problems, which we now consider.

II. AN AGENCY-COSTS THEORY OF INDEX FUND INCENTIVES

Our discussion of the governance promise of index funds has stressed that the value of index fund portfolios, and the wealth of the beneficial investors in these funds, would be enhanced by these funds undertaking certain stewardship activities. As Section A below explains, however, stewardship decisions are made by the investment advisers managing the index funds, and it is therefore critical to assess the incentives of these index fund managers.

The remainder of this Part develops an analytical framework for understanding the incentives of index fund managers. Section B discusses the stewardship decisions that would best serve the interests of index fund investors and would likely be made if the index fund portfolio had a sole owner. Sections C and D analyze how the fact that investment managers manage other people's money affects the incentives of index fund managers. Section C examines the index fund managers' incentives to under-invest in stewardship compared to the value-maximizing level. Section D focuses on the qualitative stewardship decision of how deferential to be to corporate managers, and shows that index fund managers have incentives to be excessively deferential. Finally, Section E discusses some constraints that limit the force of the distorted incentives that we identify.

A. Index Funds and their Managers

Index funds are a special type of investment fund. They pool the assets of many individuals and entities and invest those assets in diversified portfolios of securities. Actively managed investment funds buy and sell securities of companies in accordance with their views about whether those companies are under- or overvalued.²⁹ By contrast, index funds invest in portfolios that attempt to track the performance of specified benchmark indexes, such as the S&P 500, or the Russell 3000.³⁰ The term *index fund* encompasses both mutual funds and exchange traded funds (ETFs), or any other investment vehicle that mechanically tracks an index.³¹ A well-known examples of an index mutual

²⁹ See, e.g., Fid. Investments, Active and Passive Funds: The Power of Both, https://www.fidelity.com/viewpoints/investing-ideas/power-of-active-and-performance.

³⁰ See, e.g., Vanguard 500 Index Fund, Prospectus (Form N-1A) 6 (2017).

³¹ For a discussion of the rules governing mutual funds and ETFs, see LOIS YUROW, TIMOTHY W. LEVIN, W. JOHN MCGUIRE & JAMES M. STOREY, MUTUAL FUNDS REGULATION AND COMPLIANCE HANDBOOK, § 4:1 (2017); William A. Birdthistle, *The Fortunes and Foibles of*

fund is the Vanguard S&P 500 Mutual Fund. Popular index ETFs are SSGA's SPDR S&P 500 ETF, and BlackRock's iShares Core S&P 500 ETF. Although there are index funds that track indexes of debt securities, we focus on those that invest in equity securities.

The index fund sector is heavily concentrated and is dominated by the Big Three.³² This concentration is to be expected: because index funds currently track indexes, they provide a commodity product, and there are no substantial opportunities for new entrants to improve on the offerings of incumbents by using strategies that are difficult to imitate. The dominant incumbents have significant advantages because of the economies of scale of operating index funds, the funds' branding, and—in the case of ETFs—the liquidity benefits for funds with large asset bases.

Index funds are generally structured as corporations or statutory trusts, with their own directors or trustees. However, these directors or trustees have a very limited set of responsibilities, and the key decisions in operating index funds are made by the fund's investment advisor.³³ We use the term *index fund managers* to refer to these investment advisors of index funds that make key decisions, including BlackRock, Vanguard and SSGA.³⁴ It is the incentives and decisions of index fund managers that are our focus in this Article.³⁵

The economies of scale in investment management mean that most investment managers now manage dozens or hundreds of investment funds, often referred to collectively as "fund complexes" or "fund families." While some investment fund families

Exchange-Traded Funds: A Positive Market Response to the Problems of Mutual Funds, 33 DEL. J. CORP. L. 69, 72 (2008).

³² See, e.g. BlackRock, *BlackRock Global ETP Landscape* Dec. 2016 6 (reporting that, as of December 2016, BlackRock had 36.9% of the exchange-traded products market, Vanguard had 18.5%, and SSGA had 15.4%).

³³ For a discussion of the discussion of governance of index funds, see Eric D. Roiter, *Disentangling Mutual Fund Governance from Corporate Governance*, 6 HARV. BUS. L. REV. 1, 18 (2016).

³⁴ BlackRock is a public company, and SSGA is an operating unit of a public company, so it is reasonable to assume that they both seek to maximize their profits and, in turn, the value of their index fund management business. In contrast, Vanguard is owned by its investment funds. *See* Vanguard, Why Ownership Matters at Vanguard, https://about.vanguard.com/what-sets-vanguardapart/why-ownership-matters/. Vanguard appears to operate by constraining its fees to the point that leaves its business with no profit. This raises the interesting question of which objectives the business leaders of Vanguard maximize. It is reasonable to assume that, subject to their chosen constraint, they try to be successful by expanding the scale of their business. Our analysis in this part is consistent with this assumption.

³⁵ For early writing stressing the need to consider the incentives of institutional investors, see Rock, *supra* note 13, at 453; Jill E. Fisch, *Relationship Investing: Will It Happen--Will It Work*, 55 OHIO ST. L. J. 1009, 1039 (1994); Black, *supra* note 13, at 595–96.

consist predominantly of actively managed funds, each of the Big Three fund families consists predominantly of index funds.³⁶

For the Big Three, as with many other investment managers, the key stewardship decisions are centralized in a dedicated stewardship department of the index fund manager.³⁷ An important component of the stewardship decision making of the index fund manager relates to the level of resources it devotes to this department, as well as to the qualitative decisions that the department makes.

B. Stewardship

1. The Scope of Stewardship Activities

In the literature on institutional investors, *stewardship* refers to the actions that investors can take in order to enhance investments in companies that they manage on behalf of their own beneficial investors.³⁸ Most advanced economies now have stewardship principles or codes that seek to provide guidance to institutional investors.³⁹ We focus here on stewardship that aims to enhance the value of the company.⁴⁰ Stewardship by

³⁶ As of June 2017, the proportion of assets invested in index funds was 79% for SSGA, 73% for Vanguard, and 66% for BlackRock. In contrast, only 14% of Fidelity's assets under management were invested in index funds. Hortense Bioy, Alex Bryan, Jackie Choy, Jose Garciz-Zarate & Ben Johnson, *Passive Fund Providers Take an Active Approach to Investment Stewardship* 4 Dec. 5, 2017.

³⁷ See, e.g., State St. Global Advisors, Annual Stewardship Report, *supra* note 7, at 7 ("All voting and engagement activities are centralized within the Asset Stewardship Team."). See also Fichtner, Heemskerk & Garcia-Bernardo, *supra* note 2, at 317 (documenting highly consistent voting within fund families by each of the Big Three as evidence of the impact of centralized stewardship departments).

³⁸ BlackRock defines investment stewardship as "engagement with public companies to promote corporate governance practices that are consistent with encouraging long-term value creation for shareholders in the company." *The Investment Stewardship Ecosystem* (BlackRock Viewpoint), Jul. 2018 6.T

³⁹ For recent efforts in the United Kingdom and the United States, see Fin. Reporting Council, UK Stewardship Code (2012).; Institutional Stewardship Grp., About the Investor Stewardship Group and the Framework for U.S. Stewardship and Governance (2018), https://isgframework.org/.

⁴⁰ There are some institutional investors—for instance socially responsible funds—that might have goals other than enhancing value. We do not discuss this type of stewardship in this Article. For a discussion of such stewardship by one of us, see Scott Hirst, Social Responsibility Resolutions, 43 J. CORP. L. 217, 222 (2017–2018).

We also note that some investors in indexed products seek to screen out some companies from the portfolio in which they invest, and index fund managers therefore also manage portfolios that follow such exclusions. Investor demands for exclusion of certain investments, and the impact they institutional investors, including by the index funds that are the focus of this Article, includes three components: monitoring, voting, and engagement.

Monitoring. Monitoring involves evaluating the operations, performance, practices, and compensation and governance decisions of portfolio companies. It provides the informational basis for the voting and engagement decisions of index funds.

Voting. Voting at shareholder meetings is a key function of index fund managers and other shareholders. Among the most important voting rights of shareholders is the right to vote on the election of directors to manage the corporation. In addition, shareholders have the right to vote on charter and bylaw amendments; fundamental changes (such as a merger, acquisition, or dissolution of the corporation); and advisory votes on executive compensation and shareholder proposals.⁴¹ As index funds (along with other investment funds) are required to vote on these matters,⁴² index fund managers decide how their funds vote, and these decisions have significant influence on the actions of public companies.

Engagement. Index fund managers can interact with their portfolio companies in ways other than through casting votes—for example, by submitting shareholder proposals, nominating directors, and undertaking proxy contests. Shareholders can also have public or private communications with managers and directors of their portfolio companies. Shareholder engagement may be pro-active and initiated by the investor, or it may be reactive, as when an investor responds to contact from a portfolio company, or to communications from other investors.⁴³

2. Value-Enhancing Stewardship

In order to assess any of the above stewardship decisions of index fund managers, it is first necessary to define a benchmark for desirable stewardship decisions. In the case of index fund managers, the benchmark is the stewardship decisions made by the investment

might have on corporate behavior, are outside the scope of this Article, as we focus on the stewardship decisions of index fund managers with respect to those companies that are included in managed portfolios.

⁴¹ For the classic treatment of shareholder voting, see Frank H. Easterbrook & Daniel R. Fischel, *Voting in Corporate Law*, 26 J. L. & ECON. 395 (1983).

⁴² See Interpretive Bulletin relating to the exercise of shareholder rights and written statements of investment policy, including proxy voting policies or guidelines, 29 C.F.R. § 2509.2016-01 (Dec. 29, 2016).

⁴³ Note that index fund do not liquidate their investments in particular portfolio companies as long as those companies remain in the index, so index funds thus cannot influence corporate behavior through exit decisions. As Alex Edmans has highlighted in his body of work, exit decisions by other investors can affect corporate behavior. For surveys of his and others' work on exit decisions and governance, see Edmans, *supra* note 29; Alex Edmans & Clifford G. Holderness, *Blockholders: A Survey of Theory and Evidence, in* HANDBOOK OF THE ECON. OF CORP. GOVERNANCE (Benjamin E. Hermalin & Michael S. Weisbach eds., 2017). managers that would be best for investors in the index funds. These are also the stewardship decisions that would be made if there were no agency separation between the index fund manager and the holders of the investments in the index fund—that is, in a "sole-owner" benchmark, in which the index fund's portfolio had a sole owner that managed the portfolio and was expected to make all of the stewardship choices that would enhance its value.

It is useful here to consider two types of decisions that index fund managers must make regarding stewardship. One type of decision is quantitative: determining the level of investment that the index fund manager will make on stewardship activities. The other type of decision is qualitative: determining the level of deference that the index fund manager will give to the corporate managers that lead particular portfolio companies. Below we discuss the value-enhancing stewardship choices with respect to each of these decisions.

Choice of Stewardship Investment Levels. Investment in a certain stewardship activity will be desirable only if it produces, on an expected value basis, an increase in the value of the portfolio companies that are the subject of the activity. Clearly, stewardship activity should not be undertaken if it is not expected to produce such a gain. However, such an expectation is not sufficient for certain stewardship investments to be worthwhile; the gain must also exceed the cost of the activity.

To formalize our analysis, we refer to the investment in the stewardship activity as the *stewardship investment*, and to the value increase created by that investment in stewardship on an expected value basis as the *expected gain from stewardship investment*. We denote the cost of stewardship investment as C_{SI} and the expected gain from stewardship investment by ΔV_{SI} . From the perspective of the beneficial investors in the index fund, a Stewardship Investment to bring about an expected gain from stewardship is desirable if and only if $C_{SI} < \Delta V_{SI}$ —that is, if the cost of the stewardship investment is less than the expected gain from it.

This condition could well call for substantial investments in stewardship activities. For instance, consider a situation where an index fund manager holds a stake of \$1 billion in a portfolio company. If certain stewardship activities are expected to increase the value of the company by 0.1%, it would be desirable from the perspective of the index fund's beneficial investors, to invest up to \$1 million in such stewardship. Even if the expected gain were as little as 0.01%, it would be desirable to invest up to \$100,000 in stewardship.

We note that each of the Big Three has positions of \$1 billion or more in numerous companies, with an average value of \$4 billion for such positions. As Table 1 reports, BlackRock, Vanguard, and SSGA held positions of \$1 billion or more in 353, 427, and 242 S&P 500 companies, respectively, as of the end of 2017.⁴⁴ From the perspective of a beneficial investor in a Big Three index fund, substantial investments in stewardship are therefore likely to be value enhancing in many cases.

⁴⁴ Table 1 is based on ownership data from FactSet Ownership.

Index Fund Manager	Number	Mean Value (\$m)	Median Value (\$m)
BlackRock	353	\$4,211	\$2,267
Vanguard	427	\$4,191	\$2,181
SSGA	242	\$3,846	\$2,104

Table 1. Big Three Positions of \$1 Billion or More

Choice of Level of Deference. The other important dimension, which is qualitative in nature, is the level of deference that index fund managers give to the views and preferences of the managers of their portfolio companies. Examples of such "deference/nondeference" choices are whether to vote for or against a company's say-on-pay proposal; whether to vote for or against a company's director slate in a proxy fight against an activist; whether to support or withhold support from the directors on the company slate in uncontested elections; whether or not to vote against shareholder proposals to a company. An index fund manager's deference/nondeference decisions may sometimes involve the choice of general principles or guidelines that apply to a wide range of situations, such as the choice of proxy voting guidelines.

In some situations, such as making a deference/nondeference decision when voting, the resource cost of casting the vote would be the same regardless of the position taken: the deference/nondeference decision is a purely qualitative choice and involves no resource dimension. However, in other situations, such as determining whether to submit a shareholder proposal, the nondeference choice of submitting the shareholder proposal would involve resources not required if the choice were for deference, and would therefore require a greater investment of resources in stewardship. Although there is thus some interaction between the choice of investment level and the choice of deference/nondeference, we discuss the two choices separately for the sake of conceptual clarity. Similarly, for simplicity of exposition, we discuss deference/nondeference as a binary decision, but the insights from our analysis are equally applicable to situations where the level of deference involves a range of choices.

What is the deference/nondeference decision that would be value-maximizing for index fund investors? In many cases, the positions preferred by corporate managers would be viewed independently as value maximizing by the index fund manager. In some cases, the index fund manager may be uncertain, but may rationally conclude that deferring to the views of corporate managers would likely be value enhancing because of the corporate managers' superior information. However, there may be other cases where there would be reasons to believe that deferring to corporate managers would not be value enhancing. Formally, nondeference will be value enhancing if and only if its expected effect on the value of the index fund's position in the portfolio company would be positive. Denoting the expected gain from nondeference as ΔV_{ND} , nondeference would be value enhancing if and only if $\Delta V_{ND} > 0$.

C. Incentives to Under-invest in Stewardship

We first consider index fund managers' incentives with respect to the first dimension of stewardship choices we identified: the level of investment in stewardship activities. Section 1 discusses this choice assuming, for simplicity, that both the fee levels that index fund managers charge and the size of their investment portfolio are fixed. Section 2 relaxes this assumption and considers the extent to which stewardship provides index fund managers with competitive benefits over rival investment managers, and how that may affect index fund manager incentives.

1. The Tiny Fraction of Value Increases Captured

Let us first assume that index fund managers take their assets under management and fee structures as given. This simplifying assumption permits a focus on a key driver of the gap between their interests and those of the beneficial investors in their funds: whereas the index fund managers bear all the costs of investments in stewardship, the increased revenue they receive—through increased fee revenue—will be only a tiny fraction of the expected value increase from governance improvements.

Under existing arrangements, index fund managers charge their investors fees that are usually specified as a fixed percentage of assets under management.⁴⁵ With respect to the cost of investments in stewardship, index fund managers generally cover those expenses, from the fee income that the investment managers receive from the investment funds.

Given our assumption that stewardship does not affect the flow of funds, the private benefits to index fund managers from stewardship come only from an expectation of increased fees that result from an increase in the value of the index funds' given assets. Because these fees are calculated as a fraction of assets under management, any lasting increase in value can be expected to produce an increase in the present discounted value of the fees to the index fund manager. We refer to the fraction of portfolio value that the index fund manager charges as a fee as the *fractional fee*, and denote it by θ . In this case, if creating an expected gain from stewardship investment of ΔV_{SI} would require stewardship activities involving an investment with a cost of C_{SI} , the index fund manager would have incentives to engage in these activities if and only if $C_{SI} < \theta \times \Delta V_{SI}$ —that is, if the cost of

⁴⁵ Amounts that investment managers charge to investors also include certain expenses, such as legal expenses and expenses related to custody of portfolio assets. These are all included in the annual fund operating expenses that investment funds are required to disclose (see 17 C.F.R. § 274.11A, Item 3), which are calculated as a percentage of investment, and commonly referred to as the "expense ratio." When we refer to fees charged to investors we include all amounts included in the expense ratio.

the stewardship investment is not only less than the expected gain from it, but is also less than that gain multiplied by the (very small) fractional fee.

Recall from the discussion in the preceding Section B that the stewardship investment would be value enhancing if and only if its cost, C_{SI} , is less than ΔV_{SI} . Thus, the range in which desirable stewardship investments would not be in the interests of the index fund manager would be defined as

$$\theta \times \Delta V_{SI} < C_{SI} < \Delta V_{SI}.$$

What is the practical significance of this problem? In assessing this critical question, it is important to recognize the very small quantum of the fees that index funds charge. The average expense ratios for the Big Three—the combined fees and expenses that they receive for their services as a percentage of assets under management—are 0.25%, 0.10%, and 0.16% for BlackRock, Vanguard, and SSGA, respectively. Because these figures also include expenses, the fractional fee is likely even lower than these figures suggest.⁴⁶ Their very low fee percentages are an attractive feature of index funds that has driven their phenomenal growth. However, as the analysis above has demonstrated, the tiny fraction of expected gains captured by index fund managers gives them a correspondingly tiny incentive to invest in stewardship.

Recall the example of an index fund that has a \$1 billion position in a particular company where certain stewardship investments would be able to generate an expected gain of a modest 0.1%. Even though the level of the expected gain is small, given the size of its position, it would be value enhancing for the index fund to invest up to \$1 million on stewardship to achieve the gain. It would therefore be desirable for the index fund to have a team of professionals that would dedicate a significant proportion of its time to stewardship at the particular company.

