Reversing the Fortunes of Active Funds

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In 2019, for the first time in the history of U.S. capital markets, passive funds surpassed active funds in terms of total assets under management. The continuous growth of passive funds at the expense of active funds is a genuine cause for concern. Active funds monitor the management and partake of decision-making in their portfolio companies. Furthermore, they improve price efficiency and managerial performance by engaging in informed trading. The buy/sell decisions of active funds provide other market participants reliable information about the quality of firms. The cost of active investing is significant and it is exclusively borne by active funds; the benefits, by contrast, are spread over all shareholders, including passive funds that freeride on the efforts of their active peers. Therefore, the contraction of active funds threatens to set back the quality of corporate governance in U.S. firms.

This Essay proposes a way to reverse this trend. To preserve the benefits presented by active funds, we explore the possibility of employing tax mechanisms to help defray the extra cost borne by active funds. Perversely, at present, our tax laws exacerbate the problem. Since active funds trade more frequently than passive ones, they face a substantially heavier tax burden. We argue that taxation is the key to leveling the playing field in capital markets. Specifically, we establish a prima facie case for using tax credits to support active funds and enhance their market share. We focus on two types of tax credits: effort-based tax credits and result-based tax credits. Effort-based tax credits would be granted whenever an active fund undertakes prespecified measures to improve corporate governance irrespective of their success. Result-based tax credits would be contingent on the attainment of certain outcomes. The two types are not mutually exclusive and, as we will show, can be combined for maximal effect.

Our proposal has three potential advantages over competing initiatives that seek to induce passive funds to become more active. First, taxes constitute a highly effective tool for altering behavior as they transform the underlying motivations of the subject. Second, our proposal has the potential to create a

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virtuous financial cycle: the expected increase in tax revenues from the improved performance of firms generated by the tax credit should cover the cost of providing the credits. Third, and finally, from a political economy standpoint, our proposal, on account of its noncoercive nature, will not attract opposition from the investment industry and thus stands a realistic chance of being adopted.

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Introduction

Passive funds are on the rise. Between 2008 and 2015, investments in active funds shrunk by \$800 billion, while investment in passive funds increased by \$1 trillion. This trend has intensified in recent years. In 2017 alone, passive mutual funds absorbed \$692 billion, in contrast to the outflows

^{1.} 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, 299 (2017).

from active funds that reached \$45 billion.² This process has culminated in a transformative moment: in September 2019, for the first time in the history of U.S. capital markets, the assets held by passive funds surpassed those of active funds.³

This development in the structure of the capital market has far-reaching implications for corporate governance. The investments of most passive funds are pegged to a certain index.⁴ They invest in the companies that comprise the index, independent of the quality of decision-making in those companies. The strict focus of passive funds on lowering fees to investors prevents them from allocating resources to monitoring and analysis of firms. A fortiori, participation in informed decision-making in the form of active engagements is antithetical to the investment strategy of passive funds.

Active funds follow a very different investment strategy. They analyze the performance of companies on an ongoing basis, and thus engage in informed trading decisions, monitor the management of the companies in which they invest, and play an active role in strategic decision-making in those companies. Through these measures, active funds improve managerial performance not only in their portfolio companies, but also in the market at large. Due to their active investment strategy, the fees charged by active funds are much higher than those charged by passive funds. At the same time, because the benefits produced by active funds inure to all investors, active funds capture only a small portion of the value they produce. The

^{2.} Dani Burger, *Investing in Index Funds Is No Longer Passive*, BLOOMBERG (Feb. 28, 2018, 2:27 AM), https://www.bloomberg.com/news/articles/2018-02-27/passive-becomes-the-new-active-as-indexing-rules-everything [https://perma.cc/44NE-GTZP].

^{3.} John Gittelsohn, End of Era: Passive Equity Funds Surpass Active in Epic Shift, BLOOMBERG (Sept. 11, 2019, 2:31 PM), https://www.bloomberg.com/news/articles/2019-09-11/passive-u-s-equity-funds-eclipse-active-in-epic-industry-shift [https://perma.cc/5ZCY-SSZ7].

^{4.} Regarding the definition of an index and examples of passive investment strategy, see Andrew W. Lo, *What Is an Index?*, J. PORTFOLIO MGMT., Winter 2016, at 21, 21–22.

^{5.} These two functions—active trading and involvement in managerial decisions—are linked together to a certain extent. The ability of active funds to buy and sell shares and alter their portfolios provides them with leverage over managers and boards. *See* Ian R. Appel, Todd A. Gormley & Donald B. Keim, *Passive Investors, Not Passive Owners*, 121 J. FIN. ECON. 111, 113 (2016) ("[P]assive investors might be less able to exert influence over managers. By seeking to minimize deviations from the underlying index weights, passive institutions tend to lack a traditional lever used by non-passive investors to influence managers—the ability to accumulate or exit positions."). Regarding how the possibility of exit may be required for the efficacy of voice mechanisms, see ALBERT O. HIRSCHMAN, EXIT, VOICE AND LOYALTY: RESPONSES TO DECLINE IN FIRMS, ORGANIZATIONS, AND STATES 35–36 (1970).

^{6.} This is what separates active funds from activist hedge funds. The engagements of activist hedge funds are far more aggressive and far-reaching than those of active funds. Critically, though, activist hedge funds capture the lion's share of the benefits they produce. It should be added that there exists a heated debate in the corporate law scholarship about whether activist hedge funds produce any benefits at all. Several scholars have pointed out that the shares of companies targeted by activist hedge funds tend to go up in the short run, but often fall in the long run. The engagements

combination of higher fees and insufficiently high yields to offset them has caused many investors to switch from investing in active funds to passive funds. Yet from the societal perspective, the decline in active funds is alarming because of their important market-wide effects.