However, assuming that the fractional fee is 0.5%, the index fund manager's interests would not be served by any stewardship investments exceeding \$5,000. More generally, the highest level at which stewardship investment would serve the private interest of the index fund manager would be only 0.5% of the level at which stewardship investment would be value maximizing for index fund investors. Thus, the index fund manager would *not* have an incentive to employ a team of professionals to spend significant time on stewardship for that company, even though such stewardship would be value maximizing. The \$5,000 investment in stewardship that would serve the index fund manager's interests could fund only a small fraction of a single person's annual time.

Consider now a situation where the expected gain is a mere 0.01%. In this case, it would be value maximizing to invest up to \$100,000 in stewardship to bring about this gain.

⁴⁶ See Patricia Oey, U.S. Fund Fee Study 10 Apr. 26, 2018 (based on Morningstar data as of December 31, 2017).

However, if the fractional fee is again 0.5%, the index fund manager would have no incentive to invest more than \$500 in stewardship.

2. The Limited Effects of Competition for Funds

So far our analysis has assumed that index fund managers take their assets under management and fees as given. We now relax this assumption and examine how the competition to attract funds affects index fund managers' incentives to invest in stewardship. We first discuss competition with other index funds, and then competition with actively managed funds.

Competition with Other Index Funds. An index fund manager's most obvious source of competition is other index fund managers.⁴⁷ An investor in a given index fund could choose to invest instead in an index fund run by another manager that tracks the same or similar index. Index fund managers thus have an incentive to make their funds as attractive as possible, and to perform as well as possible, relative to other index funds.

Competition with other index funds gives index fund managers precisely zero additional incentive to invest in stewardship for any of their portfolio companies. If the index fund manager invests in stewardship that increases the value of a particular portfolio company, the increase will be shared with all other investors in the company, including rival index funds that replicate the same index. These rival index funds will capture the same benefit even though they have not themselves made any additional investment in stewardship. An index fund manager's investment in stewardship will therefore not result in any increase in the fund's performance compared to that of its rivals, and will not allow the fund to attract investments from its rivals or to increase its fee levels.

The index fund manager cannot even increase its fees or expenses to cover the cost of the investment in stewardship: since its gross returns are the same as those of rival index fund managers, if it increases its fees or expenses, its net returns will be *below* those of its rivals. Stewardship will therefore not provide any competitive benefits to index fund managers and will not give them any incentive to ameliorate their under-investment in stewardship from the level described in Section C.1.

Finally, while the above analysis has assumed implicitly that index fund investors care exclusively about the financial return from their investment, some index fund investors might well have a preference for investing with an index fund manager whose stewardship activities they view favorably, or at least not unfavorably, and expect index fund managers with which they invest to be good stewards. The more widely held are such preferences, the stronger the incentives that index fund managers will have to be perceived as good stewards. However, incentives to be *perceived* as good stewards are quite different from

⁴⁷ For studies stressing performance relative to peer fund managers, see Fisch, *supra* note 45, at 1020–21; and Keith C. Brown, W.V. Harlow & Laura T. Starks, *Of Tournaments and Temptations: An Analysis of Managerial Incentives in the Mutual Fund Industry*, 51 J. FIN. 85, 85 (2012).

incentives to make desirable stewardship decisions. Because investors with preferences for good stewardship may not recognize certain deviations from optimal stewardship decisions, accommodating their preferences would not discourage such sub-optimal stewardship. Although the interest of index fund managers in being perceived as good stewards cannot eliminate such deviations, it can be expected to affect index fund manager behavior, in a way that we will return to in Section D.4, below.

Competition with Actively Managed Funds. Professors Fisch, Hamdani, and Davidoff Solomon have recently offered support for index fund stewardship, arguing that index fund managers compete for funds "not only with each other but also with active funds", and that this competition provides them with "the incentive to use their governance rights to target underperforming companies in their portfolio".⁴⁸ According to this view, by improving the governance of public companies, index fund managers may eliminate potential advantages that actively managed funds might have—advantages that might otherwise provide those funds with opportunities to outperform index funds. However, as we explain below, this argument provides little basis for expecting index fund managers to have significant incentives to invest in stewardship.

A key driver of the movement from active funds to index funds has been the understanding, backed by empirical evidence in the financial literature, that actively managed funds significantly underperform index funds on average. To the extent that this understanding leads investors to switch from active funds to index funds, the relevant competition for any given index fund manager is other index funds that track the same or similar indexes.

Of course, substantial assets under management are still invested in actively managed funds; this is mainly because, even though actively managed funds underperform (on average) whichever index they use as a benchmark, some do outperform these indexes.⁴⁹ Fisch, Hamdani, and Davidoff Solomon acknowledge this, giving the example of active manager Oakmark International Investor, which attracted \$9.7 billion in new assets in 2017, leading it to close to new investors in 2018.⁵⁰

If index funds bring about governance improvements in some or all of their portfolio companies, it would not eliminate the possibility of some actively managed funds outperforming the indexes that they use as benchmarks. For any given index, the

⁴⁸ See Fisch, Hamdani & Davidoff Solomon, supra note 13, at 10.

⁴⁹ For studies by financial economists on such occasional outperformance, see, e.g., Jonathan B. Berk & Jules H. van Binsbergen, *Mutual Funds in Equilibrium*, 9 ANN. REV. OF FIN. ECON. 147 (2017); Hyunglae Jeon, Jangkoo Kang & Changjun Lee, *Precision about Manager Skill, Mutual Fund Flows, and Performance Persistence*, 40 THE N. AM. J. OF ECON. & FIN. 222 (2017).

⁵⁰ See Fisch, Hamdani & Davidoff Solomon, *supra* note 13, at 11, fn. 64, citing Greg Carlson, *Oakmark International Announces Soft Close*, 178, MORNINGSTAR.COM (Jan. 30, 2018), http://www.morningstar.com/articles/845771/oakmark-international-announces-soft-close.html.

constituent companies in the index can be expected to perform very differently, depending on their industry and the success of their strategies, services, and products. Among the many active portfolio managers investing in these companies, some will disproportionately hold positions in companies that outperform the index, leading those managers to outperform index funds. For example, to the extent that an active manager disproportionately invested in Amazon, Inc. in recent times, that manager would likely have outperformed the manager's benchmark index, even fully assuming that Amazon was well governed and made adequate disclosures.

Indeed, to the extent that stewardship by index fund managers brings about expected governance gains in a different subset of companies in the index in any given period, this effect alone could lead to the outperformance of those actively managed funds that hold disproportionately large fractions of the companies that experience such gains. All in all, an interest in lowering the performance of actively managed funds relative to index funds should not be expected to provide index fund managers with a substantial incentive to bring about such changes.⁵¹

D. Incentives to be Excessively Deferential

Part II.C discussed one key dimension of stewardship decisions: the choice of how much to spend on stewardship investments and the incentives that index file managers have to under-invest in stewardship. In this Section we turn to a second key dimension: the choice between deference to corporate managers and nondeference. As we show, the private interests of index fund managers are likely to be affected by their deference/nondeference choices in ways that could well distort these choices. Below we first discuss this problem in general; we then proceed to discuss three significant ways in which the private interests of index fund managers, and especially the Big Three, could be served by being excessively deferential.

1. The Effects of Private Benefits from Deference

Let us consider the situation in which an index fund manager faces a binary choice between deference and nondeference to a particular portfolio company's managers. Valueenhancing stewardship would call for nondeference whenever the expected value effect from nondeference is positive and for deference whenever the expected value effect from nondeference is negative. However, the choice between deference and nondeference may also affect the interests of the index fund manager in other ways, some of which we discuss

⁵¹ For additional criticisms of the argument that the desire to compete with actively managed funds encourages stewardship by index funds, see J.B. Heaton, *All You Need is Passive A Response to Professors Fisch, Hamdani, and Davidoff Solomon*, SSRN Scholarly Paper ID 3209614 (Soc. Sci. Res. Network), Jul. 7, 2018

in Subsections 2 to 4. Let us suppose that nondeference would impose costs of C_{ND} on the index fund manager. Suppose also that the *expected gain from nondeference*, which we denote by ΔV_{ND} , is positive, so nondeference would be desirable for the beneficial investors in the index fund. Will nondeference also serve the interests of the index fund manager?

If the index fund manager chooses nondeference, the value of the portfolio will increase by ΔV_{ND} . However, as above, the index fund manager captures only the fractional fee (θ) of such expected gain from nondeference: $\theta \times \Delta V_{ND}$. Therefore, even though nondeference is desirable for the index fund's investors, nondeference will not serve the interest of the index fund manager where $C_{ND} > \theta \times \Delta V_{ND}$. Thus, costs to index fund managers from nondeference create a distortion: value-enhancing nondeference would *not* serve the interests of index fund managers if and only if

$$0 < \Delta V_{ND} < C_{ND} / \theta.$$

It is useful to note the role that the fractional fee (θ) plays in determining the range of situations in which the index fund manager will have distorted incentives. Rearranging the inequality above, desirable nondeference will be against the interests of index fund managers whenever $\theta < \Delta V_{ND} < C_{ND}/\theta$. Because the value of θ is likely to be very small for index fund managers, C_{ND}/θ will likely be higher, and the range of distorting situations will likely be wider. The economic intuition is that, with a low fractional fee (θ), the expected gain from nondeference (ΔV_{ND}) figures less prominently in the calculus of index fund managers' incentives, and is thus more likely to be outweighed by given private costs from nondeference.

To illustrate, let us consider again the numerical example discussed above, of an index fund with a \$1 billion position. Suppose that the expected gain from nondeference is 0.1%, of the position, or \$1 million and that the index fund manager's fractional fee is 0.5%. Nondeference will not be in the interests of the index fund manager whenever the cost to the index fund manager from nondeference exceeds the relatively low threshold of \$5,000.⁵²

The practical significance of the distortions from private costs of nondeference will depend on the extent of such costs. Below we therefore consider the significance of three sources of costs: business ties with public companies (Subsection 2); legal requirements that nondeferential index fund managers file Schedule 13D disclosure (Subsection 3); and the risk that, by "stepping on the toes" of corporate managers, the Big Three could trigger a managerial and regulatory backlash (Subsection 4).

 $^{^{52}}$ If we refer to the second example used in Section II.C, and consider a situation where the expected gain is only 0.01%, deference will be in the interests of index fund managers whenever the private costs for non-deference are greater than \$500.

2. Business Ties with Corporate Managers

The Significance of Business Ties. Index fund managers, including the Big Three, have a web of financially-significant business ties with corporate managers, so they may pay close attention to how corporate managers perceived them. One important source of such business ties that has received considerable attention relates to defined contribution plans, commonly referred to as "401(k) plans".⁵³ The assets under management in 401(k) plans were over \$4.7 trillion in 2015,⁵⁴ most which came from employees of public companies. Over 60% of 401(k) assets were held in mutual funds.⁵⁵ Index fund managers derive a substantial proportion of their revenues from 401(k) plans⁵⁶ in two ways: (i) by providing administration services to the plan,⁵⁷ and (ii) by having their index funds included in the menu of investment options available to plan participants.⁵⁸

Index fund managers can reasonably expect that the extent to which corporate managers view them favorably might influence their revenues from 401(k) plans. In public companies, a committee of employees often chooses the plan administrator and the menu of investment options.⁵⁹ Although these choices are subject to fiduciary duties, the decision makers often have a number of reasonable choices, and in such cases the views and preferences of corporate managers could influence the decision of these employees. Furthermore, the incentives discussed below arise even if decisions are often not influenced.

⁵⁷ As of December 31, 2016, Vanguard (\$444 billion in plan assets) was the third-largest plan provider, after Fidelity and TIAA. *See* Plansponsor, 2017 Recordkeeping Survey 3 (Jun. 25, 2017), https://www.plansponsor.com/research/2017-recordkeeping-survey/. Plansponsor's data is based on a survey of data from each provider. Plansponsor estimates that the providers that responded to the survey comprise 85% of the total defined contribution plan market. *See Id.* at 5.

⁵⁸ An index fund that provides administration services is also more likely to have its funds appear on the menus for 401(k) investments. For evidence, see Veronika Pool, Clemens Sialm & Irina Stefanescu, *It Pays to Set the Menu: Mutual Fund Investment Options in 401(k) Plans*, 71 J. FIN. 1779, 1786 table 1 (2016).

⁵⁹ For smaller companies, the plan fiduciary is a staff member in the company's human resources or finance department. STEPHEN DAVIS, JON LUKOMNIK & DAVID PITT-WATSON, WHAT THEY DO WITH YOUR MONEY: HOW THE FINANCIAL SYSTEM FAILS US AND HOW TO FIX IT 104 (2016).

⁵³ 401(k) plans are so-called for the section of the Internal Revenue Code that governs the tax treatment of "qualified cash or deferred arrangement," which is how these plans are structured. *See* Internal Revenue Code, 26 U.S. § 401(k).

⁵⁴ Sean Collins, Sarah Holden, James Duvall & Elena Barone Chism, *The Economics of Providing 401(k) Plans: Services, Fees, and Expenses, 2015, 22 ICI RES. PERSP. 2 (2016).*

⁵⁵ See Id.

⁵⁶ According to Pensions & Investments, the proportion of U.S. client assets under management for each of the Big Three that came from 401(k) plans in 2017 was 14%, 20%, and 17%, for BlackRock, Vanguard, and SSGA, respectively.

by the preferences of corporate managers, so long as index fund managers *believe* that such influence might sometimes have an effect.

How Business Ties Provide Incentives for Deference. We distinguish two types of effects of business ties on deference/nondeference choices. The first type of effect, "client favoritism," has received significant attention in the literature,⁶⁰ however, we view it as less important. Index fund managers may be more deferential to managers of companies with which they have (or hope to have) business ties than they are to managers of other companies. For example, an index fund manager may have incentives to support the say-on-pay proposal of a company that is a current or potential client, even if that index fund manager would vote against such a proposal at other companies.

Indeed, there is evidence suggesting that such favoritism has an effect on voting decisions. In particular, empirical studies have documented that the volume of business that investment managers receive from corporate pension funds is associated with their voting more frequently in support of corporate managers on shareholder proposals, as well as on executive compensation matters.⁶¹ Furthermore, a recent study by Dragana Cvijanović, Amil Dasgupta, and Konstantinos Zachariadis finds that investment managers are more likely to vote in support of portfolio company managers on closely-contested proposals when the investment manager has significant business ties to the portfolio company.⁶²

Responding to concerns about client favoritism problems, some investment fund managers, including the Big Three, have put in place internal "walls" separating stewardship personnel from the individuals who maintain and cultivate business ties. For example, SSGA publishes "Conflict Mitigation Guidelines" that explain how SSGA's stewardship team is insulated from others within the organization whose role is to develop

⁶⁰ For work discussing this type of effect, see, e.g., Gerald F. Davis & Tracy A. Thompson, *A Social Movement Perspective on Corporate Control*, 39 ADMIN. SCI. Q. 141, 161–62 (1994); John Brooks, *Corporate Pension Fund Asset Management*, *in* TWENTIETH CENTURY FUND, ABUSE ON WALL STREET: CONFLICTS OF INT. IN THE SEC. MARKETS (1980); Coffee, *supra* note 13, at 1321; Rock, *supra* note 13, at 469.; Black, *supra* note 13, at 597.

⁶¹ See Gerald F. Davis & E. Han Kim, Business Ties and Proxy Voting by Mutual Funds, 85 J. FIN. ECON. 552 (2007) (voting on shareholder proposals); 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. & QUANTITATIVE ANALYSIS 567 (2012) (voting on executive pay); Assaf Hamdani & Yishay Yafeh, Institutional Investors as Minority Shareholders, 17 REV. OF FIN. 691 (2013).

⁶² Dragana Cvijanović, Amil Dasgupta & Konstantinos E. Zachariadis, *Ties that Bind: How Business Connections Affect Mutual Fund Activism*, 71 J. FIN. 2933 (2016).

and maintain business ties with corporate managers.⁶³ However, even fully assuming that internal walls should be expected to completely eliminate the problem of client favoritism by the Big Three and some other major index fund managers, such walls cannot eliminate another key channel through which business ties produce incentives to be deferential. It is that channel—setting stewardship principles, policies, and practices that are more deferential to companies in general—that we believe to be most important in incentivizing deference.

Setting such principles, policies, and practices more deferentially enhances the likelihood that corporate managers will view the index fund manager more favorably, and does so without producing any inconsistency in the treatment of clients and non-clients. For example, rather than tending to vote in favor of managers in say-on-pay proposals at particular companies that are clients, an index fund manager can set its general principles, policies, and practices so as to enhance the likelihood of supporting management in votes across all portfolio companies. Doing so would reduce the likelihood that any current or potential clients would receive a negative vote and therefore view the index fund manager unfavorably.

The problem of excessively deferential principles, policies, and practices is difficult for outsiders to measure empirically. Existing studies do not test for, and so cannot detect, this problem, because they focus on differential treatment of clients and non-clients.

Of greater importance, excessively deferential principles, policies, and practices could make an index fund manager's stewardship more deferential than desirable *outside* of the subset of companies that are current or potential clients. Such excessively deferential principles, policies, and practices will affect that index fund manager's stewardship decisions with respect to public companies in general. The breadth of this effect strengthens concerns about distortions of the deference/nondeference choices of index fund managers.

3. Avoiding Section 13(d) Filer Status

We now turn to a cost of nondeference that applies to the Big Three and arises from the substantial stakes that they hold in most publicly traded companies. The Big Three hold positions of more than 5% in a very large number of public companies: 2,454 companies (BlackRock), 1,839 companies (Vanguard), and 221 companies (SSGA).⁶⁴ For all of these

⁶³ State St. Global Advisors, 2018 SSGA Conflict Mitigation Guidelines (Mar. 16, 2018), https://www.ssga.com/na/us/institutional-investor/en/our-insights/viewpoints/2018-ssga-conflict-mitigation-guidelines.html.

⁶⁴ See Section III.F and Table 9, *infra*. Calculations are based on data from FactSet Ownership, as of December 31, 2017.

companies, the Big Three have incentives to avoid any nondeference that would require filing on Schedule 13D.⁶⁵

Under Section 13(d) of the Securities and Exchange Act, an investor that obtains more than 5% of a public company is required to make certain disclosures, either on Schedule 13D or on Schedule 13G.⁶⁶ The criterion for whether the investor must make detailed disclosure on Schedule 13D, rather than more limited disclosure on Schedule 13G, is whether the investor makes the acquisition "with the purpose [or] the effect of changing or influencing the control of the [portfolio company]".⁶⁷ A number of stewardship activities by index fund managers could be viewed as having such a purpose and therefore requiring the index fund manager to file on Schedule 13D. These activities include putting forward or supporting proposals to sell or restructure the portfolio company, proposing governance changes that make it easier to replace the managers of the portfolio company, or engaging with the portfolio company to propose or facilitate the appointment of particular individuals as directors.⁶⁸

Being a Schedule 13D filer rather than a Schedule 13G filer would involve very significant costs for the Big Three. In particular, Schedule 13D filings must be made much more frequently than Schedule 13G filings and are much more extensive. Schedule 13D must be filed within ten days after every acquisition and subsequent change in holdings, compared to once-per-year for Schedule 13G. Schedule 13D filings also require particularized disclosure of each acquisition, entity-by-entity, compared to disclosure of aggregated positions for Schedule 13G.⁶⁹ Schedules 13D and 13G apply not just to the index funds managed by the index fund manager but to all the investments they manage, including active funds, and separate client accounts. This increases the differential in compliance costs exponentially: given the frequency of trades in all of these portfolios,

⁶⁵ For early discussions of the possibility that Section 13(d) could deter stewardship, see Alfred F. Conard, Beyond Managerialism: Investor Capitalism Symposium: Issues in Corporate Governance, 22 U. MICH. J.L. REFORM 117, 162 (1988–1989); Mark J. Roe, *A Political Theory of American Corporate Finance*, 91 COLUM. L. REV. 10, 26 (1991).

⁶⁶ See 15 U.S.C. § 78m(d) (2012); 15 U.S.C. § 78m(g) (2012); 17 C.F.R. § 240.13d-1(b) (2017). For an analysis of the law and economics of blockholder disclosure co-authored by one of us, see Lucian A. Bebchuk & Robert J. Jackson, Jr., *The Law and Economics of Blockholder Disclosure*, 2 HARV. BUS. L. REV. 39 (2012).

⁶⁷ See 17 C.F.R. § 240.13d-1(b) (2017). For a general discussion of the rules governing Section 13(d), see ARNOLD S. JACOBS, THE WILLIAMS ACT -- TENDER OFFERS AND STOCK ACCUMULATIONS ch. 2 (2018).

⁶⁸ For a detailed discussion of the facts and circumstances that might require Schedule 13D filing, see *Id.* sec. 2:64.

⁶⁹ Compare 17 C.F.F. § 240.13d-102 (2017) (regarding Schedule 13G) with 17 C.F.F. § 240.13d-101 (2017) (regarding Schedule 13D).

making the extensive disclosure for every single change in position that Schedule 13D requires would be incredibly costly and time consuming.

To sum up, consider a Big Three index fund manager that has a position of more than 5% and is considering desirable nondeferential stewardship that could be viewed as being intended to influence control. The analysis in this Section shows that such nondeference would impose significant costs, which would be borne by the index fund manager rather than by the index fund. Such nondeference would therefore be against the interests of the index fund manager, even though it is desirable for the index fund.

4. Fears of Backlash

Finally, we turn to what we believe to be an especially strong factor inducing the Big Three to be excessively deferential to corporate managers—their substantial and growing power puts them at risk of public and political backlash that might constrain index fund managers in ways they would find detrimental.⁷⁰ As explained below, deference could reduce the risk of such backlash.

Consider the desirable position in which the business leaders of the Big Three find themselves. The economies of scale and first-mover advantage that they enjoy provide substantial protection for the dominance of their firms in the index fund marketplace. Are there any clouds on the horizon? Is there anything major that could go wrong for the leaders of the Big Three?

Perhaps the most significant risk is that of a backlash reaction to the growing power of The Big Three. Business history suggests that the concentration of power over "Main Street" companies in the hands of large "Wall Street" interests can lead to a backlash. Referring to the current period as a "new era of financial capitalism," scholars have compared it to a chapter in American history a century ago in which Wall Street interests, led by J.P. Morgan, wielded substantial power.⁷¹ However, this earlier chapter of finance capitalism ended with a strong regulatory backlash. As Mark Roe's well-known work has documented, vested interests were able to mobilize popular sentiments against the concentrated power of Wall Street financiers, leading to an array of legal rules that curtailed the power of financial blockholders and their ability to intervene in Main Street for decades.⁷²

⁷⁰ On the concept of backlash in economic and legal systems generally, and on how the risk of backlash affects decision making, see Mark J. Roe, *Backlash*, 98 COLUM. L. REV. 217, 217 (1998).

⁷¹ See Gerald F. Davis, A New Finance Capitalism? Mutual Funds and Ownership Re-Concentration in the United States, 5 EUR. MGMT. REV. 11, 12 (2008); Fichtner, Heemskerk & Garcia-Bernardo, supra note 2, at 299.

⁷² For an influential work providing the historical account of backlash against Wall Street, see Roe, *supra* note 75, at 27–28.

Let us consider how the approach of the Big Three may influence the prospect of public or political backlash today. Consider a hypothetical *interventional strategy* as part of which the Big Three would seek to improve the value of portfolio companies by (i) making executive compensation incentives more tightly linked to performance, (ii) eliminating anti-takeover defenses, (iii) monitoring the business performance of CEOs very closely, and (iv) forcing out CEOs who do not meet a relatively high standard of performance. Let us further assume that the interventional strategy would be expected to enhance the value of the Big Three portfolios by about 5%, and that the Big Three know of this expected beneficial effect.

Of course, it might be argued that the interventional strategy would be value decreasing rather than value enhancing. However, our focus here is not on debating the merits of the interventional strategy but rather on showing that the Big Three would have incentives to avoid the strategy even under the assumed scenario in which the strategy is expected to be beneficial for their portfolios, and the Big Three know this to be the case.

This interventional strategy would create a significant risk of a backlash. Even though the interventional strategy would be expected to enhance value, managers of portfolio companies would have strong incentives to resist it and mobilize against the Big Three because of the strategy's adverse effect on their power and private interests. Because managers control the massive resources of Main Street companies, they are a formidable foe in the political arena.⁷³

Furthermore, management interests could be expected to receive substantial public support. Even though we have stipulated that the interventional strategy is expected to enhance value, this fact would not be incontestable, or necessarily salient to the public. To the contrary, corporate managers, and the groups, advisors and researchers associated with them, would be expected to argue forcefully that the interventional strategy would destroy value. They may claim that the Big Three would be excessively micromanaging or second-guessing the business decisions of well-informed managers, creating distraction, or pressuring them toward short-termism. Indeed, business history suggests that public opinion would view with suspicion any substantial concentration of power over Main Street companies by financial decision makers.

Thus, pursuing any such strategy whereby the Big Three used their power in ways that adversely affect corporate managers would have a significant risk of backlash. Such backlash could lead to the imposition of considerable legal constraints on the power and activities of large index funds and thereby have substantial adverse effects on the Big Three. Their leaders therefore have significant interest in reducing the risk of such backlash.

⁷³ For a study of the subject in a historical context, see *Id.* at 46. For a formal analysis of this issue co-authored by one of us, see Lucian A. Bebchuk & Zvika Neeman, *Investor Protection and Interest Group Politics*, 23 REV. FIN. STUD. 1089, 35 (2010).

The Big Three can reduce the risk of corporate managers inciting a backlash by limiting the extent to which their stewardship constrains the power, authority, compensation, and other private interests of corporate managers. Indeed, a strategy of deference would likely convert corporate managers into quiet allies rather than foes. With such a strategy, corporate managers could be expected not to resist the increasing equity concentration in the hands of the Big Three but, rather, to view such concentration as favorable to their own interests.

With a strategy of deference, index fund managers also reduce the salience of their power and, with it, potential concerns from those parts of the public that are resistant to large concentrations of financial power. Even when interventions in portfolio companies are value maximizing, decisions by the Big Three to engage in such intervention would make salient their influence on economic decision making at many Main Street companies. Thus, even though a strategy of nondeference would not serve the financial interests of Big Three fund investors, it would benefit the Big Three managers by reducing opposition to their power not only from corporate managers but also from parts of the public that are resistant to concentrations of power, and thus also decreasing the risk of regulatory backlash.

E. Limits on the Force of Distorting Incentives

Thus far we have focused on the significant incentives that index fund managers, and especially the Big Three, have to under-invest in stewardship and to defer excessively to corporate managers. We conclude this Part with some comments on two factors that may limit the force and potentially damaging consequences of these distorting incentives.

1. Fiduciary Norms

To begin, in addition to their economic incentives, fiduciary norms and individuals' desire "to do the right thing" may well have a significant influence on index fund managers.⁷⁴ Such motivations might lead to different behavior, including behavior that may be more desirable to their investors, than that suggested by a pure incentive analysis. Analyzing the strength of such motivations is beyond the scope of this Article and the expertise of its authors, but we wish to stress that such motivations might have a significant effect on behavior.

We note that some index fund managers (including two of the Big Three) are public companies. Fiduciary norms call for executives of those index funds to maximize the value of the fund management company. For the reasons explained in this Part, the value of the

⁷⁴ In our own interactions with individuals working for index funds, we have often encountered what impressed us as an interest of those individuals in "doing the right thing."

fund management company might be best served by the index fund manager underinvesting in stewardship and displaying deference to the managers of portfolio companies.

More importantly, the premise underlying many corporate governance rules, policies and arrangements is that incentives matter. If we could rely exclusively on fiduciary norms many key corporate law rules, and many incentive compensation schemes for corporate managers, would be rendered unnecessary. To illustrate, if fiduciary norms were sufficient to induce desirable behavior it would not be necessary to design complicated executive compensation arrangements with close attention to the incentives that they provide. Yet companies spend substantial amounts to incentivize their executives with pay arrangements. The voting guidelines of index fund managers encourage such arrangements, and give significant consideration to the incentives they create in determining how to cast say-on-pay votes. Thus, even fully accepting that fiduciary norms and a desire to do the right thing play a role in shaping behavior, it remains important to carefully analyze the incentives of index fund managers.

2. Stewardship Quality Image

As we have noted, index fund managers might care about how their stewardship is perceived, not just by the managers of their portfolio companies but also by their current and potential customers.

While some index fund investors will choose their index fund manager solely on the basis of financial considerations, other current and potential investors—such as public pension funds, endowments, and individuals with non-financial preferences—might also base their choices among index fund managers on non-financial considerations. In particular, such investors might base their choice partly on their perceptions regarding the stewardship quality of the index fund managers they use or are considering.

To the extent that some investors disfavor investing with index fund managers that they believe to be inferior stewards, even where the investors' returns are the same as from other index fund managers, then index fund managers will have an incentive to avoid being perceived as inferior stewards. Thus, index fund managers will have an incentive to emphasize their commitment to stewardship in their public communications. This might also lead index fund managers to take positions on subjects that they expect to appeal to such investors, such as gender diversity on boards and climate change disclosure.

These incentives are also likely to discourage behavior on the part of index fund managers that would make more salient their incentives to under-invest in stewardship, or to be deferential to corporate managers. However, as we have stressed above, most investors are unlikely to have sufficient expertise or resources to evaluate the many stewardship decisions made by index fund managers. As a result, incentives to avoid being perceived as inferior steward cannot be expected to eliminate the many non-salient ways that the incentives described by the agency cost view affect the behavior of index fund managers. Finally, we note that this discussion carries significant implications for the potential value of this Article. To the extent that our analysis serves to inform investors with preferences for stewardship quality, it could contribute to reducing deviations from desirable stewardship decisions. We return to this issue in Section IV.G below.

III. EVIDENCE

In this Part we turn from theory to evidence. We combine data from various providers with hand-collected data to put forward substantial evidence regarding the stewardship activities that index fund managers do and do not undertake. Our comprehensive empirical analysis covers a wide range of activities, including the following eight dimensions of index fund manager behavior: investments in stewardship (Section A); private engagements (Section B); limited attention to performance (Section C); pro-management voting (Section D); avoiding shareholder proposals (Section E); avoiding director nominations and Schedule 13D filer status (Section F); limited involvement in corporate governance reforms (Section G); and avoiding lead plaintiff positions (Section H).

Part II contrasted the agency-costs view we put forward with the no-agency-costs benchmark in which stewardship decisions were made by a sole owner-manager of the index fund. The empirical patterns we observe are inconsistent—or at least in tension—with the no-agency-cost view. As we explain below, these empirical patterns are consistent with—and can be explained by—the predictions generated by the agency-costs view: that index fund managers have considerable incentives to both underinvest in stewardship and defer excessively to corporate managers.

A. Investments in Stewardship

In recent years, the Big Three have substantially increased the resources they devote to stewardship.⁷⁵ Vanguard stated that "our team has doubled in size since 2015",⁷⁶ and BlackRock has announced its intent "to double the size of the investment stewardship team over the next three years".⁷⁷ The Big Three have also noted the significant numbers of stewardship personnel that they employ, corporate meetings at which they vote, and

⁷⁵ Bioy, Bryan, Choy, Garciz-Zarate & Johnson, *supra* note 46, at 19, Exhibit 10 (reporting the results of a survey of investment fund managers conducted in October 2017 showing that from 2014-2015 to 2017, the number of stewardship team members (excluding environmental, social, and governance (ESG) analysts and portfolio managers of investment teams) increased from 20 to 33 at BlackRock, from 10 to 21 at Vanguard, and from 8 to 11 at SSGA).

⁷⁶ See, e.g., Vanguard, Annual Stewardship Report, *supra* note 22, at 2.

⁷⁷ 2017 Letter from Larry Fink, *supra* note 6.

companies with which they engage.⁷⁸ Supporters of index fund stewardship have viewed these figures as promising and reassuring.⁷⁹

However, any assessment of the Big Three's stewardship activities needs to be made in light of both the vast number of portfolio companies that they invest in and the many companies in that group where they have stakes with significant monetary value. We conduct such an assessment below, and find that it raises significant concerns that the Big Three substantially under-invest in stewardship.⁸⁰

1. Current Levels of Stewardship Investments

Table 2 below uses data from Morningstar and the most recent stewardship reports of the Big Three to present the number of stewardship personnel that each manager employs, and the number of portfolio companies that each manages in the United States and abroad.

BlackRock	Vanguard	SSGA
33	21	11
17,309	18,900	17,337
4,084	3,946	3,762*
	33 17,309	33 21 17,309 18,900

Table 2. Stewardship Personnel and Portfolio Companies

We next estimate the total investment in stewardship by each of the Big Three. We assume, conservatively, that the cost of each stewardship staff member (including fringe

⁸⁰ Tables and other data referred to in this Section are based on data from Bioy, Bryan, Choy, Garciz-Zarate & Johnson, *supra* note 46, at 19, Exhibit 10 (regarding stewardship personnel, as of October 2017); BlackRock, *Investment Stewardship Report: 2017 Voting and Engagement Report* Jul. 15, 2017 [hereinafter, the "BlackRock Stewardship Report"]; Vanguard, Annual Stewardship Report, *supra* note 22; and State St. Global Advisors, Annual Stewardship Report, *supra* note 7 [hereinafter, collectively, the "Big Three Stewardship Reports"] (regarding numbers of portfolio companies and engagements); Pensions & Investments' 2018 survey of money managers [henceforth, "Pensions and Investments Database"] (regarding equity assets under management); and Oey, *supra* note 56, at 10 (regarding average expense ratios).

⁷⁸ For instance, Vanguard's McNabb stated that Vanguard's investment stewardship team "held more than 950 engagements with company leaders" in 2017. Vanguard, Annual Stewardship Report, *supra* note 22, at 1.

⁷⁹ For discussions by supporters of index fund stewardship that cite the Big Three's statements on the scale of their activities favorably, see Fisch, Hamdani & Davidoff Solomon, *supra* note 13, at 25–26; and Asaf Eckstein, *The Virtue of Common Ownership in an Era of Corporate Compliance*, SSRN Scholarly Paper ID 3194605 44 (Soc. Sci. Res. Network), Jun. 12, 2018.

benefits and payroll loading rates) is \$300,000 per year. Table 3 shows the estimated cost of each of the Big Three's stewardship departments, the fraction they represent of (i) equity assets under management (AUM), and (ii) the estimated fees from managing these assets. As the Table shows, the estimated investment in stewardship by BlackRock and Vanguard is below \$10 million each, and that of SSGA is below \$5 million. These stewardship budgets are each less than 0.0003% of AUM. Perhaps most tellingly, that estimated stewardship investment represents less than one-fifth of 1% —only 0.02%—of the estimated fees that each of the Big Three charge for managing equity assets. Thus, although the Big Three view stewardship budgets are economically insignificant in the context of their operations and the fees they charge.

	BlackRock	Vanguard	SSGA
Stewardship Investment as % of Equity AUM			
Estimated Stewardship Investment (\$m)	\$9.9	\$6.3	\$3.3
Equity AUM (\$m)	\$3,364,184	\$3,507,649	\$1,835,917
Stewardship as % of Equity AUM	0.00029%	0.00018%	0.00018%
Stewardship Investment as % of Estimated Fees			
Estimated Stewardship Investment (\$m)	\$9.9	\$6.3	\$3.3
Estimated Fees & Expenses (\$m)	\$8,410	\$3,508	\$2,937
Stewardship as % of Fees & Expenses	0.12%	0.18%	0.11%

Table 3. Stewardship Investments Relative to Equity Investments and Estimated Fees

Another important dimension for assessing the levels of investment in stewardship is the amount of personnel time each of the Big Three dedicates to particular portfolio companies. To estimate this amount, we assume (conservatively) that each stewardship team member works on all weekdays other than federal holidays (i.e., they take no vacation or sick days), for a total of 250 workdays per year. We also assume (again conservatively) that stewardship personnel spend 100% of their time on "pure" stewardship and no time at all on other activities, such as administration, training, and reporting.

To estimate the amount of personnel-time devoted to a given company, we must make assumptions regarding how the Big Three allocate their stewardship time among their portfolio companies. To this end, we examine four different potential allocation scenarios. First, Scenario 1 assumes that the Big Three divide their stewardship resources equally among all of their portfolio companies. Second, because our focus is on understanding the quality of corporate governance in U.S. public companies, Scenario 2 assumes (conservatively) that the Big Three spend 75% of their stewardship resources on U.S. portfolio companies (even though those companies constitute less than 25% of each manager's total portfolio companies). Third, because index fund managers are likely to allocate more stewardship time to portfolio companies where their investments are larger, we recalculate stewardship time and investment in proportion to the size of the position in the Big Three's portfolio. Scenario 3 calculates how much time and investment the Big Three make for each \$1 billion equity position in their worldwide portfolios, and Scenario 4 calculates the stewardship time and investment for each \$1 billion equity position in U.S. public companies, assuming again that the Big Three spend 75% of their stewardship resources on those companies.