The continuous contraction of active funds with its attendant negative consequences for corporate governance has not escaped the attention of corporate scholars who have suggested various ways to empower active funds. Existing proposals, while varied and nuanced, share a common ground: they all seek to enhance the market position of active funds by introducing changes in corporate law. These proposals run the gamut from mandating participation in corporate decision-making to requiring a certain level of expenditures on active engagements to introducing dual class shares to tilt the balance in favor of active funds. Conspicuous in its absence is a tax-based mechanism.

The absence of a tax-based solution is a puzzle because active funds engender significant positive externalities in financial markets and the classic response to their existence is predicated on tax instruments. The engagements of active funds through voice (i.e., actual participation) and exit (i.e., sale of shares based on firm-specific knowledge) generate unaccounted-for benefits—known as positive externalities—for individual shareholders, passive funds, and most importantly, society at large. The involvement of active funds with firm managements, as well as their trading decisions, enhance the value of the target firm and transmit important information to the market. Furthermore, improved corporate governance in one company has

of activist hedge funds primarily focus on cutting costs. While this strategy yields short-term positive effects, it often harms companies in the long run. *See, e.g.*, K.J. Martijn Cremers, Erasmo Giambona, Simone M. Sepe & Ye Wang, Hedge Fund Activism and Long-Term Firm Value 21, 23, 41–42 (Dec. 13, 2018) (unpublished manuscript), https://ssrn.com/abstract=2693231 (challenging the view that hedge fund activism adds long-term value through a finding that, despite positive initial returns, the value of activist hedge fund targets tend to be lower than the value of control firms in the long run).

- 7. It should be noted that not all scholars agree that the decline of active funds is a cause for concern. See Jill Fisch, Assaf Hamdani & Steven Davidoff Solomon, The New Titans of Wall Street: A Theoretical Framework for Passive Investors, 168 U. PA. L. REV. 17, 35 (2019) (arguing that competition from passive funds will cause active funds to improve their performance); Edward B. Rock, The Logic and (Uncertain) Significance of Institutional Shareholder Activism, 79 GEO. L.J. 445, 480 (1991) (noting the limited incentives of mutual funds and other institutional investors); Edward Rock & Marcel Kahan, Index Funds and Corporate Governance: Let Shareholders Be Shareholders 3 (N.Y. Univ. Sch. of Law, Law & Economics Research Paper Series, Working Paper No. 18-39, 2019), https://ssrn.com/abstract=3295098 (arguing that passive funds have a sufficient incentive to engage in monitoring the companies in their portfolio).
 - 8. For a discussion of existing proposals, see *infra* subpart III(A).
- 9. For a very recent discussion regarding the positive externalities of active funds and the problem that the growing market share of passive funds poses for the market at large, see Jonathan Guthrie, *The Fallacy Behind the Rise of Passive Fund Management*, FIN. TIMES (Jan. 14, 2020), https://www.ft.com/content/1c4382c6-36cb-11ea-a6d3-9a26f8c3cba4 [https://perma.cc/FV9D-KV8R].

the potential to lift other companies in the same sector by establishing better governance standards for the entire industry. Gains by public companies, in turn, translate into greater tax revenues for society at large, including individuals who do not invest in the stock market. Hence, the decline of active funds has adverse effects that go well beyond the capital market.

Positive externalities cannot be taken for granted. Economic theory teaches that in the absence of government incentives, behavior that generates a positive externality will be undersupplied relative to the optimal social amount because the actor bears the full marginal cost of the relevant activity, but appropriates only a fraction of the marginal benefit. ¹⁰ For this reason, Arthur Cecil Pigou has famously argued for the use of taxes and subsidies to address the challenge of externalities (both positive and negative). 11 Taxes should be used to lower the level of activities that produce adverse social effects (negative externalities); subsidies should be employed to encourage behavior that produces desirable social effects (positive externalities). Yet, the existing tax regime only exacerbates the plight of active funds. Perversely, passive funds enjoy a more lenient effective tax burden than active funds. 12 The turnover ratio of active funds is over 300% higher than that of passive funds.¹³ As a consequence, active funds are taxed more frequently and their effective tax rate is higher by nearly 40%, relative to passive funds.14

While uneven taxation is presently part of the problem, it can be the solution to the problem of active funds. In this Essay, we explore the option of using favorable tax treatment to incentivize sophisticated investors to assume an active role in corporate governance.¹⁵ We examine how targeted tax benefits, in the form of tax credits, can enhance the attractiveness of active funds relative to passive ones. Tax credits may be keyed to efforts or

^{10.} See, e.g., Carl J. Dahlman, *The Problem of Externality*, 42 J.L. & ECON. 141, 141–42 (1979) (explaining that some beneficial transactions are not carried out by wealth-maximizing agents because the cost of the transaction is greater than the actual benefit).

^{11.} A.C. PIGOU, THE ECONOMICS OF WELFARE 381 (4th ed. 1932).

^{12.} See infra note 108; see also infra note 107.

^{13.} See infra note 105.

^{14.} On average, active funds pay annually nearly 40% more tax as a percentage of their returns than passive funds: 0.96% of their returns compared to 0.69% paid by passive funds. *See infra* note 107 and accompanying text.