For each of these four scenarios, Table 4 provides estimates of the amount of personnel time, and the dollar cost of this personnel time, that the Big Three allocate to stewardship. Table 4 indicates that, no matter the scenario, each of the Big Three spends very limited resources on stewardship—either in personnel time or in dollar cost—per portfolio company, including for positions of significant monetary value. In particular, even under the most conservative assumptions, each of the Big Three spends less than 3.5 person-days each year, and less than \$4,000 in stewardship costs, to oversee a billion-dollar investment.

	BlackRock	Vanguard	SSGA
Stewardship Time (Person-Days)			
Scenario 1: Equal Allocation of Stewardship Time, per Portfolio Company (Worldwide)	0.48	0.28	0.16
Scenario 2: Stewardship Allocated 75% to U.S. Companies, per U.S. Company	1.52	1.00	0.55
Scenario 3: Proportional Stewardship Allocation, per \$1bn Position Worldwide	2.45	1.50	1.50
Scenario 4: Proportional Stewardship Allocation, per \$1bn Position in U.S. Companies	3.17	1.84	1.69
Stewardship Investment (\$)			
Scenario 1: Equal Allocation of Stewardship Time, per Portfolio Company (Worldwide)	\$572	\$333	\$190
Scenario 2: Stewardship Allocated 75% to U.S. Companies, per U.S. Company	\$1,818	\$1,197	\$658
Scenario 3: Proportional Stewardship Allocation, per \$1bn Position Worldwide	\$2,943	\$1,796	\$1,797
Scenario 4: Proportional Stewardship Allocation, per \$1bn Position in U.S. Companies	\$3,805	\$2,213	\$2,025

Table 4. Stewardship Per Portfolio Company

2. Assessing Current Levels

Recall the factors that provide the Big Three with incentives to under-invest in stewardship relative to what would be desirable for their beneficial investors. Given that each of the Big Three holds positions of about 5% or more in a very large proportion of American companies,⁸¹ with many of these positions worth more than \$1 billion, it would be in the interest of index fund investors for those portfolio companies to receive significant time and attention from the Big Three's stewardship personnel.

Recall the example, discussed in Section II.B.2, of an index fund portfolio with a sole owner-manager and a \$1 billion investment in a particular portfolio company. In that case, it would be value-maximizing to spend up to \$1,000,000 to bring about a 0.1% increase in value. However, as we discussed in Section II.C, an index fund manager that has a Fractional Share fee of 0.5% of assets under management would have an incentive to spend up to \$5,000 on stewardship. The concerns raised by this analysis are reinforced by the evidence presented in Table 4. The levels of stewardship described in Table 3 and Table 4 are likely to enable only limited and cursory attention a large majority of the Big Three's

⁸¹ See Table 9, *infra*.

portfolio companies, including those where they hold positions of significant monetary value.

In assessing this concern, we note that evaluation of the governance and performance of a public company requires reviewing documents that are, at a minimum, in the hundreds of pages. Such information includes (i) the company's annual report and proxy statement, (ii) the performance of the company with respect to long-term plans; (iii) the company's executive pay arrangements; (iv) management proposals and shareholder proposals going to a vote; and (v) the views of the company's directors on all of these matters. In addition, there are other materials that investors with large stakes may want to review, such as analyst reports and proxy advisory assessments.

Supporters of index fund stewardship argue that index fund managers' diverse portfolios mean that index fund managers are well positioned to monitor their portfolio companies and ensure that they have appropriate mechanisms to deal with various legal and compliance risks.⁸² We agree that these efforts could provide significant stewardship benefits, and that the Big Three's large positions in virtually all significant public companies means that their beneficial investors would be served by having the Big Three oversee these companies fully and carefully, as supporters of index funds stewardship contemplate. However, given the time and monetary resources described above that index fund managers currently allocate to stewardship, they are unable to do so.

Instead, this level of stewardship investment likely requires the stewardship staff of index fund managers to limit themselves to cursory examinations using general principles in most cases, and to do so to a much greater extent than would be desirable for index fund investors. The empirical evidence about current investment levels is therefore consistent with the concerns about incentives to under-invest suggested by the agency-costs view.⁸³

B. Private Engagements

In subsequent Sections of this Part we discuss significant tools that are available to shareholders and widely used by other investors, and we present evidence that index funds refrain from using those tools. Before we discuss that evidence, however, it is worth

⁸² See, e.g., Eckstein, supra note 89, at 29.

⁸³ We would like to note that some of the stewardship activities of the Big Three have a large impact relative to the modest monetary resources invested. Because of the large stakes that the Big Three hold in a vast number of portfolio companies, the general voting guidelines and governance positions put forward by the Big Three could have an effect in many companies. However, many valuable stewardship activities require the steward to go beyond general principles and to make significant investments in stewardship at particular companies. Our analysis indicates that, consistent with the agency-costs view, the Big Three are likely to under-invest in such company-specific stewardship.

examining the argument that private "behind-the-scenes" engagement with portfolio companies are an effective substitute for these other stewardship tools. This Section therefore presents and analyzes evidence on private engagement by the Big Three. Our analysis shows that, although private engagement by the Big Three is likely to have benefits where it occurs, it cannot serve as a substitute for—or justify the avoidance of—other stewardship tools.

Big Three executives have stressed the central role that private engagement plays in their stewardship. For example, writings by senior officers of BlackRock state that "[t]he key to effective engagement is constructive and private communication";⁸⁴ and that "[e]ngaging with boards and firm executives ... can bring about change through incremental, non-confrontational means".⁸⁵ Furthermore, and importantly, Big Three executives have stressed their view that private, behind-the-scenes engagement is a *superior* stewardship tool. Vanguard and its senior officers have referred to private engagement as the "perhaps more important ... component of [Vanguard's] governance program," indicating that such engagement "provides for a level of nuance and precision that voting, in and of itself, lacks," and stating that "engagement is where the action is."⁸⁶ Similarly, a senior BlackRock officer was quoted in the *Wall Street Journal* as stating that "meetings behind closed doors can go further than votes against management."⁸⁷ Supporters of index fund governance have also asserted the significance of the private engagement channel.⁸⁸

However, even fully accepting the views of Big Three executives and index fund stewardship supporters regarding the benefits of private engagement where it occurs, any assessment of the significance of this channel requires an evaluation of the scale and nature of those private engagements undertaken by the Big Three. The Big Three Stewardship Reports indicate that these managers conduct private communications with hundreds of companies, and these absolute numbers have been stressed by supporters of index funds stewardship.⁸⁹ However, the number of companies with which the Big Three privately engage should be examined in relation to the much larger number of portfolio companies in which the Big Three hold significant stakes.

⁸⁴ See, e.g., BlackRock Stewardship Report, *supra* note 80, at 2.

⁸⁵ See, e.g., Matthew J. Mallow & Jasmin Sethi, *Engagement: The Missing Middle Approach in the Bebchuck-Strine Debate*, 12 N.Y. U. J. OF L. & BUS. 385, 392, 396 (2015–2016).

⁸⁶ Booraem, *supra* note 38.

⁸⁷ Sarah Krouse, David Benoit & Tom McGinty, *Meet the New Corporate Power Brokers: Passive Investors*, WALL ST. J., Oct. 24, 2016, http://www.wsj.com/articles/the-new-corporatepower-brokers-passive-investors-1477320101.

⁸⁸ See, e.g. Fisch, Hamdani & Davidoff Solomon, supra note 13, at 25.

⁸⁹ For writings stressing the absolute number of engagements, see, e.g., Eckstein, *supra* note 89, at 44–45.

Table 5 reports the percentage of their portfolio companies with which each of the Big Three companies had zero engagement in the one-year period covered by their Stewardship Reports:⁹⁰ 89% for BlackRock, 83% for Vanguard, and 90% for SSGA. Table 5 also indicates that, for the small minority of those portfolio companies with which the Big Three did undertake private engagement, most of those engagements were limited to a *single* conversation during the year. In only a very small percentage—3.5% of portfolio companies for BlackRock, 7% for Vanguard, and less than 1% for SSGA—did the engagement include more than a single conversation. Thus, for the large majority of cases in which there was no engagement, private engagement cannot be argued to have provided a substitute for the use of other stewardship tools.

	BlackRock	Vanguard	SSGA
Portfolio Companies with No Engagement	89.3%	82.8%	90.4%
Portfolio Companies with Engagement:			
Portfolio Companies with Engagement Limited to a Single Conversation	7.2%	10.3%	8.9%
Portfolio Companies with Engagement including more than a single conversation	3.5%	6.9%	0.7%
Total Portfolio Companies with Engagement	10.7%	17.2%	9.6%

Table 5. Private Engagement

Furthermore, even in those cases in which private engagement does occur, there are reasons to be concerned that its effectiveness is reduced by the Big Three's general reluctance to use other stewardship tools. For example, communication by a Big Three manager in favor of a given governance change, such as a move to majority voting or annual elections, would draw the attention of corporate managers to the fact that the changes had the support of a substantial shareholder. However, if corporate managers expected that failure to make the change would cause the Big Three manager to submit a shareholder proposal, they would presumably be more likely to make the change. Conversely, their current expectation that the Big Three manager would not submit a shareholder proposal if they fail to make such a change (as we discuss in Section E) makes private engagement less likely to be successful than it could be.

Similarly, the general unwillingness of the Big Three to nominate director candidates is likely to reduce the effectiveness of private engagements. This is because corporate managers expect that the failure of such engagements will not result in the Big Three seeking to replace directors. Thus, not only can private engagement not be a substitute for

⁹⁰ BlackRock's and Vanguard's Annual Stewardship Reports are for the year ended June 30, 2017; SSGA's Annual Stewardship Report is for the 2016 calendar year.

other tools, given the small minority of cases in which it takes place, but refraining from using other tools can also be expected to weaken the effectiveness of the private engagements that do take place.

C. Limited Attention to Performance

Enhancing the financial returns of portfolio companies is an important objective for index fund investors. Accordingly, such investors would benefit from stewardship that identifies portfolio companies that underperform, examines what changes could improve their performance, and uses the substantial voting power of the Big Three to bring about such changes. In discussing his view that index funds offer "the best hope for corporate governance", Vanguard's founder Jack Bogle stressed that "the new index fund rule is that if you don't like the management, fix the management because you can't sell the stock."⁹¹ However, as this Section discusses, Big Three stewardship practices focus on having companies follow governance and to the need to remedy it, including by fixing the management.

The Big Three Stewardship Reports indicate that the Big Three's private, behind-thescenes engagements—when they do occur—focus on addressing significant deviations from desirable governance principles. For example, SSGA indicates that its engagement seeks to provide "principles-based guidance".⁹² BlackRock indicates that its engagement might occur when a company lags behind its peers on environmental, social, or governance matters; when it is in a sector with a thematic governance issue material to value; or for other reasons that do not include the company lagging behind its peers in financial performance.⁹³ Vanguard's stewardship focuses on board composition issues, including gender diversity, governance structures, executive compensation, and risk oversight (including climate risk).⁹⁴

However, our review of all of the examples of behind-the-scenes engagements described in the Big Three Stewardship Reports found *no* cases in which engagement was motivated by an identification of financial or business underperformance or by efforts to address such underperformance. To be sure, some Big Three engagements follow interventions by activist hedge funds seeking to improve performance and focus on those interventions.⁹⁵ However, in those cases the Big Three did not identify underperformance themselves but merely reacted to activist hedge funds identifying underperformance and making proposals to address it.

⁹¹ Benz, *supra* note 12.

⁹² See, e.g., State St. Global Advisors, Annual Stewardship Report, *supra* note 7, at 3.

⁹³ BlackRock Stewardship Report, *supra* note 80, at 3.

⁹⁴ Vanguard, Annual Stewardship Report, *supra* note 22, at 7.

⁹⁵ Id.

Similar conclusions arise from our review of the proxy voting guidelines that the Big Three follow in determining whether to support incumbent directors standing for reelection. Each of the Big Three's guidelines provide a set of factors that could lead to a vote to withhold support. The Big Three vary in the exact deviations from governance principles that they view as justifying a "withhold" vote. However, none of the Big Three's guidelines lists financial underperformance, no matter how severe or persistent, as a basis for choosing to "withhold" a vote from one or more directors.

Writers supportive of index fund stewardship seek to justify their limited attention to financial underperformance by arguing that index fund managers "generally lack the expertise and access to information to identify operational improvements that should be implemented to improve the performance of companies in their portfolio."⁹⁶ However, because such arguments take such lack of "in-house expertise" as a given, they fail to recognize that it is a product of the choices made by index fund managers. Index fund managers have the resources to obtain or develop any "in-house expertise" that they might consider desirable.

Indeed, given that the Big Three hold positions of \$1 billion or more in hundreds of companies, the value of the portfolios they manage and the interests of their beneficial investors could well be served by adding in-house personnel with financial expertise. If the Big Three added a sufficient number of such personnel they could identify cases of severe or persistent underperformance. Furthermore, once such cases are identified, those personnel could put together proposals to improve performance by making particular changes in corporate leadership or strategies, and they could facilitate such changes using the influence and power that comes with their large stakes. Why then do the Big Three not employ such personnel on the significant scale that their holdings could warrant? The lack of such personnel is consistent with, and can be explained by, the incentives of index fund managers identified in Part II.

Some could argue that index fund managers do not need to pay attention to financial underperformance as they can count on activist hedge funds to bring such underperformance to the attention of other investors, and to initiate proposals for improving performance.⁹⁷ However, companies often underperform for several years before an

⁹⁶ Fisch, Hamdani & Davidoff Solomon, *supra* note 13, at 15, fn. 76. *See also* Charles M. Nathan, *Institutional Investor Engagement: One Size Does Not Fit All*, THE CONF. BOARD (Jul. 18, 2018), https://www.conference-board.org/blog/postdetail.cfm?post=6826 (explaining that the Big Three's stewardship teams "are principally focused on big picture environmental, social, and governance (ESG) issues [and they] lack the skill-sets and manpower necessary to deal in depth with company specific issues of strategy design and implementation, capital allocation, M&A opportunities, and operational and financial performance.")

⁹⁷ For such an argument, see Gilson & Gordon, *supra* note 13, at 897–98.

activist emerges to push for change.⁹⁸ The interests of index fund investors are therefore not served by ignoring underperformance in the hope that an activist hedge fund may address it.

Furthermore, as we discuss in Section IV.F, activist hedge funds have incentives to engage only when performance problems are very large and can be fixed quickly. The interests of index fund investors would be served by having other performance problems addressed as well. Thus, while the work of activist hedge funds often provides benefits to index fund investors, it does not fully substitute for work that index fund managers could do themselves to address problems of financial or business underperformance. Index fund managers largely avoid such work at the moment, even though it could provide index fund investors with significant additional benefits.

D. Pro-Management Voting

The analysis in Part II raises concerns that the Big Three index fund managers have incentives to be excessively deferential to corporate managers when they cast votes, especially with respect to issues affect managers' authority and private interests. This Section reviews the Big Three's voting record on these issues.⁹⁹ As explained below, the evidence on such voting is consistent with, and can be explained by, the theoretical predictions of our agency-costs view.

In particular, we consider the two issues closest to the hearts of managers: say-on-pay proposals and proxy fights with management. Table 6 provides evidence of the incidence of "no" votes by each of the Big Three in say-on-pay votes at S&P 500 companies in each full year since the 2011 adoption of a say-on-pay mandate in the Dodd-Frank Act.¹⁰⁰ As Table 6 indicates, each of the Big Three very rarely opposed such votes, doing so in only 3.2% of cases on average.

¹⁰⁰ Dodd–Frank Wall Street Reform and Consumer Protection Act § 951 (2010) (adding to the Securities Exchange Act of 1934 § 14A, 15 U.S.C. § 78n–1 (2018)).

⁹⁸ A study co-authored by one of us shows empirically that activist targets underperform significantly during the three years prior to the emergence of an activist hedge fund, see Lucian A. Bebchuk, Alon Brav & Wei Jiang, *The Long-Term Effects of Hedge Fund Activism*, 115 COLUM. L. REV. 1085, 1125 (2015).

⁹⁹ The results we presented here are consistent with three current papers on mutual fund voting more generally. *See* Ryan Bubb & Emiliano Catan, *The Party Structure of Mutual Funds*, SSRN Scholarly Paper ID 3124039 (Soc. Sci. Res. Network), Feb. 14, 2018; Patrick Bolton, Tao Li, Enrichetta Ravina & Howard Rosenthal, *Investor Ideology*, SSRN Scholarly Paper ID 3119935 (Soc. Sci. Res. Network), Feb. 7, 2018; and Davidson Heath, Daniele Macciocchi, Roni Michaely & Matthew Ringgenberg, *Passive Investors Are Passive Monitors*, SSRN Scholarly Paper ID 3259433 (Soc. Sci. Res. Network), Oct. 26, 2018. Consistent with our results, those papers find that index fund managers are more likely to vote than other mutual funds. The results we present in this Section build on a larger work on voting with Alma Cohen.

	BlackRock	Vanguard	SSGA	Avg.
2012	2.5%	3.6%	3.1%	3.1%
2013	2.3%	2.1%	4.2%	2.9%
2014	2.3%	2.9%	6.4%	3.9%
2015	1.0%	1.8%	4.5%	2.4%
2016	2.0%	1.8%	5.1%	3.0%
2017	3.6%	3.3%	5.9%	4.3%
Avg.	2.3%	2.4%	4.9%	3.2%

Table 6. Big Three "No" Votes in S&P 500 Say-on-Pay Votes

Of course, this pattern is only suggestive and does not provide irrefutable evidence of excessive deference. It could be argued that the general support by index fund managers for say-on-pay proposals merely reflects the optimality of executive pay arrangements in the vast majority of S&P 500 companies. At a minimum, however, index funds' general support for executive pay in the vast majority of these companies is consistent with the deference predictions of the agency-costs view.