^{15.} It is possible to internalize positive externalities, by both taxing and spending mechanisms. The main considerations for which of the two should be chosen are a matter of institutional and organizational design. See David A. Weisbach & Jacob Nussim, The Integration of Tax and Spending Programs, 113 YALE L.J. 955, 957 (2004) (arguing that the decision to integrate tax and spending programs through the tax system "is solely a matter of institutional design"). The organizational consideration they raise—the complexity of having an additional system to which firms would have to release their information—leads to preferring the tax system over an additional spending program. See id. at 995 (explaining that separate systems lead to more complexity through specialization, which would require more precision and detailed measurements in each system).

outcomes. Effort-based tax credits can be used to reward institutional investors that incur specific expenses associated with corporate activism for example, an engagement in a proxy contest or corporate governance analysis—irrespective of the ultimate result. A result-based tax credit would be awarded to successful activists whose efforts bear fruit. The credit amount would be determined based on a menu of milestones that reflect inner-firm changes, such as an appointment of a director or a restructuring of management compensation. Alternatively, the credit can be pegged to the performance of a company's stock.¹⁶ Since effort-based tax benefits and result-based tax benefits are not mutually exclusive, the two can be combined. For instance, it is possible to provide modest effort-based tax benefits to active investors in order to spur them to launch initiatives and explore opportunities to get involved in specific corporations and then supplement them with result-based benefits if a desirable outcome is ultimately attained. The deployment of the credit can be designed in a way that does not adversely affect the public at large. The tax reductions to active funds would be financed by increasing the rates of non-active market participants that benefit from the actions of active funds.

Our proposal offers three potential advantages over competing mechanisms aimed at bolstering engagements by shareholders. First, tax incentives constitute a far more effective tool for encouraging the growth of active funds and active participation in corporate matters than legislation or regulation that forces passive funds to become active. If a passive fund has no interest in assuming an active role in the management of a company, it is highly doubtful that legal mandates forcing engagement would achieve their desired goal of *meaningful* engagements. Worse yet, mandatory measures would necessitate significant expenditures on monitoring and enforcement. Tax benefits, by contrast, allow each category of funds, active and passive, to act as it prefers, while maintaining a stable market equilibrium between the two groups. Furthermore, tax instruments are flexible and dynamic. Unlike binary regulatory mechanisms, a tax benefit can be keyed to multiple performance indicators and can be adjusted to fit the changing magnitude of the positive externalities generated by sophisticated investors.¹⁷

Second, implementation of our proposal is likely to have a budgetneutral effect. As we noted, active funds generate much higher tax revenues

^{16.} For a detailed discussion, see infra section II(B)(2).

^{17.} Louis Kaplow & Steven Shavell, *On the Superiority of Corrective Taxes to Quantity Regulation*, 4 AM. L. & ECON. REV. 1, 7–10 (2002) (emphasizing that the price element of taxes provides the government with vital information that can be utilized to optimize the tax instrument). The price element of taxes can also serve as a mechanism for revealing information to the parties. *See, e.g.*, Brian Galle, *Tax, Command . . . or Nudge?: Evaluating the New Regulation*, 92 TEXAS L. REV. 837, 848 (2014) (explaining that prices reveal information about the subjective valuations of parties).

than passive funds. Taxes are paid only in the event of realization of investments. Realization events are much more frequent in active funds that engage in constant trading. Recall that passive funds mostly rely on a buy and hold strategy and, as a consequence, trade less frequently. Owing to the different trading strategies of passive and active funds, the award of a tax credit to active funds will partially pay itself off. Moreover, the involvement of active funds in corporate governance has the potential to increase the aggregate profits of firms, and, as a result, enhance the tax base. Therefore, the provision of tax credits would not *a fortiori* adversely affect tax collection.

Third, and finally, our proposal stands a much better chance of being adopted relative to all other proposals as it employs a "carrot" in the form of a tax benefit to achieve the desired result. As a vast literature in economics and political science demonstrates, industries are much more likely to support policy proposals that rely on carrots, rather than sticks. This is especially true for the politically potent investment industry. Since our proposal encourages positive behavior (active investment), rather than penalizing the mirrorimage behavior (passive investment), it stands a much higher chance of being adopted, relative to the alternatives.

The remainder of this Essay unfolds in three parts. Part I will discuss the positive externalities generated by active institutional investors and how they improve corporate governance structures. Part II will present a specific policy proposal detailing how tax incentives can be employed to promote investors' engagement in corporate governance. Part III enumerates the advantages of our proposal, relative to preexisting ones. A short conclusion will ensue.

I. Positive Externalities of Active Funds

Institutional investors have come to dominate financial markets. Bernard Black was one of the first scholars to identify the rise of institutional investors as a game-changing factor for the agency problem that arises from rational apathy.¹⁹ This phenomenon has been thoroughly analyzed by Jeff

^{18.} See, e.g., Brian Galle, The Tragedy of the Carrots: Economics and Politics in the Choice of Price Instruments, 64 STAN. L. REV. 797, 803–06 (2012) (defining carrots and sticks).