Let us also consider a second type of voting choice that is of significant importance to incumbents—whether to support the company's slate of directors in contested elections by institutional investors.¹⁰¹ A recent study by finance Professors Brav, Jiang, and Li finds that index funds vote against hedge fund dissidents more often than did other types of investment funds, to an extent that is economically and statistically significant.¹⁰² This empirical evidence on the votes of index funds in proxy fights with activist hedge funds is also consistent with, and could be explained by, the deference predictions of our incentive analysis.¹⁰³

E. Avoiding Shareholder Proposals

A widely used shareholder tool for improving corporate governance is the submission of shareholder proposals to be voted on at the company's annual meeting, generally using shareholders' rights under Securities Exchange Act Rule 14a-8.¹⁰⁴ Shareholder proposals

¹⁰¹ Alon Brav, Wei Jiang & Tao Li, *Picking Friends Before Picking (Proxy) Fights: How Mutual Fund Voting Shapes Proxy Contests*, SSRN Scholarly Paper ID 3101473 35, figure 1A (Soc. Sci. Res. Network), Dec. 8, 2017.

¹⁰² *Id.* at 19.

¹⁰³ Table 6 is based on say-on-pay data from the Proxy Insight database (accessed July 27, 2018) [hereinafter, "Proxy Insights"] and S&P 500 constituent data from Compustat.

¹⁰⁴ 17 C.F.R. 240.14a-8 (2017).

advocating governance changes that receive majority support commonly lead to companies adopting such changes.¹⁰⁵ As a result, when governance changes are widely viewed by investors as best practice, shareholder proposals advocating such changes have been very successful in bringing about those changes in companies that have not yet implemented them. For example, shareholder proposals have led a large number of public companies to adopt majority voting, annual elections, and, most recently, proxy access—all governance arrangements that have received broad support from investors.¹⁰⁶ As Table 7 indicates, almost 4,000 shareholder proposals were submitted between 2008 and 2017 to companies in the Russell 3000 index.¹⁰⁷

¹⁰⁵ For empirical evidence, see Yonca Ertimur, Fabrizio Ferri & Stephen R. Stubben, *Board of Directors' Responsiveness to Shareholders: Evidence from Shareholder Proposals*, 16 J. CORP. FIN. 53, 54 (2010).

¹⁰⁶ For empirical evidence, see *Id.* (regarding majority voting); Emiliano Catan & Michael Klausner, *Board Declassification and Firm Value: Have Shareholders and Boards Really Destroyed Billions in Value?*, SSRN Scholarly Paper ID 2994559 2 (Soc. Sci. Res. Network), Sept. 1, 2017 (regarding declassification); and Tara Bhandari, Peter Iliev & Jonathan Kalodimos, *Governance Changes through Shareholder Initiatives: The Case of Proxy Access*, SSRN Scholarly Paper ID 2635695 22 (Soc. Sci. Res. Network), Jan. 17, 2017 (regarding proxy access).

¹⁰⁷ Table 7 is based on Russell 3000 constituent data from FTSE Russell and shareholder proposal data from SharkRepellent.net. We exclude social responsibility proposals, and proposals that are part of proxy contests.

Year	Shareholder Proposals
2008	409
2009	477
2010	456
2011	310
2012	359
2013	344
2014	300
2015	396
2016	322
2017	261
Total	3,912

Table 7. Submission of Shareholder Proposals

The Big Three have consistently supported shareholder proposals to adopt governance arrangements that they view as beneficial, and they continue to do so. For example, each of the Big Three has consistently voted for shareholder proposals seeking to replace staggered boards with annual elections.¹⁰⁸ And the Big Three's voting guidelines indicate that they will generally vote in support of proposals to introduce annual elections, majority voting, and proxy access.¹⁰⁹

Still, many of the Big Three's portfolio companies have not yet adopted these arrangements. Given that the Big Three focus on governance arrangements in general, their support for these arrangements in particular, and the effectiveness of shareholder proposals in obtaining such arrangements, it would be natural to expect them to make extensive use of shareholder proposals at those companies. However, our review of the almost-4,000 shareholder proposals submitted from 2008 to 2017 did not identify a single proposal submitted by any of the Big Three.

It might be argued that the Big Three avoid submitting shareholder proposals that would serve the interests of their beneficial investors because all necessary proposals are already being submitted by others. However, many shareholder proponents have much

¹⁰⁸ For evidence of such support, see Catan & Klausner, *supra* note 117, at 2.

¹⁰⁹ See BlackRock, Proxy Voting Guidelines for U.S. Securities (2018) 2–6; Vanguard, Vanguard's Proxy Voting Guidelines; State St. Global Advisors, 2018 Proxy Voting and Engagement Guidelines: North America Mar. 2018 2–4.

more limited resources than the Big Three. As a result, many proposals that the Big Three would support are not submitted at all, or are submitted only after a delay of many years.

To illustrate, a large proportion of the Big Three's portfolio companies that lack annual elections, majority voting, or the ability for shareholders to call special meetings—all arrangements called for by the Big Three's voting principles¹¹⁰—have yet to receive shareholder proposals calling for such arrangements. Had any of the Big Three submitted proposals advocating those changes, that initiative would likely have led to the adoption of the arrangements supported by the Big Three in many cases.

The Big Three's practice of voting consistently for shareholder proposals advocating certain changes yet never initiating such proposals is difficult to reconcile with the no-agency-cost view. However, this reactive-not-proactive approach is consistent with, and can be explained by, the agency-costs view. Whereas corporate managers have come to expect and accept the Big Three voting for shareholder proposals advocating changes consistent with governance best practices, corporate managers might view the proactive submission of proposals as adversarial or even confrontational.

By refraining from submitting shareholder proposals, the Big Three enable many portfolio companies to maintain governance arrangements that are inconsistent with the Big Three's governance principles. As a result, consistent with the agency-costs view, the Big Three's stewardship activities serve their beneficial investors significantly less than they could.

F. Avoiding Involvement in Director Nominations and Schedule 13D Filings

Directors matter. The characteristics, background, and experience of directors have considerable influence over the governance and performance of companies. The governance principles on which the Big Three focus have an impact on the selection of directors (e.g., by discouraging the selection of directors who did not consistently attend past board meetings, and encouraging gender diversity among directors). However, among the very large number of individuals whose selection would comply with the Big Three's principles, some potential directors might clearly be better choices than others given the particular portfolio company's circumstances and needs. A board with governance processes that accord completely with the standards promoted by the Big Three may sometimes select one or more particular individuals who are not well suited to the needs of the company, or fail to select one or more individuals who could be expected to improve board performance.

When the Big Three hold large stakes in such a company, their beneficial investors would be served by the index fund managers seeking to identify when changes to the set of individuals comprising the board are desirable and working to facilitate such desirable

¹¹⁰ See note 109, *supra*, and accompanying text.

changes. Those desirable changes might not require a representative of the index fund manager to join the board—a change in the set of independent directors on the board by adding and/or removing one or more directors could be sufficient.¹¹¹

In this Section we examine whether the Big Three do in fact seek to influence or be involved in the selection of individuals who serve on the boards of their portfolio companies. We examine both (i) formal nominations of individuals to serve as directors, and (ii) mere communications to portfolio companies suggesting particular individuals that should be added to or removed from the board of directors. We find that the Big Three appear to avoid both types of activities.

We begin by gathering data on director nominations. Table 8 shows that there were approximately 2,400 director nominations at U.S. companies from 2008 to 2017.¹¹² However, our review of these nominations indicates that not a single nomination was made by any of the Big Three.

Year	Director Nominations
2008	255
2009	235
2010	190
2011	177
2012	206
2013	198
2014	229
2015	266
2016	195
2017	209
Total	2,373

Table 8. Actual and Proposed Director Nominations

Even though the Big Three did not formally nominate any directors it is still possible that they suggested that particular individuals be added to or removed from a company's

¹¹¹ For evidence that activist hedge funds often seek to improve value in their portfolio companies by introducing new independent directors, see Lucian A. Bebchuk, Alon Brav, Wei Jiang & Thomas Keusch, *Dancing with Activists*, SSRN Scholarly Paper ID 2948869 (Soc. Sci. Res. Network), Apr. 1, 2017.

¹¹² Table 8 is based on S&P Dow Jones Indices data from Compustat and on director nomination data from SharkRepellent.net.

board of directors. To evaluate whether this was the case, we reviewed the examples of engagements described in their Stewardship Reports. Our review indicates that such communications were not part of the engagement in any of the numerous examples given by the Stewardship Reports, either with named companies, or in examples of stewardship with unnamed companies.

We next examine this issue more systematically by gathering data on the positions of 5% or more that the Big Three held in its portfolio companies in the Russell 3000 index during the ten-year period from 2008 to 2017.¹¹³ As Table 9 indicates, the incidence of positions of 5% or more in the hands of the Big Three was large and increased throughout the period, reaching more than 4,500 such positions in 2017.

	BlackRock	Vanguard	SSGA	Total
2008	1,175	31	83	1,289
2009	1,383	83	71	1,537
2010	1,464	176	82	1,722
2011	1,495	438	107	2,040
2012	1,629	833	153	2,615
2013	1,818	992	173	2,983
2014	1,926	1,283	210	3,419
2015	2,038	1,489	150	3,677
2016	2,281	1,631	200	4,112
2017	2,454	1,839	221	4,514

Table 9. Big Three Positions of 5% or More

As discussed in Section II.D.3, an index fund manager with a block of 5% or more must file on Schedule 13D if its activities have the purpose or effect of influencing the identity of the individuals serving on the board.¹¹⁴ We therefore gathered data on Schedule 13D filings over the ten year period from 2008 to 2017. We find that none of the Big Three made a single Schedule 13D filing, even though there were thousands of situations in which they had positions of 5% or more in portfolio companies. This evidence supports our analysis in Section II.D.3 concerning the Big Three's incentives to avoid taking on

¹¹³ Table 9 is based on institutional ownership data from FactSet Ownership, investment manager rankings data from the Pensions & Investments 2018 Survey of Money Managers (accessed July 11, 2018) [henceforth, "Pensions & Investments"], Russell US Index constituent data from FTSE Russell; data on S&P Dow Jones Indices from Compustat, and data on Schedule 13D filings from SharkRepellent.net.

¹¹⁴ 15 U.S.C. § 78m(d) (2012); 17 C.F.R. § 240.13d-1(b) (2017).

Schedule 13D filer status. Furthermore, given this evidence, we can infer that the Big Three refrain entirely from communications about particular individuals who they believe should be added to or removed from the board in the vast number of situations in which one or more of the Big Three had positions of 5% or more in portfolio companies.

It could be argued that the Big Three do not need to engage with companies about adding or removing particular directors because activist hedge funds take on this role. However, the Big Three have made clear that their views on the optimal selection of board members often differ from those of activist hedge funds, with SSGA issuing a statement criticizing portfolio companies that reach settlement agreements with activist hedge funds to add directors favored by activists without consulting other investors.¹¹⁵ The best way for any of the Big Three to increase the likelihood that underperforming companies would make director additions that are consistent with its views regarding value-maximization would be for the Big Three manager itself to communicate with its portfolio companies about the particular director additions they believe would be best for the company.

The Big Three's reluctance to be involved in selecting particular directors is difficult to reconcile with the no-agency-costs view. However, it is consistent with, and can be explained by, our incentive analysis and the agency-costs view. Examining the fit of particular directors and identifying directors who should be added or removed requires the investment of significant time and resources. The Big Three's avoidance of such actions is consistent with their incentives to under-invest in stewardship and with the limited resources they actually allocate to stewardship at any particular portfolio company. Furthermore, deference to corporate managers on the choice of directors (assuming general process requirements are met) is consistent with the deference incentives that we identified.

G. Limited Involvement in Corporate Governance Reforms

The Big Three's beneficial investors would benefit from having their index fund managers contribute to corporate governance reforms that are likely to have a material effect on their portfolio companies. The Big Three could serve their investors' interests by seeking to facilitate desirable rule changes and impede undesirable changes. Commentators have long observed that index fund investors have an especially keen interest in rule changes that could enhance the value of a large number of companies, even by a small amount.¹¹⁶ Indeed, given the Big Three's focus on governance practices, supporters of

¹¹⁵ See State St. Global Advisors, Protecting Long-Term Shareholder Interests In Activist Engagements (2016).

¹¹⁶ See, e.g., Ronald J. Gilson & Reiner Kraakman, *Reinventing the Outside Director: An Agenda for Institutional Investors*, 43 STAN. L. REV. 863, 867 (1990–1991) ("indexed institutional investors should seek a corporate governance system that ... can improve the performance of all companies.").

index fund stewardship have argued that the Big Three are well-positioned to contribute in this way.¹¹⁷

This Section provides empirical evidence about two key ways in which institutional investors can seek to influence legal rules regarding public companies: by commenting on SEC proposed rules regarding corporate governance, and by filing amicus curiae briefs in significant precedential litigation in this field. We find that the Big Three have had very little participation in either of these activities, and we explain that this finding is consistent with our incentive analysis.

Comment Letters on Proposed SEC Rules. By submitting comments on proposed SEC rules, commenters have an opportunity to influence SEC rulemaking. Under the no-agency-costs view, the Big Three, holding more than 20% of corporate equities in the marketplace, should be expected to be active participants and frequently express their views on proposed SEC rules. Clearly, when a Big Three manager views a proposed SEC rule as desirable or undesirable, submitting a comment could contribute to achieving value increases in portfolio companies or avoiding value decreases. Furthermore, even if the index fund manager views a proposed rule as practically insignificant for investor interests, expressing this view could still benefit the manager's beneficial investors by directing the SEC's limited resources and attention to changes that have more potential to benefit investors.

We hand-collected and reviewed the comment on all SEC proposed rules regarding corporate governance (80) from the SEC website. As Table 10 indicates,¹¹⁸ each of the Big Three submitted comments on only one or two of the 20 proposed rules that attracted the most comments. By comparison, the largest two asset owners, CalPERS and CalSTRS, whose assets are largely indexed but very small compared to those managed by the Big Three, submitted comments on 7 (CalPERS) and 11 (CalSTRS) proposed rules.

A similar picture emerges when we examine the larger set of proposed rules that received relatively less attention. Of those 60 proposed rules, each of the Big Three submitted comments with respect to no more than four (less than 10%). In contrast, CalPERS and CalSTRS submitted comments with respect to between 8 and 16 rules.

¹¹⁷ See, e.g., Fisch, Hamdani & Davidoff Solomon, *supra* note 13, at 15; Eckstein, *supra* note 89, at 42.

¹¹⁸ Table 10 is based on an analysis of comments lists collected from the webpages of proposed SEC rules, Sec. & Exch. Comm'n, Proposed Rules, https://www.sec.gov/rules/proposed.shtml. (accessed July 13, 2018). Totals for asset owners are less than the sum of comments by the three individual funds as several comments were submitted jointly by two or more of the funds.

	Index Fund Managers			Large Asset Owners			
	BlackRock	Vanguard	SSGA	Total	CalPERS	CalSTRS	Total
Most Commented 25% of Proposed Rules (20)							
Total Comments Submitted	1	4	2	7	16	11	26
Comments per Proposed Rule	0.05	0.20	0.10	0.35	0.80	0.55	1.30
Proposed Rules Commented On	1	2	2	5	11	7	17
Proportion of Proposed Rules Commented On	5%	10%	10%	25%	55%	35%	85%
Remaining 75% of Proposed Rules (60)							
Total Comments Submitted	2	4	1	7	10	11	20
Comments per Proposed Rule	0.03	0.07	0.02	0.12	0.17	0.18	0.33
Proposed Rules Commented On	2	4	1	7	9	8	16
Proportion of Proposed Rules Commented On	3%	7%	2%	12%	15%	13%	27%

Table 10. Involvement in SEC Proposed Rules Regarding Corporate Governance

Amicus Curiae Briefs in Precedential Litigation. Supporters of index fund stewardship have argued that "institutional investors now regularly file amicus briefs",¹¹⁹ noting an amicus brief that BlackRock filed on the issue of marriage equality for same-sex couples.¹²⁰ However, although the subject of same-sex marriage is clearly important, it does not involve a corporate governance issue. We therefore examine in this Subsection evidence on the submission of amicus briefs in cases of importance to protecting and enhancing the value of index fund portfolios.

Table 11 presents data from 2008 to 2017 on the ten cases of precedential litigation regarding investor protection that the Council of Institutional Investors identified as

¹¹⁹ Fisch, Hamdani & Davidoff Solomon, *supra* note 13, at 27.

¹²⁰ *Id.* at 28, fn. 160 (citing a blog post as "reporting that BlackRock signed an amicus brief to the U.S. Supreme Court arguing for marriage equality for same sex couples").

sufficiently important to warrant the filing of an amicus curiae brief.¹²¹ We reviewed the filings in each of these cases to identify all of the briefs submitted. Eight of the ten cases gathered a significant number of amicus curiae briefs, with six of the ten drawing between 10 and 30 briefs.

Reviewing the filed briefs, we find that none of the Big Three filed a single amicus curiae brief in any of these ten precedential litigations, either alone or jointly with any other party. We note that the two largest asset owners, CalPERS and CalSTRS, whose assets are largely indexed, although less than 5% of those assets under management held by the largest of the Big Three, filed their own briefs or joined the Council of Institutional Investors' brief in five of the ten cases. In two more of the ten cases an individual amicus brief was also filed by the third-largest asset owner, the New York State Common Retirement Fund.¹²² However, in the ten cases of precedential litigation most important to investors, the voices of the Big Three, representing more than 20% of corporate equities, were absent.

¹²¹ We are grateful to the General Counsel of the Council of Institutional Investors for providing us with this list.

¹²² Those cases were Merck & Co. v. Richard Reynold, 559 U.S. 633 (2010), and Janus Capital Group, Inc. v. First Derivative Traders, 564 U.S. 135 (2011).

Case	Amicus Briefs	Briefs by Two Largest Asset Owners
Stoneridge Investment Partners, LLC v. Scientific-Atlanta, Inc., 552 U.S. 148 (2008)	29	$\checkmark\checkmark$
Free Enterprise Fund v. Public Company Accounting Oversight Board, 537 F.3d 667 (D.C. Cir. 2008)	22	**
Free Enterprise Fund v. Public Company Accounting Oversight Board, 561 U.S. 477 (2010)	17	**
Merck & Co. v. Richard Reynold, 559 U.S. 633 (2010)	15	
New York State Teachers' Retirement System v. The Mercury Pension Fund Group, 618 F.3d 988 (9th Cir. 2010)	1	
Janus Capital Group, Inc. v. First Derivative Traders, 564 U.S. 135 (2011)	13	
Business Rountdable v. SEC, 647 F.3d 1144 (D.C. Cir. 2011)	6	**
New Jersey Carpenters Health Fund v. RALI Series 2006-QO1 Trust, 477 Fed. Appx. 809 (2d Cir. 2012)	6	
Halliburton Co. v. Erica P. John Fund, Inc., 573 U.S. 13 (2014)	25	**
Corre Opportunities Fund, LP v. Emmis Communications Corp., 792 F.3d 737 (7th Cir. 2015)	2	

Table 11. Amicus Curiae Briefs, 2008–2017

 \checkmark Briefs filed separately by both of the asset owners

** Brief filed by both of the asset owners, jointly with CII

Incentives. Thus, although supporters of index fund stewardship have argued that the Big Three are well positioned to contribute to legal reforms affecting public companies, our evidence indicates that their activities in this regard are very modest. Indeed, the Big Three have collectively contributed fewer comments on SEC proposed rules regarding corporate governance, and fewer amicus briefs in precedential litigation, than the two largest asset owners, which have corporate equities with a value of approximately 5% of that of the largest of the Big Three.