^{19.} Bernard S. Black, Agents Watching Agents: The Promise of Institutional Investor Voice, 39 UCLA L. REV. 811, 813 (1992); Bernard S. Black, Shareholder Passivity Reexamined, 89 MICH. L. REV. 520, 575–91 (1990). Other scholars, such as Ronald Gilson, Reinier Kraakman, and Roberta Romano, have supported this view. See Ronald J. Gilson & Reinier Kraakman, Reinventing the Outside Director: An Agenda for Institutional Investors, 43 STAN. L. REV. 863, 866 (1991) (noting the rapid growth of funds managed by institutional investors and related monitoring problems); Roberta Romano, Answering the Wrong Question: The Tenuous Case for Mandatory Corporate Laws, 89 COLUM. L. REV. 1599, 1607 (1989) (discussing the "rational apathy story" as it relates to shareholders); Roberta Romano, Public Pension Fund Activism in Corporate Governance Reconsidered, 93 COLUM. L. REV. 795, 795–96 (1993) (explaining that because of the

Gordon and Ron Gilson, who highlighted the differences between institutional and individual investors. 20 Yet, treating institutional investors as a monolithic group misses a critical difference between passive and active institutional investors. Passive funds, as their name implies, steer clear of active involvement in their portfolio companies. They attract investors by offering them low fees, a strategy that necessitates them to cut costs to the bare minimum.²¹ Active funds, by contrast, play a unique role in financial markets: they monitor the performance of their portfolio companies and partake of initiatives intended to improve corporate governance.²² The benefits of the actions undertaken by active funds extend to all market participants—first and foremost, passive funds. As we will show, active funds contribute to the overall efficiency of financial markets, benefitting all market actors. To get a handle on the contribution of active funds to corporate governance, it is necessary to revisit the basic trait of public corporations separation of ownership and control—and the problem of rational apathy to which it gives rise.

A. The Rational Apathy of Shareholders

In their seminal work on corporate law, Adolf Berle and Gardiner Means identified the central challenge posed by the separation of ownership and control in public corporations: the small stake of individual shareholders gives them no real incentive to monitor management and be actively involved in firms.²³ Subsequent scholarship in the field of public choice has reinforced their prediction.²⁴ Of particular note is Mancur Olson's *The Logic of Collective Action*, which pointed to the phenomenon of dispersed stockholders as an example of the inability of large and dispersed groups to

organizational structure of large U.S. corporations, "managers may run [a] firm in their own, rather than the shareholders' interest, choosing the quiet life over the maximization of share value").

^{20.} 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, 865–67 (2013) (distinguishing between the interests of retail investors, institutional investors, and activist hedge funds).

^{21.} Dorothy S. Lund, *The Case Against Passive Shareholder Voting*, 43 J. CORP. L. 493, 508 (2018).

^{22.} Many of their engagements are under the radar through communication with the management rather than activism on the ballot. There are findings that indicate the prevalence of engagements through communication with management. See Joseph A. McCahery, Zacharias Sautner & Laura T. Starks, Behind the Scenes: The Corporate Governance Preference of Institutional Investors, 71 J. FIN. 2905, 2906 (2016) (finding that 63% of the funds they have surveyed have engaged in direct discussion with management in the last five years and 45% have had private discussions with a company's board outside of management's presence).

^{23.} ADOLF A. BERLE, JR. & GARDINER C. MEANS, THE MODERN CORPORATION AND PRIVATE PROPERTY 112–16, 125 (1933).

^{24.} See, e.g., Michael C. Schouten, *The Case for Mandatory Ownership Disclosure*, 15 STAN. J.L. BUS. & FIN. 127, 135 (2009) (arguing that in firms with dispersed ownership, no individual shareholder has enough incentive to monitor management).

further their interests.²⁵ This phenomenon, largely known as the "rational apathy of shareholders," has received sustained attention in the corporate governance literature.²⁶

The problem of rational apathy is exacerbated by the inability of individual shareholders to obtain financial information at a reasonable cost. Individual shareholders typically lack the business acumen to get actively involved in corporate management. Also, they are inadequately informed to undertake this task. Active involvement in a firm's management requires two types of information: general market information and firm-specific information. General market information requires analysis of industry-wide and global economic conditions, trends, and forecasts. Firm-specific information consists of data about the performance, structure, and potential of individual firms. A typical individual shareholder readily possesses neither type of information.

In theory, individual shareholders could purchase general market information from professional analysts and glean information about firms in which they invest. In practice, the cost of doing so is prohibitively high. General market analysis can only be obtained at a very high price and it needs to be updated constantly. Similarly, different types of firm-specific

^{25.} MANCUR OLSON, JR., THE LOGIC OF COLLECTIVE ACTION: PUBLIC GOODS AND THE THEORY OF GROUPS 55 (1965). Olson's work is a systemized development of prior work in the field of public choice with similar arguments. See ANTHONY DOWNS, AN ECONOMIC THEORY OF DEMOCRACY 265–76 (1957) (defining the term "rational abstention"). Regarding the general application of Olson's work to the field of corporate governance, see ROBERT CHARLES CLARK, CORPORATE LAW § 9.5 at 390–91 (1986); Lucian Arye Bebchuk, Limiting Contractual Freedom in Corporate Law: The Desirable Constraints on Charter Amendments, 102 HARV. L. REV. 1820, 1837–40 (1989); and Rock, supra note 7, at 454–57.

^{26.} See Lucian Arye Bebchuk, Reinier Kraakman & George G. Triantis, Stock Pyramids, Cross-Ownership and Dual Class Equity: The Mechanisms and Agency Costs of Separating Control from Cash-Flow Rights, in Concentrated Corporate Ownership 295, 301 (Randall K. Morck ed., 2000) (noting that when shareholders hold a small fraction of cash flow rights in a firm, agency costs often increase); Black, Shareholder Passivity Reexamined, supra note 19, at 526–29 (describing the widespread acceptance of the shareholder impotence argument); Frank H. Easterbrook & Daniel R. Fischel, Voting in Corporate Law, 26 J.L. & Econ. 395, 402 (1983) (arguing that voters do not have the appropriate incentives to study the firm and vote intelligently); Ronald J. Gilson, The Case Against Shark Repellent Amendments: Structural Limitations on the Enabling Concept, 34 STAN. L. REV. 775, 824 (1982) (noting that a rational shareholder may choose not to incur the costs of becoming informed about management decisions); Henry G. Manne, Some Theoretical Aspects of Share Voting: An Essay in Honor of Adolf A. Berle, 64 COLUM. L. REV. 1427, 1441 (1964) (noting that even shareholders who have the capacity to understand their voting options often are not incentivized to undertake this effort).