Under the no-agency-costs view, more involvement should be expected from investors that collectively hold more than \$5 trillion in corporate equities. However, the reluctance of the Big Three to contribute to corporate governance reforms is consistent with, and can be explained by, the incentives identified by the agency-costs view described in Part II. The incentives of the Big Three to defer to corporate managers discourage them from supporting reforms that strengthen shareholder rights, but their interest in reducing the salience of their deference gives them incentives not to oppose such reforms. Thus, the interests of the Big Three are likely served by generally staying on the sidelines and not lending their influential support either in favor of or against such reforms.

H. Avoiding Lead Plaintiff Positions

Securities litigation provides an important instrument for deterring misconduct by corporate insiders, as well as for compensating investors when such misconduct occurs. The "lead plaintiff" that is selected in any securities class action plays a significant role in navigating the litigation. The lead plaintiff plays a key role in selecting and setting compensation incentives for class counsel and in overseeing the terms of any settlement, including any monetary recovery and any prospective corporate governance changes that will be required as part of the settlement.

Since the adoption of the Private Securities Litigation Reform Act (PSLRA) in 1995, securities law has followed a presumption that the plaintiff with the largest financial interest in a class action should be the lead plaintiff in the litigation.¹²³ The underlying policy view has been that it is advantageous for investors to have an institutional investor with significant "skin in the game" to play the role of lead plaintiff, because such investors have the greatest incentive and ability to monitor the litigation and ensure that it is conducted in the interest of investors.¹²⁴

With over \$5 trillion in corporate equities, the Big Three's beneficial investors have significant monetary interests in the outcome of many securities class actions. The legal rules and policies of the PSLRA indicate that the interests of these investors are best served by having the Big Three—institutional investors with very substantial skin in the game—play the role of lead plaintiffs in significant securities class actions. By so doing, the Big Three could help to ensure that the outcome of such actions would best serve the interests of investors. Among other things, they would be able to incentivize class counsel adequately and ensure that corporate governance reforms will be introduced as part of the settlement if, and only if, they are necessary.

This Section examines the extent to which the Big Three contributed to stewardship by serving in a lead plaintiff roles in significant securities cases between 2008 and 2017. Table 12 presents data that we gathered regarding the incidence of securities class actions during those ten years.¹²⁵ So that we do not include marginal cases that are more likely to be frivolous, we focus on cases that were settled for more than \$10 million as well as the subset of those cases that were settled for more than \$100 million. These are cases that can be expected to be brought up regardless of who agrees to serve as lead plaintiff. Given that

¹²³ Private Securities Litigation Reform Act of 1995, 15 U.S.C. § 78u-4(a)(3)(B)(iii).

¹²⁴ For an influential article written during the debate leading to the passage of the PSLRA that advocated having institutional investors serve as lead plaintiffs, see 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 (1995).

¹²⁵ Table 12 is based on securities class action settlement data from Institutional Shareholder Services' Securities Class Action Database (accessed July 16, 2018) [henceforth, "SCAS"].

they are likely to take place in any event, there are significant benefits for investors from having the litigation overseen by a lead plaintiff with substantial skin in the game.

Table 12 shows that 219 class actions settled for more than \$10 million during the tenyear period from 2008 to 2017, with a total recovery of about \$24 billion. Furthermore, of these 219 cases, 47 class actions settled for more than \$100 million, with a total recovery of \$18.7 billion.

Year	Cases Settled for over \$10m	Total Recovery in Cases Settled for over \$10m (\$m)	Cases Settled for over \$100m	Total Recovery in Cases Settled for over \$100m (\$m)
2008	58	\$6,913	18	\$5,282
2009	38	\$6,542	7	\$5,636
2010	20	\$1,971	4	\$1,340
2011	20	\$1,711	6	\$1,194
2012	20	\$1,300	3	\$755
2013	15	\$497	1	\$116
2014	29	\$4,633	5	\$3,979
2015	11	\$463	1	\$142
2016	7	\$383	2	\$235
2017	1	\$40	0	\$0
Total	219	\$24,453	47	\$18,679

Table 12. Securities Class Action Cases

For the reasons discussed above, the Big Three's beneficial investors could well have benefited from having their fund managers serve as lead plaintiff in some of these significant securities class actions. Our review of the data, however, indicates that *none* of the Big Three served as lead plaintiff in *any* of these securities class actions during the tenyear period that we examined.

The avoidance of any lead plaintiff positions by the Big Three is in tension with the noagency-costs view. However, this pattern is consistent with, and can be explained by, the agency-costs view and its incentive analysis.¹²⁶ First, the empirical pattern is consistent with the incentive to under-invest in stewardship. Consider a significant litigation and

¹²⁶ For a related discussion of why large investment managers do not become lead plaintiffs, see David H. Webber, *Private Policing of Mergers and Acquisitions: An Empirical Assessment of Institutional Lead Plaintiffs in Transactional Class and Derivative Actions*, 38 DEL. J. CORP. L. 907 (2013–2014) and David H. Webber, *Shareholder Litigation without Class Actions*, 57 ARIZ. L. REV. 201 (2015)

suppose that having an index fund manager serve as lead plaintiff would produce a benefit of \$1 million for the fund's beneficial investors. In this case, taking the lead plaintiff role would be efficient as along as doing so could be done with a cost below \$1 million. However, if the index fund manager has a fractional share of 0.5%, taking the lead plaintiff position would not serve the manager's interests as long as the cost exceeds \$5,000.

Furthermore, the avoidance of any lead plaintiff positions is also consistent with the Big Three's deference incentive. Doing a good job as lead plaintiff in these actions may require taking strong positions against certain corporate managers and corporate managers may view such activity unfavorably. At the same time, because choices made in securities litigation are public and can be scrutinized, for the Big Three to carry out lead plaintiff responsibilities in a manner that is excessively deferential toward corporate managers would make such deference more salient to outsiders. Avoiding lead plaintiff positions thus a safe strategy that allows index fund managers to avoid both frictions and perceptions that they consider undesirable.

IV. POLICY

We now turn to policy implications. The analysis in the preceding Parts identified and documented the incentives of index fund managers to under-invest in stewardship and defer to corporate managers. Below we discuss a number of measures that could be used to address these incentive problems. In each case, we do not provide a comprehensive analysis of each measure or give a blueprint for its implementation; rather, we wish to put these measures on the table for subsequent discussion as partial solutions to the considerable problems that we have identified. Our aim is also not to present an exhaustive identification of approaches that should be considered for addressing the identified problems, but to suggest proposals that highlight the need for a policy reexamination of the legal rules in this area, with an openness to fresh ideas.

In particular, Section A proposes measures to encourage the use of stewardship tools by index fund managers; Section B examines measures to address problems arising from business relationships; Section C focuses on measures to bring transparency to private engagements; and Section D discusses measures to limit the scale of assets managed by each index fund manager.

We also discuss the implications of our analysis for important ongoing debates in the corporate law field. Our analysis undermines key arguments made in the heated debates on common ownership (Section E) and hedge fund activism (Section F), and suggests a reorientation of those debates.

Before proceeding, we would like to note that our analysis assumes that index fund stewardship should continue, and will do so. We do not support recent proposals to prevent index funds from voting their shares.¹²⁷ While we have explained that index fund managers (including the Big Three) might under-invest in making informed stewardship decisions, we view these decisions as more informed than the decisions of many other shareholders whose entitlement to vote is not questioned, such as retail investors and investment funds that hold shares for only a short period. Therefore, although we have concerns about index fund incentives, our focus is not on eliminating index fund stewardship, but on improving it, and assessing its implications for ongoing debates.

A. Encouraging Investment in Stewardship

The evidence that we presented in Part III shows that, consistent with our incentive analysis, the Big Three make investments in stewardship that are very small relative to the number of their portfolio companies and the value of their equity assets: each allocates to stewardship less than 0.0003% of the value of assets under management and devotes, on average, only a few thousand dollars in stewardship costs to large positions. These levels of stewardship are likely to be less than optimal from the collective perspective of index fund investors, who would be better off if all index fund managers increased their investments in stewardship and passed the costs on to their beneficial investors.

Policymakers should explore ways to encourage index fund managers to move towards these higher levels of stewardship investment. As we explain below, because current stewardship budgets are economically negligible relative to the fee income of the Big Three, pressure from investors and from the public alone could lead the Big Three to raise their stewardship budgets considerably, and, given the importance of increasing investment in stewardship, it would be worthwhile for policy makers to consider measures to encourage such investment. To that end, we suggest that they consider three possible measures.

1. Charging Stewardship Costs to the Index Fund. One way to respond to the identified incentive problems is to facilitate the ability of index fund managers to charge stewardship costs directly to the index fund so they are born by the index fund investors that also capture the gains from stewardship activity. This would mean that index fund managers would no longer have to bear the cost of stewardship investments while capturing only a tiny benefit of the gains such investments generate.¹²⁸ As we explained above, the stewardship efforts of index fund managers are generally undertaken by a centralized department on behalf of all the funds in the fund family. A significant impediment to charging stewardship costs to

¹²⁷ See Lund, supra note 13.

¹²⁸ See also Assaf Hamdani, Eugene Kandel, Yevgeny Mugerman & Yishay Yafeh, *Incentive Fees and Competition in Pension Funds: Evidence from a Regulatory Experiment*, 2 J. OF LAW, FINANCE, & ACCT. 49, 54 (2017) (advocating performance fees for retirement savings funds as an alternative approach).

index fund investors is the difficulty of allocating centralized stewardship costs to index funds without risking litigation. Regulators could help alleviate this problem. One solution could be for the SEC to adopt a safe harbor that would allow fund families that have a central stewardship unit to allocate the cost of such a unit to the portfolios of the different funds that they manage, and to do so proportionately to the value of the portfolio of each fund.¹²⁹

2. *Sharing Outside Research Services*. As Section III.C explained, it would be desirable for index fund managers to monitor portfolio companies to identify underperformance, to assess the characteristics and fit of their directors, and—when appropriate—to identify individual directors who would be worth removing or adding. Such stewardship activities require close attention to the particular circumstances of individual companies and, are therefore costly. However, such information acquisition could serve more than one index fund manager. Policymakers should thus facilitate the pooling of research, including having such research be undertaken by outside organizations on behalf of multiple index fund managers.¹³⁰

Consider the following thought experiment. Suppose that there were three substantial organizations that monitored each company in the major indexes to reveal underperformance and identify changes—including the choice of directors—that could improve performance. Suppose also that the Big Three and other index fund managers shared the costs of these organizations and received reports from them to inform their stewardship decision-making. In our view, such pooling of resources already, which takes place in Europe,¹³¹ could also improve index fund stewardship in the United States. Policy makers should facilitate such pooling by making it clear that the shared use of such resources would not create a group for the purposes of Section 13(d).¹³² We note that the European Securities and Market Authority provides a safe harbor for certain collective efforts by shareholders.¹³³

3. Making Stewardship Expenses Mandatory. Finally, a third measure for policymakers to consider is to require each index fund manager to invest an amount in stewardship that

¹²⁹ For example, the safe harbor could provide a precise formula, such as dividing the cost proportionately to the average value of the portfolio at the beginning or end of each quarter of the calendar year.

¹³⁰ For recent policy discussions about pooling of resources by institutional investors, see Sharon Hannes, *Super Hedge Fund*, 40 DEL. J. CORP. L. 163 (2015–2016), as well as Luca Enriques & Alessandro Romano, *Institutional Investor Voting Behavior: A Network Theory Perspective*, SSRN Scholarly Paper ID 3157708 36 (Soc. Sci. Res. Network), Apr. 1, 2018.

¹³¹ In the United Kingdom some pooling of stewardship is done through the Investor Forum. *See* About The Investor Forum, https://www.investorforum.org.uk/about.

¹³² For a review of these rules, see JACOBS, *supra* note 77, ch. 2

¹³³ European Sec. & Markets Auth., *Information on Shareholder Cooperation and Acting in Concert under the Takeover Bids Directive – 1st Update* Jun. 20, 2014.

is above a specified minimum fraction of its indexed assets under management. Consider, as a thought experiment, a requirement that all index fund managers allocate for stewardship an amount equal to at least 0.0005% or 0.001% of their indexed equity assets under management. Although this investment would remain an economically negligible fraction of total index fund manager fee revenue, it would lead to a doubling or tripling of stewardship budgets. Of course, as with any such mandate, a difficult issue would be the specific investment requirement. However, as long as the required investment was held to a multiple of existing stewardship investments, the risk of overshooting the desirable stewardship level would remain relatively low compared to the economic benefit from reducing under-investment. Indeed, even if policymakers did not adopt such a mandate, merely considering it would likely encourage index fund managers to increase their stewardship incentives.

B. Business Relationships with Public Companies

As Section II.D explained, index fund managers' business relationships with public companies provide significant incentives for them to be excessively deferential to corporate managers. We put forward two alternative measures that could be considered to address this problem: limits on business relationships and disclosure requirements.¹³⁴

1. Limits on Business Relationships. One natural approach for regulators is to constrain or prohibit business relationships between index fund managers (and potentially some other investment managers) and their portfolio companies. The substantial assets under management should give index fund managers sufficient scale that they can operate solely as investment managers without engaging in other business activities. Put another way, there would not appear to be substantial efficiency gains from investment managers also operating such other businesses, so precluding them from doing so would not have significant social costs.¹³⁵

For example, public officials should consider prohibiting investment managers from administering 401(k) plans for employers. This is a business that inherently places index fund managers into meaningful conflicts of interest with a significant number of portfolio companies over which they conduct stewardship. As explained earlier, empirical evidence suggests that these conflicts of interest distort investment managers' stewardship

¹³⁴ For early discussions of regulatory responses to problems arising from business relationships, see Bernard S. Black, *Agents Watching Agents: The Promise of Institutional Investor Voice*, 39 UCLA L. REV. 811, 885 (1991–1992), and Jennifer S. Taub, *Able but Not Willing: The Failure of Mutual Fund Advisers to Advocate for Shareholders' Rights*, 34 J. CORP. L. 843, 887–88 (2008–2009).

¹³⁵ Indeed, in addition to considering whether index fund managers should engage in business activities other than investment management, public officials may wish consider whether index fund managers should also manage active funds, as the Big Three currently do.

incentives. More broadly, policy makers should review investment managers' range of business relationships with portfolio companies and compare (i) the efficiencies that result from combining these businesses with (ii) the adverse effects of these businesses on the incentives of investment managers.

2. Disclosure Requirements. A more moderate approach would be to require index fund managers to disclose their business relationships with portfolio companies with particularity. Index fund managers currently provide some information about their policies and practices with respect to conflicts of interest, but they do not provide particularized information about the actual cases where potential conflicts arise. Disclosure alone would not preclude business relationships between index fund managers and their portfolio companies, but it would shed light on those relationships, enabling outsiders to assess how they affect stewardship decisions. Such scrutiny may help offset the undesirable incentives of index fund managers and thus have positive effects on their stewardship activities. Transparency would also provide a basis for regulators to make informed choices regarding the desirability of substantive restrictions on business relationships.

C. Bringing Transparency to Private Engagements

As we have discussed, the leaders of the Big Three consider private engagements with portfolio companies as the major channel through which they conduct stewardship. We have presented evidence that private engagement takes place with a very small minority of portfolio companies. Nonetheless, used effectively, private engagement by index fund managers could have a powerful influence on portfolio companies. Our analysis suggests that it would be desirable for index fund managers to provide much more detailed disclosure regarding their private engagements.

BlackRock and Vanguard currently provide very little information about the companies with which they engage privately and what takes transpires in those engagements. Each of the Big Three publishes an annual stewardship report with the number of its engagements, and the illustrative topics they covered. But this is insufficient to determine the vast majority of companies with which BlackRock and Vanguard engaged. SSGA is somewhat more transparent about its engagements, disclosing the companies with which it engaged¹³⁶ and the general categories of each engagement.¹³⁷ In this Section we propose bringing greater transparency to this important component of fund stewardship for all index fund managers.

The Value of Transparency. We believe that making index fund engagements more transparent would be desirable for two reasons. First, transparency would provide all

¹³⁶ State St. Global Advisors, Annual Stewardship Report, *supra* note 7, at Appendix, 41-53.

¹³⁷ For example, for SSGA's reporting on companies with which it had engagements focused on executive compensation concerns, see *Id.* at 34.

investors with material information. Companies are already required to disclose any engagements with activist hedge funds. We believe that the marketplace should similarly be informed about engagements with index funds that have large stakes in the company.

Private engagements involve both information flows from public companies to index fund managers, and vice versa.¹³⁸ Index fund managers seek information that they view as useful for their voting decisions: For instance, during Vanguard's engagements with two companies on climate risk disclosure, corporate managers made commitments to improve disclosure that caused Vanguard to vote against a shareholder proposal requesting such disclosure.¹³⁹ In BlackRock's engagements, it "seek[s] to better understand how boards assess their performance and the skills and expertise needed to take the company through its future ... multi-year strategy" and "continue[s] to engage companies to better understand their progress on improving gender balance in the boardroom."¹⁴⁰ If either BlackRock or Vanguard receive information that it deems material for its voting decisions, such information is also likely to be material to the voting decisions of other investors.

Private engagements also involve index fund managers communicating their views that portfolio companies should change their governance practices in certain ways. For example, SSGA provided feedback to Qualcomm Inc. regarding its compensation plans, as a result of which the company made the desired changes to those plans.¹⁴¹ Private engagement by the Big Three is predicated on the belief that such communications increase the likelihood that requested changes will occur. Information that the Big Three have made such requests would thus be material for other investors.