^{27.} Zohar Goshen & Gideon Parchomovsky, *The Essential Role of Securities Regulation*, 55 DUKE L.J. 711, 721 (2006).

information are often kept secret, ²⁹ and even publicly available data can only be accessed periodically. Furthermore, individual shareholders who commit to information gathering, would need to do so on a continuous basis. This, of course, would necessitate massive expenditures and involves a steep opportunity cost. Once we account for the fact that most investors hold diverse portfolios, it becomes abundantly clear that active monitoring is not a practical option for individual shareholders. It is also undesirable from a social perspective as it implicates duplicative investments in monitoring. The problem is aggravated by the presence of free-riding opportunities: even shareholders who might personally benefit from engaging in monitoring would rather have other shareholders perform this task in order to reap the benefits without incurring the cost.

Activism by dispersed individual shareholders is plagued by yet another problem. Even if a shareholder were to incur the significant expense of gathering the necessary information about a firm, she would not be able to accomplish her desired goal. Dispersed ownership suggests that each shareholder typically holds a tiny fraction of a firm's shares. Consequently, an individual shareholder stands no realistic chance of changing the firm's path. In the famous terminology of Albert Hirschman, she has no voice in the company—or, to put the matter slightly differently, her voice will not be heard. Realizing this much, no individual shareholder would invest the time and money necessary to educate herself about a corporation's affairs even if she had the financial wherewithal to do so. The investment would simply go to waste. Hence, the only sensible investment strategy for an individual shareholder is to hold a diversified portfolio of firms, remain passive, and rely on exiting (i.e., sale of shares) if she is dissatisfied with the performance of firms in her portfolio. she is dissatisfied with the performance of firms in her portfolio.

Indeed, most dispersed individual shareholders do not even show up to vote, despite the negligible cost of doing so. Empirical data shows that retail investors, who comprise approximately 30% of all shareholders in U.S.

^{29.} See, e.g., Omri Ben-Shahar & Lisa Bernstein, *The Secrecy Interest in Contract Law*, 109 YALE L.J. 1885, 1886 (2000) (arguing that when contracting, firms prefer to keep private certain information, such as labor costs, inventory size, availability of alternative suppliers, and business plans).

^{30.} See HIRSCHMAN, supra note 5, at 30 ("Voice is here defined as any attempt at all to change, rather than to escape from, an objectionable state of affairs").

^{31.} See Stephen M. Bainbridge, Shareholder Activism and Institutional Investors 14 (Univ. of Cal., L.A. Sch. of Law, Law & Economics Research Paper Series, Research Paper No. 05-20, 2005), https://ssrn.com/abstract=796227 ("[T]hey will remain passive in hopes of free riding on someone else's activism. As in other free riding situations, because everyone is subject to and likely to yield to this temptation, the probability is that the good in question—here shareholder activism—will be under-produced.").

public companies in 2019, voted only 28% of their proxies in 2019.³² The cost of voting is negligible. Yet, a large majority of retail shareholders is not willing to incur this minimal cost, let alone invest in additional information to make a fully informed decision.

The low participation of dispersed individual shareholders significantly weakens the central mechanism for confronting and reducing managerial agency costs—board accountability and stockholder involvement in the firm. As fewer stockholders vote in board elections, the board becomes less accountable to stockholders and feels less obliged to promote their interests. A board without strong accountability to stockholders has little reason to insist that management decisions are aligned with stockholders' interests. Thus, the low participation of individual shareholders impairs the important role of voting in diminishing managerial agency costs. 34

Investors' utilization of the exit mechanism that consists of selling off underperforming firms is also lower than the socially optimal level. It may seem that the exit option is not undermined by the collective action problem that plagues the voice mechanism since selling stocks does not require the same level of investment as active involvement in the daily operations of firms. Yet, informed selling decisions also necessitate investment of resources in market-wide and firm-specific information.³⁵ And while these expenditures are smaller than those entailed by active participation in firms'

^{32.} In contrast, institutional investors cast over 90% of their proxies. 2019 PROXY SEASON REVIEW, PROXYPULSE (2019) 4–5, https://www.broadridge.com/_assets/pdf/broadridge-proxypulse-2019-review.pdf [https://perma.cc/59P3-4B2Y].

^{33.} Regarding the relatively low impact of shareholders on board elections in comparison to management, see Lucian A. Bebchuk, *The Myth of the Shareholder Franchise*, 93 VA. L. REV. 675, 680–82, 688–93 (2007).

^{34.} The assumption in this Essay is that a larger participation of retail stockholders will reduce the clout of managers. This might be contested in light of data reflecting that retail investors tend to vote with managers to a greater extent than institutional investors. See Jill E. Fisch, Standing Voting Instructions: Empowering the Excluded Retail Investor, 102 MINN. L. REV. 11, 15 n.24 (2017) (highlighting reports that show "retail investors are more likely to support management"); Kobi Kastiel & Yaron Nili, In Search of the "Absent" Shareholders: A New Solution to Retail Investors' Apathy, 41 DEL. J. CORP. L. 55, 71-73 (2016) (detailing how retail investors' participation can distort voting outcomes in favor of management); see also Gilson & Gordon, supra note 20, at 887 (noting that the vast majority of proposals up for vote in mutual funds are proposed by management). Yet current numbers most likely do not reflect the rate in which retail investors would support management after increasing participation of retail investors. In other words, the tendency of the inframarginal retail investors to vote with management will be weaker than those currently voting. A survey of retail investors conducted by the Brunswick Group serves as a strong indication for such a gap. In a survey of 801 retail investors, it was found that most believe that activists add longterm value and may be more likely to support activists than generally thought. See Robert Moran & Kaylan Normandeau, Retail Investors Cheer on the Activists, BRUNSWICK REV.: SPOTLIGHT ON SHAREHOLDER ACTIVISM (Brunswick Group LLP, London, U.K.), 2015, at 14, https:// www.brunswickgroup.com/media/2140/shareholder-activism-issue.pdf [https://perma.cc/6HQ3-RSTR] (summarizing findings from a Brunswick survey of retail investors—with 74% saying that activism adds value); see also Fisch, supra (citing to a similar summary of the same survey).

^{35.} Goshen & Parchomovsky, supra note 27, at 721.

management, they are significant in their own right. The existence of sophisticated, active investors who engage in managing companies and make informed trading decisions, enables other investors to form diversified portfolios without bearing the costs of information gathering and data analysis. Passive investors can simply monitor the actions of active funds and follow in their footsteps. The presence of active funds diminishes the expected value of independent information collection for other traders, making free riding a profit-maximizing strategy. ³⁶ This dynamic explains, in part, the increase in investment inflows to passive funds.

But free riding is not sustainable beyond a certain point. When a freeriding possibility exists, it will be the dominant strategy for most rational actors. This dynamic also characterizes capital markets, undermining the long-term profitability of active funds. If the percentage of active investors falls below a certain threshold, public stock prices will become less reliable as the lion's share of the trading will consist of uniformed trading by passive funds. This, in turn, would hinder efficient pricing in financial markets, and consequently result in a suboptimal allocation of resources.

B. The Positive Effect of Active Funds on Financial Markets

Active funds differ from most other investors. They provide unique services to the firms in which they invest. Critically, the value of the services provided by active funds extends well beyond the boundaries of their portfolio companies. In the paragraphs to follow, we will enumerate the benefits that accrue to other market participants and the public at large from

^{36.} The free riding of passive funds on the information-collecting efforts exerted by active funds is exemplified by the staggering gap in fees between active and passive funds: the average management fees of active funds are approximately six times higher than the average management fees of passive funds. See Patricia Oey, Investors See Largest Ever Decline in Fund Fees, MORNINGSTAR (Apr. 26, 2018), https://www.morningstar.com/articles/861288/investors-seelargest-ever-decline-in-fund-fees [https://perma.cc/EUJ5-3YZK] (summarizing a 2017 study that found the asset-weighted average net expense ratio was 0.11% for U.S. equity index funds, in contrast to actively managed U.S. funds, in which the ratio was over six times more and stood at 0.73%). Due to the free riding effect, active funds do not reap any benefit from their additional costs. Ample data shows that their performance is equivalent to or even worse than that of passive funds. See, e.g., Ben Johnson, The Morningstar Active/Passive Barometer Might Help Investors Improve Their Base Rates, MORNINGSTAR (Sept. 16, 2019), https://www.morningstar.com/articles /945906/the-morningstar-activepassive-barometer-might-help-investors-improve-their-base-rates [https://perma.cc/7QQP-7KY5] ("As is apparent in the accompanying table, actively managed funds have generally underperformed their passive counterparts, especially over longer time horizons"); BEN JOHNSON, ALEX BRYAN & ADAM MCCULLOUGH, MORNINGSTAR, MORNINGSTAR'S ACTIVE /PASSIVE BAROMETER (Aug. 2018), https://www.morningstar.com/content/dam/marketing/shared /Company/LandingPages/Research/Documents/Morningstar Active Passive Barometer 2018 .pdf [https://perma.cc/YZ3V-6CQ7] ("The average dollar in passively managed funds has tended to outperform the average dollar invested in actively managed funds.... Investors would greatly improve their odds of success by favoring low-cost funds, which succeeded far more often than high-cost funds over the long term.").

the strategies employed by active funds. As we will show, these effects are significant, and their contribution to the quality of corporate governance cannot be understated.

1. Positive Externalities for Other Shareholders.—Active funds improve corporate governance in firms along two dimensions: first, they raise the quality of decision-making processes within the firm; and second, they curtail the ability of managers to extract private benefits at the expense of shareholders by engaging in continuous monitoring of the firms' decisions. To put the matter differently, active funds perform the important function of ensuring that management and board members abide by the two duties imposed on them by law: the duty of care and the duty of loyalty.

Improved decision-making processes act as a safeguard against violations of the duty of care by lowering the risk of harmful business decisions. Moreover, they limit the ability of management to funnel value from the shareholders to themselves. In some instances, shareholder engagement can also police against violations of the duty of loyalty by preventing directors and corporate officers from engaging in self-dealing transactions. In other instances, it can serve to discipline management by inducing it to act more ethically, within the limits of the duty of loyalty—for example, by restricting managerial power to devise generous compensation schemes for itself.