The second reason why transparency would be desirable is that it should lead to more meaningful engagement by index fund managers. Thus far, we have taken the stewardship decisions of index fund managers as given. However, transparency is likely to affect stewardship decisions in desirable ways. Once investors are informed about the companies with which engagements took place and the subjects of those engagements, they will be better able to assess the effectiveness of such engagements. This would motivate index fund managers to achieve more significant outcomes from their private engagements.

The SEC's Regulation FD requires companies to disclose material information that they provide to some investors. In our view, it would be reasonable to interpret Regulation FD as requiring companies to disclose the existence and contents of all of their engagements. That Vanguard believes information from its private engagements with a

¹³⁸ See Mallow & Sethi, *supra* note 95, at 393 (an article by senior officers of BlackRock explaining that "[e]ngagement could take the form of consultation for the purpose of enhancing two way information flow between shareholders and management." [Footnote omitted]).

¹³⁹ Vanguard, Annual Stewardship Report, *supra* note 32, at 12.

¹⁴⁰ See, e.g. BlackRock, BlackRock Investment Stewardship Engagement Priorities for 2018 Mar. 2018 3.

¹⁴¹ State St. Global Advisors, Annual Stewardship Report, *supra* note 7, at 26.

company to be material is highly suggestive that other investors would regard it as material as well, and the information should therefore also be considered material to the company. Vanguard knows what demands it has communicated and how the company has responded; Regulation FD should require the disclosure of this information to all investors. Counsel to public companies and to the SEC should consider whether Regulation FD already requires companies to disclose the existence and contents of their engagements with index fund managers, as they do for engagements with activist hedge funds.

If the SEC does not consider such disclosure to be currently required under Regulation FD, it should consider amending Regulation FD or adopting other rules to require such disclosure, either by companies or by investment managers. In designing such disclosure rules, the SEC should aim to place other investors on an equal informational footing with the index fund manager undertaking the engagement. Such disclosure may include the engagements that took place, their duration, whether they were by phone or in person, the main topics discussed, the positions that the index fund manager expressed, and the company's responses. Were investors aware of this information they could assess how effectively index fund managers wield their considerable power.

Potential Objections. Index fund managers and their supporters are likely to argue that such disclosure could chill private engagement: companies might not be willing to engage privately with index fund managers if they know their communications would be disclosed. We do not believe this to be a realistic concern. Companies are unlikely to reject conversations with their largest shareholders. SSGA has disclosed the identity and nature of its engagements since 2014 without any apparent effect on its ability to engage.¹⁴² Indeed, if disclosure included whether particular companies declined to engage, the possibility of such disclosure alone would likely discourage any companies from declining engagement with index fund managers.

It could also be argued that disclosure would make engagements less effective in producing results. Companies may be more willing to accept private requests because they would prefer not to appear susceptible to outside pressure. However, any promise to accede to or seriously consider a request is even more likely to be material and therefore subject to Regulation FD. If an engagement involves only a request by the index fund manager, it is debatable whether disclosing the request would make the company less likely to heed it. Following a long-term investor's request may be positively regarded. The willingness of companies to implement precatory shareholder proposals that receive majority support demonstrates that the visibility of shareholder pressure is generally not a barrier to management responsiveness. While these costs should be considered, they do not appear sufficient to maintain the lack of engagement transparency.

¹⁴² State St. Global Advisors, Annual Stewardship Report 2014 Year End (2015).

D. Size Limits

As noted earlier, the index fund sector is expected to continue to grow, and is likely to continue to be dominated by the Big Three. The Big Three already own stakes of 5% or more in a vast number of public companies, and the number and size of such blocks will likely continue to grow. This growing concentration of equity in the hands of three players, we argue in this Section, raises significant policy concerns and that policymakers should consider measures to limit or reverse this trend.¹⁴³

Measures to limit or discourage large financial stakes are not unknown in the U.S. regulatory framework. Long-standing tax rules deter any investment fund from holding more than 10% of the stock of any portfolio company.¹⁴⁴ However, these rules apply only to individual funds and do not prevent investment managers from advising fund complexes that cross these thresholds in the aggregate. We believe that policy makers should consider measures to prevent or deter investment fund managers from managing investment funds that cross certain thresholds in the aggregate, whether through fiat, tax penalties, or otherwise.

Such an approach would have an important effect on the trajectory of index fund growth. For concreteness, let us suppose that the proportion of U.S. equity in index funds is expected to grow to 45%. Because the current Big Three would likely continue to dominate the sector if there is no regulatory intervention, suppose that they would become a "Giant Three," each of which would own approximately 15% of the shares of each large public company. Let us now compare a regulatory approach that would effectively prevent investment fund managers from managing funds holding, in the aggregate, more than 5% of any particular company.¹⁴⁵ Let us also suppose that this would lead to holdings being divided equally among nine index fund managers—the "Big-ish Nine"—each holding about 5% of each large public company.

In our view, there are good policy reasons to prefer the Big-ish Nine scenario over the Giant Three scenario. First, having the sector in the hands of three players rather than nine is unlikely to result in significant incremental economies of scale. Each of the Big-ish Nine would be expected to be managing more than a trillion dollars; thus, they would all have substantial scale economies of their own, in the same order as the Big Three do at the moment.

Second, having nine decision makers rather than three would substantially reduce the risk of concentration, and concomitant legitimacy problems. Consider what would happen

¹⁴³ See also Coates, supra note 13 (expressing concerns about the rising concentration of corporate equity in the hands of a small number of players).

¹⁴⁴ For an account and discussion of these rules, see Roe, *supra* note 75, at 20–21.

¹⁴⁵ Since our aim is to put this general idea on the table for discussion, we do not discuss the design and implementation issues it would entail; instead, we focus on the basic conceptual question of whether this regulatory direction is worth pursuing.

if one of the Giant Three were to make a stewardship decision in a reasonable, good-faith expectation of increasing portfolio value that nonetheless turned out to be detrimental to their portfolio companies. The consequences would be large, because there is no feedback mechanism to correct such a decision: that manager's index funds would perform no worse than those of any rival index fund manager, so they would have no incentive to avoid or ameliorate their mistake.

There is also no market mechanism that rewards index fund managers for good judgment about stewardship for their portfolio companies. The financial success of index fund managers depends on their prowess at operating funds that mechanically track an index at low cost. Thus, there is no necessary association between this ability and judgment with respect to the stewardship of portfolio companies.

Third, the Big-ish Nine would likely provide a more effective check on corporate managers than the Giant Three. In the Giant Three scenario, each of the index fund managers would be continually apprehensive that its 15% block would raise concerns about its power and legitimacy, triggering demand for regulatory intervention to impose size limits or break them up. By contrast, in the Big-ish Nine scenario, with reasonable size limits already in place and voting power divided among the nine players holding, the index fund managers would have significantly less concern about additional regulatory intervention. In addition, since their blocks would not exceed 5%, none of the Big-ish Nine could be required to file on Schedule 13D, so they would not be discouraged from interventions that would require Schedule 13D filing if they held more than 5%. These factors would substantially reduce the incentives of the Big-ish Nine managers to be deferential to corporate managers, thereby allowing them to be more effective stewards of the interests of index fund investors.

Clearly, such size limits would represent a major step in the regulatory intervention into the distribution of control in the economy, a step that should not be taken lightly. However, the challenge posed by the power amassed by the Big Three is unusual in its economic significance and merits a consideration of such measures.

E. The Debate on Common Ownership

A significant body of recent academic work has expressed serious concern about one of the consequences of the rise of index funds: increases in common ownership, whereby an investment manager holds positions in all the companies in a given sector of the economy.¹⁴⁶ These authors argue that a rise in common ownership, whether from index funds or otherwise, can be expected to produce substantial anti-competitive effects that are

¹⁴⁶ For a review of this literature, see Martin C. Schmalz, *Common Ownership, Concentration and Corporate Conduct*, SSRN Scholarly Paper ID 3165340 (Soc. Sci. Res. Network), Feb. 26, 2018.

detrimental to the economy.¹⁴⁷ This view has led prominent legal scholars and economists—including Professors Elhauge, Hovenkamp, Posner, Scott Morton, and Weyl—to propose strong measures to constrain the rise of common ownership. Such measures include limiting investment managers to holding only one company in each economic sector, and having anti-trust regulators scrutinize the behavior of index funds and other similar investors.¹⁴⁸

This Article identifies index fund managers' incentives that common ownership scholars fail to take into account. In particular, as we have described, index fund managers have weak incentives to engage in stewardship aimed at enhancing the value of particular companies,¹⁴⁹ but they do have incentives to defer to the preferences of corporate managers. Thus, contrary to the worries of common ownership scholars, index fund managers should not be expected to push corporate managers to engage in business strategies that they would not wish to pursue on their own.

We believe that the alarmism over common ownership, and the scrutiny that it brings, may have two important negative consequences. First, it may push index fund managers to act even more deferentially than they have to date, in which case such alarmism could move stewardship even further in the wrong direction. The problem with index fund stewardship is not that it pushes corporate managers too much but that it pushes them too little.

Second, common ownership alarmism might push anti-trust officials in the wrong direction. There is evidence that concentration in many markets and the associated increases in markups have been on the rise in recent decades.¹⁵⁰ Dealing with such concentration requires antitrust regulators to focus their attention on the decisions of corporate managers. Common ownership concerns are a red herring that distracts anti-trust officials by unnecessarily refocusing their attention on ownership patterns and the stewardship of index fund managers.

¹⁴⁷ See José Azar, Martin Schmalz & Isabel Tecu, Anti-Competitive Effects of Common Ownership, J. OF FIN. (Forthcoming) (2018).

¹⁴⁸ See Einer Elhauge, *Horizontal Shareholding*, 129 HARV. L. REV. 1267 (2016); Eric A. Posner, Fiona Scott Morton & E. Glen Weyl, *A Proposal to Limit the Anti-Competitive Power of Institutional Investors*, 81 ANTITRUST L. J. 669 (2017); Fiona Scott Morton & Herbert Hovenkamp, *Horizontal Shareholding and Antitrust Policy*, 127 YALE L.J. 2026 (2018).

¹⁴⁹ For an empirical examination confirming our analysis, see Jonathan Lewellen & Katharina Lewellen, *Institutional Investors and Corporate Governance: The Incentive to Be Engaged* Sept. 2018.

¹⁵⁰ See Gustavo Grullon, Yelena Larkin & Roni Michaely, Are U.S. Industries Becoming More Concentrated?, SSRN Scholarly Paper ID 2612047 (Soc. Sci. Res. Network), Aug. 31, 2017.

F. The Debate on Hedge Fund Activism

The past decade has seen a heated debate over the merits of hedge fund activism, and how it should be governed.¹⁵¹ Opponents of hedge fund activism claim that it pushes public companies to improve short-term outcomes at the expense of long-term value, which is detrimental to investors in those companies, as well as to the economy. This has led these opponents to advocate for various measures to constrain activist hedge funds.¹⁵² Given the long-term focus of index funds, opponents of hedge fund activism view index fund stewardship as a preferable substitute for the activities of activist hedge funds.¹⁵³

The analysis in this Article suggests that understanding the stewardship incentives and behavior of index fund managers should lead to support for hedge fund activism rather than opposition. The shortcomings of index fund stewardship that we identify mean it cannot be a substitute for hedge fund activism. To the contrary, these shortcomings mean that hedge fund activism has a critical role in stewardship.

The incentives of hedge fund managers differ from those of the index fund managers that we have analyzed in three key ways. First, whereas index fund managers capture a time fraction on the governance gains that they produce, the so-called "2-and-20" compensation arrangements of hedge fund managers enable them to capture a meaningful proportion of any governance gains they bring about. Second, whereas index fund managers hold the same portfolios as rival managers tracking the same indexes and thus cannot improve performance relative to rivals by bringing about governance gains, activist hedge funds have concentrated portfolios, and governance gains in their main portfolio companies can thus greatly enhance their performance relative to rivals. Third, hedge fund managers generally do not have other business relationships with their portfolio companies, so they lack the other types of incentives that we have identified as inducing index fund managers to be excessively deferential to corporate managers.

¹⁵¹ For articles focusing on arguments for and against activist hedge funds, see Leo E. Strine, Jr. Who Bleeds When the Wolves Bite: A Flesh-and-Blood Perspective on Hedge Fund Activism and Our Strange Corporate Governance System, 126 YALE L.J. [i] (2016–2017); Bebchuk, Brav & Jiang, supra note 108.

¹⁵² Brokaw Act of 2017, 115th Cong. (2017-2018) S. 1744.

¹⁵³ For example, Martin Lipton, a strident opponent of hedge fund activism, has stated that "[BlackRock CEO Larry Fink's 2018 Letter to CEOs] is a major step in rejecting activism and short- termism", and that "BlackRock, State Street and Vanguard have continued to express support for sustainable long-term investment". Lipton, *supra* note 11; Lipton, *supra* note 35. For a review of the opposition to hedge fund activism co-authored by one of us, see Lucian A. Bebchuk, Alon Brav & Wei Jiang, *The Long-Term Effects of Hedge Fund Activism*, 115 COLUM. L. REV. 1085, 1093–96 (2015).

The different incentives of hedge fund managers cause them to invest substantial amounts in the stewardship of their portfolio companies. Hedge fund managers closely follow the particular business circumstances of those companies and identify ways to remedy underperformance. They can also use the full toolkit of shareholder powers—including nominating directors—vis-à-vis companies that they identify as underperforming.

Given these substantial differences in incentives and consequent stewardship behavior, index fund stewardship cannot substitute for hedge fund activism, especially with respect to remedying the underperformance of portfolio companies. The work of activist hedge funds in targeting and remedying underperformance can partially address the substantial gap left by the lack of stewardship by index fund managers, and thereby benefit index fund investors. Conversely, opposition to hedge fund activism would be contrary to the interests of index fund investors.

Although hedge fund activism can partially substitute for the lack of effective stewardship by index fund managers in some companies, it is important to recognize that it cannot fully address such stewardship shortcomings. There are three reasons for this. First, an activist hedge fund can be successful at a given company only if that company's management expects the index fund managers to support the activist hedge fund.¹⁵⁴ However, as we have explained in this Article, there are reasons to be concerned that index fund managers have incentives to be excessively deferential to corporate managers.¹⁵⁵ To the extent that index fund managers are expected not to support some value-enhancing changes that activist hedge funds would like to bring about, activist hedge funds would likely be unable to bring about such changes themselves.

Second, not only do activist hedge funds require the support of index funds to succeed in engagements that they undertake, but a lack of index fund support might discourage them from engaging with companies in the first place. A recent study by Alon Brav, Wei Jiang, and Tao Li shows that activists are less likely to engage with an underperforming company when institutional investors are less likely to vote for activist nominees.¹⁵⁶

Third, even where they could be successful, activist hedge funds have incentives to undertake stewardship activities only where such activities could result in very large increases in value. Hedge funds invest substantial resources in stewardship, and take on considerable risks in their activities, including liquidity risk and the risk of unsuccessful engagements. To compensate, activist hedge funds' own beneficial investors will demand higher net returns, which must be generated after first paying the substantial 2-and-20 fees charged by the hedge fund manager. As a result, activist hedge fund managers will be

¹⁵⁴ See, e.g., Bebchuk & Jackson, *supra* note 76, at 52; Gilson & Gordon, *supra* note 13, at 987.

¹⁵⁵ For recent empirical evidence regarding index fund managers' support for activist hedge funds, see Brav, Jiang & Li, *supra* note 112, at 3.

¹⁵⁶ *Id.* at 24–25.

willing to take on engagements only where an identified change would likely bring about large returns, sufficient to compensate their investors on a risk-adjusted basis after the manager's high fees. There will be many opportunities for smaller gains from stewardship—say, of approximately 5% to 10% —that activist hedge funds will ignore but that would significantly benefit index fund investors if they were realized.

For these reasons, activist hedge funds can be only a limited substitute for the lack of stewardship by index fund managers. Consequently, the problems with index fund stewardship identified in this Article remain of substantial concern, even if activist hedge funds are allowed to continue to operate without the impediments sought by their opponents.

G. Recognition and Reality

Recognition by policymakers and the public of the problems that we have analyzed in this Article would be necessary to bring about significant reforms in this area. Sections A to D of this Part have put forward several measures that policymakers should consider to improve the stewardship of index fund managers. Before we conclude this Part, we wish to note that this is an area in which improved understanding of problems can also directly contribute to their solution.¹⁵⁷

As we explained in Section II.E, the Big Three have significant incentives to be perceived as responsible stewards. A public perception that they are otherwise might adversely affect their flow of funds or increase the risks of a regulatory or public backlash. The Big Three thus have reason to communicate in ways that would portray their stewardship in a favorable light, and to make stewardship choices that would reduce the salience of their under-investment in stewardship and their excessive deference to corporate managers.

To the extent that investors and the public more clearly recognize the incentive problems of index fund managers, such recognition alone can lead to improved stewardship by the Big Three. Recognition of the extent to which the Big Three under-invest in stewardship might counteract their incentives to under-invest, and recognition of the extent to which their incentives push them to defer to corporate managers might constrain such deference.

For example, our analysis of the small size of the Big Three's stewardship budgets relative to the value of their assets under management and the number of their portfolio companies can contribute to public pressure on the Big Three to increase investments in

¹⁵⁷ For a discussion of another context in which recognition of flawed incentives by investors and the public can have a profound effect on reality, and where academic work highlighting the problems can usefully contribute to this recognition, see LUCIAN A. BEBCHUK & JESSE M. FRIED, PAY WITHOUT PERFORMANCE: THE UNFULFILLED PROMISE OF EXECUTIVE COMPENSATION (2004), Ch. 16.

stewardship. Similarly, our analysis of the Big Three's failure to use certain valuable stewardship tools available to shareholders can increase investor and public pressure on the Big Three to use such tools. In such ways, we hope that this Article, and the analysis and empirical evidence that it provides, will contribute to investor and public recognition of the problems afflicting index fund stewardship.

CONCLUSION

With index funds owning a large and steadily increasing fraction of the equity capital of all significant American public companies, understanding the stewardship decisions of index fund managers—and how they can be improved—is of critical importance for all interested in the governance and performance of public companies. In this Article we have sought to contribute to this understanding by providing a comprehensive theoretical, empirical, and policy analysis of index fund stewardship.

The Article has put forward an analytical framework for understanding the incentives of index fund managers. Our framework has enabled us to identify and analyze two types of incentives that could adversely affect the stewardship choices of index fund managers: incentives to under-invest in stewardship and to defer excessively to the preferences and views of corporate managers.