While the duty of loyalty has been the epicenter of corporate law and has attracted close scrutiny from courts and legislators, the duty of care has largely evaded intense judicial review and has been subjected to the permissive business judgment rule. Under the business judgment rule, the decisions and actions of boards and directors enjoy immunity from judicial intervention as long as they are adequately informed and made in good faith and without conflict of interest.³⁷ This means that the law consciously leaves business decisions to the discretion of management and boards. It is important to note that corporate law is less concerned about substandard decision-making not because it is a rare phenomenon; on the contrary, bad decision-making is more prevalent than outright violations of the duty of loyalty.³⁸ Yet, the law gives a lot of leeway to management when it comes to business decisions in order not to exert a chilling effect on corporate directors

^{37.} Lori McMillan, *The Business Judgment Rule as an Immunity Doctrine*, 4 WM. & MARY BUS. L. REV. 521, 529–30 (2013).

^{38.} See, e.g., Dan Lovallo and Olivier Sibony, The Case for Behavioral Strategy, MCKINSEY Q., March 2010, at 1, 3, https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/the-case-for-behavioral-strategy [https://perma.cc/D4Q7-MY3C] (reporting a recent McKinsey Quarterly survey of 2,207 executives, in which 60% said they thought bad strategic decisions were as frequent as good decisions and 12% said they thought good decisions were infrequent).

and officers by reviewing their decisions retrospectively.³⁹ Consequently, shareholder engagements can be particularly valuable in this context. Active shareholders can fill the gap left by courts and provide the much-needed quality control. Unlike courts, whose review is primarily procedural under the garb of the business judgment rule, active shareholders can review the substance of managerial decisions and evaluate them on the merits.⁴⁰

Active funds reap some of the benefit of the improved performance generated by themselves, on account of the appreciation in their equity stake. Yet they only capture a fraction of the benefit generated by their actions. The remainder is captured by the other shareholders, whose investments increase in value as a result of the engagement of active shareholders. Active funds cannot recoup a greater portion of the benefit they generate without buying out the other shareholders. But this option is impracticable, of course.

- 2. Positive Externalities of Engagements on the Market at Large.—The positive externalities of engagements are not limited to shareholders of the target company. The involvement of sophisticated shareholders in the management of firms generates market-wide benefits that transcend the boundaries of individual firms. Specifically, they can improve governance norms and structures across the board. As we will show, the salutary effects of active fund engagements can be divided into two perspectives: the ex ante perspective and the ex post perspective. We discuss them in order.
- a. The Ex Ante Effect.—The ex ante perspective focuses on the disciplining effect of potential interventions, or threats of intervention. True, at present, active funds rarely initiate strategic challenges to managerial policy in the form of proposals for spinoffs, capital restructurings, and cutbacks on research and development costs. Such initiatives are typically

^{39.} See Gagliardi v. TriFoods Int'l, Inc., 683 A.2d 1049, 1052 (Del. Ch. 1996). Dismissing a shareholder claim for relief, the court explained:

[[]D]irectors will tend to deviate from [a] rational acceptance of corporate risk *if* in authorizing the corporation to undertake a risky investment, the directors must assume some degree of personal risk relating to *ex post facto* claims of derivative liability for any resulting corporate loss.

^{...[}A] very small probability of director liability based on "negligence", "inattention", "waste", etc., could induce a board to avoid authorizing risky investment projects to any extent!

Id.; see also Joshua Mitts, Comment, Recoupment Under Dodd-Frank: Punishing Financial Executives and Perpetuating "Too Big to Fail," 122 YALE L.J. 507, 513 (2012) ("The potentially crippling chilling effect of judicial second-guessing of directors' decisions is precisely what motivated the development of the business judgment rule in Delaware corporate law.").

^{40.} See Maria Goranova & Lori Verstegen Ryan, Shareholder Activism: A Multidisciplinary Review, 40 J. MGMT. 1230, 1241 (2014) ("Although both governance and hedge fund activists ultimately seek to improve firm performance, they employ different methods and time horizons, as well as different perspectives on managerial decision-making prerogatives.").

the domain of activist hedge funds that openly confront management.⁴¹ This does not mean, however, that active funds play no role in affecting such changes. Active funds can throw their weight behind the initiatives of hedge funds. In fact, they often do and have an inherent incentive to join such efforts. In 2018 and 2019, active funds increasingly supported the campaigns and initiatives of activist hedge funds.⁴² The support of active funds dramatically enhances the probability of success of the measures undertaken by activist hedge funds. Hence, indirectly, active funds exert a disciplining effect on managements and boards. Without the support of active funds, the engagements of activist hedge funds would have been far less effective.⁴³

Naturally, these engagements are undesirable from the vantage point of both managers and directors, as they represent a threat to their continued employment and erode their power to run the firm as they wish.⁴⁴ Most managements and boards negatively perceive shareholder engagements and strive to avoid them.⁴⁵ Accordingly, managements and boards would be

^{41.} Regarding the critical function of activist hedge funds for improving corporate governance, see Kobi Kastiel & Adi Libson, *Global Antitakeover Devices*, 36 YALE J. ON REG. 117, 149–150 (2019).

^{42.} Shawn Tully, A Wall Street Revolution: Why Active Fund Managers Have 'Stopped Yawning and Started Flexing Their Muscles,' FORTUNE (Oct. 24, 2019, 5:00 AM), https://fortune.com/2019/10/24/wall-street-revolution-active-managers [https://perma.cc/4KDQ-Q4ZB] (pointing to the growing support of traditional active investors such as T. Rowe Price, Neuberger Berman, and Wellington Management of activist campaigns and emphasizing that passive funds do not have an interest in joining the wave due to their lack of an incentive to analyze specific reforms); Leslie P. Norton, 'Corporate America Had Better Take Note.' Fund Managers Are the New Activist Investors, BARRON'S (Apr. 5, 2019, 8:43 PM), https://www.barrons.com/articles/mutual-fund-managers-activist-investors-51554498763 [https://perma.cc/75BT-6HFV] (pointing to Wellington Management, a traditional active managed fund, and its opposition to Bristol-Myers Squibb as a landmark of the growing activism among traditional actively managed funds).