The Article has also provided the first comprehensive and detailed empirical account of the full range of stewardship activities that index fund managers do and do not undertake. We show that this evidence is consistent with the predictions of our incentive analysis and reinforces the concerns raised by our analysis.

Finally, the Article has considered the significant policy implications of the incentives problems that we identify analytically and document empirically. We propose a set of significant measures that policy makers should consider to address the concerns that our analysis and evidence have highlighted. We also show that our analysis undermines the arguments that critics have made against common ownership by institutional investors and activism by hedge funds, thereby contributing to these important policy debates.

We hope that the framework we have developed, the empirical evidence we have provided, and the policy proposals we have put forward for consideration, will all prove useful for policy makers and market participants in considering the opportunities and challenges posed by the rise of index funds. How well those policy makers and market participants assess and respond to these opportunities and challenges will have profound effects on the governance and performance of public companies and, in turn, on the prosperity of investors and the success of the American economy.

BIBLIOGRAPHY

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. & QUANTITATIVE ANALYSIS 567 (2012).

José Azar, Martin Schmalz & Isabel Tecu, Anti-Competitive Effects of Common Ownership, J. OF FIN. (Forthcoming) (2018).

Brokaw Act of 2017, 115th Cong. (2017-2018) S. 1744 (2017).

Lucian A. Bebchuk, *The Myth That Insulating Boards Serves Long-Term Value*, 113 COLUM. L. REV. 1637 (2013).

Lucian A. Bebchuk, Alon Brav & Wei Jiang, *The Long-Term Effects of Hedge Fund* Activism, 115 COLUM. L. REV. 1085 (2015).

Lucian A. Bebchuk, Alon Brav & Wei Jiang, *The Long-Term Effects of Hedge Fund* Activism, 115 COLUM. L. REV. 1085 (2015).

Lucian A. Bebchuk, Alon Brav, Wei Jiang & Thomas Keusch, *Dancing with Activists*, SSRN Scholarly Paper ID 2948869 (Soc. Sci. Res. Network), Apr. 1, 2017.

Lucian A. Bebchuk, Alma Cohen & Scott Hirst, *The Agency Problems of Institutional Investors*, 31 J. ECON. PERSP. 89 (2017).

Lucian A. Bebchuk & Jesse M. Fried, PAY WITHOUT PERFORMANCE: THE UNFULFILLED PROMISE OF EXECUTIVE COMPENSATION (2004).

Lucian Bebchuk & Scott Hirst, The Rise of the Big Three, Working Paper (2018).

Lucian A. Bebchuk & Robert J. Jackson, Jr., *The Law and Economics of Blockholder Disclosure*, 2 HARV. BUS. L. REV. 39 (2012).

Lucian A. Bebchuk & Zvika Neeman, *Investor Protection and Interest Group Politics*, 23 REV. FIN. STUD. 1089 (2010).

Christine Benz, *Bogle: Index Funds the Best Hope for Corporate Governance*, MORNINGSTAR.COM (Oct. 24, 2017), http://www.morningstar.com/videos/830770/bogle-index-funds-the-best-hope-for-corporate-gove.html.

Jonathan B. Berk & Jules H. van Binsbergen, *Mutual Funds in Equilibrium*, 9 ANN. REV. OF FIN. ECON. 147 (2017).

Tara Bhandari, Peter Iliev & Jonathan Kalodimos, *Governance Changes through Shareholder Initiatives: The Case of Proxy Access*, SSRN Scholarly Paper ID 2635695 (Soc. Sci. Res. Network), Jan. 17, 2017.

Hortense Bioy, Alex Bryan, Jackie Choy, Jose Garciz-Zarate & Ben Johnson, *Passive Fund Providers Take an Active Approach to Investment Stewardship* Dec. 5, 2017.

William A. Birdthistle, *The Fortunes and Foibles of Exchange-Traded Funds: A Positive Market Response to the Problems of Mutual Funds*, 33 DEL. J. CORP. L. 69 (2008).

Bernard S. Black, *Agents Watching Agents: The Promise of Institutional Investor Voice*, 39 UCLA L. REV. 811 (1991–1992).

Bernard S. Black, Shareholder Passivity Reexamined, 89 MICH. L. REV. 520 (1990).

BlackRock, BlackRock Global ETP Landscape Dec. 2016.

BlackRock, The Investment Stewardship Ecosystem (BlackRock Viewpoint), Jul. 2018.

BlackRock, BlackRock Investment Stewardship Engagement Priorities for 2018 Mar. 2018.

BlackRock, Investment Stewardship Report: 2017 Voting and Engagement Report Jul. 15, 2017.

BlackRock, Proxy Voting Guidelines for U.S. Securities (2018).

Patrick Bolton, Tao Li, Enrichetta Ravina & Howard Rosenthal, *Investor Ideology*, SSRN Scholarly Paper ID 3119935 (Soc. Sci. Res. Network), Feb. 7, 2018.

Glenn Booraem, Passive Investors, Not Passive Owners, HARV. L. SCH. F. ON CORP.GOVERNANCE& FIN.REG.(May10,2013),https://corpgov.law.harvard.edu/2013/05/10/passive-investors-not-passive-owners/.

Alon Brav, Wei Jiang & Tao Li, *Picking Friends Before Picking (Proxy) Fights: How Mutual Fund Voting Shapes Proxy Contests*, SSRN Scholarly Paper ID 3101473 (Soc. Sci. Res. Network), Dec. 8, 2017.

John Brooks, *Corporate Pension Fund Asset Management*, *in* TWENTIETH CENTURY FUND, ABUSE ON WALL STREET: CONFLICTS OF INT. IN THE SEC. MARKETS (1980).

Keith C. Brown, W.V. Harlow & Laura T. Starks, *Of Tournaments and Temptations: An Analysis of Managerial Incentives in the Mutual Fund Industry*, 51 J. FIN. 85 (2012).

Ryan Bubb & Emiliano Catan, *The Party Structure of Mutual Funds*, SSRN Scholarly Paper ID 3124039 (Soc. Sci. Res. Network), Feb. 14, 2018.

Greg Carlson, *Oakmark International Announces Soft Close*, 178, MORNINGSTAR.COM (Jan. 30, 2018), http://www.morningstar.com/articles/845771/oakmark-international-announces-soft-close.html.

Emiliano Catan & Michael Klausner, *Board Declassification and Firm Value: Have Shareholders and Boards Really Destroyed Billions in Value?*, SSRN Scholarly Paper ID 2994559 (Soc. Sci. Res. Network), Sept. 1, 2017.

Robert C. Clark, CORPORATE LAW (1986).

John C. Coates, *The Future of Corporate Governance Part I: The Problem of Twelve*, SSRN Scholarly Paper ID 3247337 (Soc. Sci. Res. Network), Sept. 20, 2018.

John C. Coffee, Jr., *Liquidity Versus Control: The Institutional Investor As Corporate Monitor*, 91 COLUM. L. REV. 1277 (1991).

Sean Collins, Sarah Holden, James Duvall & Elena Barone Chism, *The Economics of Providing 401(k) Plans: Services, Fees, and Expenses, 2015, 22* ICI RES. PERSP. (2016).

Alfred F. Conard, Beyond Managerialism: Investor Capitalism Symposium: Issues in Corporate Governance, 22 U. MICH. J.L. REFORM 117 (1988–1989).

Dragana Cvijanović, Amil Dasgupta & Konstantinos E. Zachariadis, *Ties that Bind: How Business Connections Affect Mutual Fund Activism*, 71 J. FIN. 2933 (2016).

Gerald F. Davis, A New Finance Capitalism? Mutual Funds and Ownership Re-Concentration in the United States, 5 EUR. MGMT. REV. 11 (2008).

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

Gerald F. Davis & Tracy A. Thompson, A Social Movement Perspective on Corporate Control, 39 ADMIN. SCI. Q. 141 (1994).

Stephen Davis, Jon Lukomnik & David Pitt-Watson, WHAT THEY DO WITH YOUR MONEY: HOW THE FINANCIAL SYSTEM FAILS US AND HOW TO FIX IT (2016).

Frank H. Easterbrook & Daniel R. Fischel, *Voting in Corporate Law*, 26 J. L. & ECON. 395 (1983).

Asaf Eckstein, *The Virtue of Common Ownership in an Era of Corporate Compliance*, SSRN Scholarly Paper ID 3194605 (Soc. Sci. Res. Network), Jun. 12, 2018.

Alex Edmans, *Blockholders and Corporate Governance*, 6 ANN. REV. OF FIN. ECON. 23 (2014).

Alex Edmans & Clifford G. Holderness, *Blockholders: A Survey of Theory and Evidence*, *in* HANDBOOK OF THE ECON. OF CORP. GOVERNANCE (Benjamin E. Hermalin & Michael S. Weisbach eds., 2017).

Einer Elhauge, Horizontal Shareholding, 129 HARV. L. REV. 1267 (2016).

Luca Enriques & Alessandro Romano, *Institutional Investor Voting Behavior: A Network Theory Perspective*, SSRN Scholarly Paper ID 3157708 (Soc. Sci. Res. Network), Apr. 1, 2018.

Yonca Ertimur, Fabrizio Ferri & Stephen R. Stubben, *Board of Directors' Responsiveness to Shareholders: Evidence from Shareholder Proposals*, 16 J. CORP. FIN. 53 (2010).

European Sec. & Markets Auth., Information on Shareholder Cooperation and Acting in Concert under the Takeover Bids Directive – 1st Update Jun. 20, 2014.

Jan Fichtner, Eelke M. Heemskerk & Javier Garcia-Bernardo, *Hidden Power of the Big Three? Passive Index Funds, Re-Concentration of Corporate Ownership, and New Financial Risk*, 19 BUS. & POL. 298 (2017).

Fid. Investments, Active and Passive Funds: The Power of Both, https://www.fidelity.com/viewpoints/investing-ideas/power-of-active-and-performance.

Letter from Larry Fink, Annual Letter to CEOs (Jan. 16, 2018).

Jill E. Fisch, *Relationship Investing: Will It Happen--Will It Work*, 55 OHIO ST. L. J. 1009 (1994).

Jill E. Fisch, Assaf Hamdani & Steven Davidoff Solomon, *Passive Investors*, SSRN Scholarly Paper ID 3192069 (Soc. Sci. Res. Network), Jun. 4, 2018.

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 (2013).

Ronald J. Gilson & Reiner Kraakman, *Reinventing the Outside Director: An Agenda for Institutional Investors*, 43 STAN. L. REV. 863 (1990–1991).

Gustavo Grullon, Yelena Larkin & Roni Michaely, Are U.S. Industries Becoming More Concentrated?, SSRN Scholarly Paper ID 2612047 (Soc. Sci. Res. Network), Aug. 31, 2017.

Assaf Hamdani, Eugene Kandel, Yevgeny Mugerman & Yishay Yafeh, *Incentive Fees and Competition in Pension Funds: Evidence from a Regulatory Experiment*, 2 J. OF LAW, FINANCE, & ACCT. 49 (2017).

Assaf Hamdani & Yishay Yafeh, *Institutional Investors as Minority Shareholders*, 17 Rev. OF FIN. 691 (2013).

Sharon Hannes, Super Hedge Fund, 40 DEL. J. CORP. L. 163 (2015–2016).

Davidson Heath, Daniele Macciocchi, Roni Michaely & Matthew Ringgenberg, *Passive Investors Are Passive Monitors*, SSRN Scholarly Paper ID 3259433 (Soc. Sci. Res. Network), Oct. 26, 2018.

J.B. Heaton, All You Need is Passive A Response to Professors Fisch, Hamdani, and Davidoff Solomon, SSRN Scholarly Paper ID 3209614 (Soc. Sci. Res. Network), Jul. 7, 2018.

Albert O. Hirschman, EXIT, VOICE, AND LOYALTY; RESPONSES TO DECLINE IN FIRMS, ORGANIZATIONS, AND STATES (1970).

Scott Hirst, Social Responsibility Resolutions, 43 J. CORP. L. 217 (2017–2018).

Institutional Stewardship Grp., About the Investor Stewardship Group and the Framework for U.S. Stewardship and Governance (2018), https://isgframework.org/.

ARNOLD S. JACOBS, THE WILLIAMS ACT -- TENDER OFFERS AND STOCK ACCUMULATIONS (2018).

Hyunglae Jeon, Jangkoo Kang & Changjun Lee, *Precision about Manager Skill, Mutual Fund Flows, and Performance Persistence*, 40 THE N. AM. J. OF ECON. & FIN. 222 (2017).

Sarah Krouse, David Benoit & Tom McGinty, *Meet the New Corporate Power Brokers: Passive Investors*, WALL ST. J., Oct. 24, 2016, http://www.wsj.com/articles/the-new-corporate-power-brokers-passive-investors-1477320101.

Jonathan Lewellen & Katharina Lewellen, *Institutional Investors and Corporate Governance: The Incentive to Be Engaged* Sept. 2018.

Martin Lipton, *Activism: The State of Play*, HARV. L. SCH. F. ON CORP. GOVERNANCE & FIN. REG. (Sept. 23, 2017), https://corpgov.law.harvard.edu/2017/09/23/activism-the-state-of-play/.

Martin Lipton, *Engagement—Succeeding in the New Paradigm for Corporate Governance*, HARV. L. SCH. F. ON CORP. GOVERNANCE & FIN. REG. (Jan. 23, 2018), https://corpgov.law.harvard.edu/2018/01/23/engagement-succeeding-in-the-new-paradigm-for-corporate-governance/.

Dorothy Shapiro Lund, *The Case Against Passive Shareholder Voting*, 43 J. CORP. L. 101 (2018).

Matthew J. Mallow & Jasmin Sethi, *Engagement: The Missing Middle Approach in the Bebchuck-Strine Debate*, 12 N.Y. U. J. OF L. & BUS. 385 (2015–2016).

William McNabb, *Getting to Know You: The Case for Significant Shareholder Engagement*, HARV. L. SCH. F. ON CORP. GOVERNANCE & FIN. REG. (Jun. 24, 2015), https://corpgov.law.harvard.edu/2015/06/24/getting-to-know-you-the-case-for-significant-shareholder-engagement/.

William McNabb, *The ultimate long-term investors*, VANGUARD BLOG FOR ADVISORS (Jul. 6, 2017), https://vanguardadvisorsblog.com/2017/07/06/the-ultimate-long-term-investors/.

Fiona Scott Morton & Herbert Hovenkamp, *Horizontal Shareholding and Antitrust Policy*, 127 YALE L.J. 2026 (2018).

Charles M. Nathan, *Institutional Investor Engagement: One Size Does Not Fit All*, THE CONF. BOARD (Jul. 18, 2018), https://www.conference-board.org/blog/postdetail.cfm?post=6826.

Patricia Oey, U.S. Fund Fee Study Apr. 26, 2018.

Plansponsor, 2017 Recordkeeping Survey (Jun. 25, 2017), https://www.plansponsor.com/research/2017-recordkeeping-survey/.

Veronika Pool, Clemens Sialm & Irina Stefanescu, *It Pays to Set the Menu: Mutual Fund Investment Options in 401(k) Plans*, 71 J. FIN. 1779 (2016).

Eric A. Posner, Fiona Scott Morton & E. Glen Weyl, A Proposal to Limit the Anti-Competitive Power of Institutional Investors, 81 ANTITRUST L. J. 669 (2017).

Edward B. Rock, *The Logic and (Uncertain) Significance of Institutional Shareholder Activism*, 79 GEO. L. J. 445 (1990–1991).

Mark J. Roe, *A Political Theory of American Corporate Finance*, 91 COLUM. L. REV. 10 (1991).

Mark J. Roe, Backlash, 98 COLUM. L. REV. 217 (1998).

Eric D. Roiter, *Disentangling Mutual Fund Governance from Corporate Governance*, 6 HARV. BUS. L. REV. 1 (2016).

Martin C. Schmalz, *Common Ownership, Concentration and Corporate Conduct*, SSRN Scholarly Paper ID 3165340 (Soc. Sci. Res. Network), Feb. 26, 2018.

Sec. & Exch. Comm'n, Proposed Rules, https://www.sec.gov/rules/proposed.shtml.

State St. Global Advisors, 2018 Proxy Voting and Engagement Guidelines: North America Mar. 2018.

State St. Global Advisors, 2018 SSGA Conflict Mitigation Guidelines (Mar. 16, 2018), https://www.ssga.com/na/us/institutional-investor/en/our-insights/viewpoints/2018-ssga-conflict-mitigation-guidelines.html.

State St. Global Advisors, Annual Stewardship Report 2014 Year End (2015).

State St. Global Advisors, Annual Stewardship Report 2016 Year End Mar. 7, 2017.

State St. Global Advisors, Protecting Long-Term Shareholder Interests In Activist Engagements (2016).

Leo E. Strine, One Fundamental Corporate Governance Question We Face: Can Corporations Be Managed for the Long Term Unless Their Powerful Electorates Also Act and Think Long Term?, 66 BUS. LAW. 1 (2010);

Leo E. Strine, Jr., Can We Do Better by Ordinary Investors; A Pragmatic Reaction to the Dueling Ideological Mythologists of Corporate Law Essay, 114 COLUM. L. REV. 449 (2014).

Leo E. Strine, Jr., *Who Bleeds When the Wolves Bite: A Flesh-and-Blood Perspective on Hedge Fund Activism and Our Strange Corporate Governance System*, 126 YALE L.J. [i] (2016–2017).

Jennifer S. Taub, *Able but Not Willing: The Failure of Mutual Fund Advisers to Advocate for Shareholders' Rights*, 34 J. CORP. L. 843 (2008–2009).

The Investor Forum, About The Investor Forum, https://www.investorforum.org.uk/about.

Vanguard, Investment Stewardship 2017 Annual Report Aug. 31, 2017.

Vanguard, Vanguard's Proxy Voting Guidelines.

Vanguard, Why Ownership Matters at Vanguard, https://about.vanguard.com/what-sets-vanguard-apart/why-ownership-matters/.

David H. Webber, *Private Policing of Mergers and Acquisitions: An Empirical Assessment of Institutional Lead Plaintiffs in Transactional Class and Derivative Actions*, 38 DEL. J. CORP. L. 907 (2013–2014).

David H. Webber, *Shareholder Litigation without Class Actions*, 57 ARIZ. L. REV. 201 (2015).

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 (1995).

Lois Yurow, Timothy W. Levin, W. John McGuire & James M. Storey, MUTUAL FUNDS REGULATION AND COMPLIANCE HANDBOOK (2017).