^{43.} It should be noted that, in principle, activist hedge funds may also be eligible for such credit, given that they, too, confer positive externalities on other shareholders through their engagements with companies. Yet, in their case, the need for a tax credit is much lower since they capture most of the positive impact of their engagement through the sizeable block of shares they own in companies with which they engage. Regarding the positive impact of hedge funds on the market as a whole, and their relationship with institutional investors, see Gilson & Gordon, *supra* note 20, at 896–901.

^{44.} Even though the activists may have the same goal as management and even the same time horizon, management may justify not listening to the activists on the basis of their own belief in an idiosyncratic value that they cannot fully disclose to the activists. Regarding the possibility that management may have an idiosyncratic vision that other outside shareholders cannot observe, see Zohar Goshen & Assaf Hamdani, *Corporate Control and Idiosyncratic Vision*, 125 YALE L.J. 560, 577–79 (2016).

^{45.} Bebchuk, Brav, and Jiang have examined shareholder engagements and, despite concerns regarding their long-term negative impact, have found empirical evidence of a positive long-term impact for such engagements. See Lucian A. Bebchuk, Alon Brav & Wei Jiang, The Long-Term Effects of Hedge Fund Activism, 115 COLUM. L. REV. 1085, 1135–44 (2015) (demonstrating that two kinds of engagements particularly feared by managements and boards—engagements calling for limiting investments and engagements that use adversarial tactics—have no empirical adverse effect on the long-term performance of companies).

inclined to go to great lengths to fend off the perceived threat of shareholder engagement. It should be noted that activist hedge funds tend to converge on companies that adopt antitakeover clauses, such as staggered boards and poison pills, as potential targets for engagement. In response to this tendency, managements and boards may refrain, *ab initio*, from adopting such mechanisms in order to minimize a company's exposure to engagements, even though such measures that protect managements and boards against hostile takeovers would have been favored absent the threat of activist shareholder engagement.

Management would similarly be cautious regarding any type of corporate behavior that may trigger engagements by activist hedge funds, such as high expense levels, empire building, avoidance of merger or acquisition opportunities that stand to enhance shareholder value, and the appointment of unprofessional board members who have ties to management. As the incidence of sophisticated shareholders' engagement grows, managements and boards will become increasingly cautious to adopt such behavior. This, in turn, benefits *all* shareholders.

The intensity of the *ex ante* effect of shareholder engagements on managements and boards depends on the perceived likelihood of such an occurrence, which, in turn, is a function of the number of engagements in the market. Every additional engagement increases the *ex ante* disciplining effect of the engagement on all the other firms in the market. While this effect may appear negligible relative to the effect on the company that an activist actually engages, it is not necessarily true. Importantly, the impact of activists on the target company has the potential to create market-wide ripple effects. As Naturally, the direct impact of an engagement may be limited in many cases to the target firm, but the indirect deterrent effect may impact hundreds of companies.

In this respect, it should be added that although, at present, active hedge funds largely leave the role of initiating strategic engagements to activist hedge funds, the introduction of a targeted incentive, such as a tax credit of the type we propose in subpart III(B), can alter the behavior of active funds.

^{46.} According to PwC's 2018 Annual Corporate Directors Survey, directors are increasingly indicating that shareholder activism has compelled companies to more effectively evaluate strategy, execution, and capital allocation. PwC Governance Insights Ctr., PwC's 2018 Annual Corporate Directors Survey 1–2, 4–5, 7–8, 14, 17–19 (2018), https://www.pwc.es/es/publicaciones/consejos-y-buen-gobierno/pwc-annual-corporate-directors-survey-2018 .pdf [https://perma.cc/KPW6-G8GM].

^{47.} C.N.V. Krishnan, Frank Partnoy & Randall S. Thomas, *The Second Wave of Hedge Fund Activism: The Importance of Reputation, Clout, and Expertise*, 40 J. CORP. FIN. 296, 298, 308–09 (2016); *see also* Lucian Arye Bebchuk, *Why Firms Adopt Antitakeover Arrangements*, 152 U. PA. L. REV. 713, 722–23 (2003) (noting that companies with antitakeover clauses, at least at the IPO stage, appear to be more attractive to investors).

^{48.} See infra notes 51–55 and accompanying text.

Specifically, tax benefits can enhance the tendency of active funds to engage in more aggressive interventions. It is not unprecedented for active funds to engage firm managements, ⁴⁹ and under appropriate incentives, this strategy can become more prevalent. As we will explain, active funds are highly responsive to economic incentives, and if offered a tax credit, they are likely to adopt policies that qualify them for it. ⁵⁰

b. The Ex Post Effect of Corporate Governance Changes on Other Firms.—The ex post perspective focuses on interventions that have already occurred, as opposed to hypothetical ones. An improvement in the governance regime of one firm may trigger a similar improvement in other firms. As long as the market is competitive and incorporates an effective share pricing mechanism, firms cannot remain idle when competitors improve. Hence, if one firm decreases managerial compensation or eliminates its staggered board, its rivals will be forced to follow suit.⁵¹

This positive externality can explain the surprising finding that the number of independent directors in a firm is not correlated with stronger performance.⁵² Jeffrey Gordon has explained this result by pointing to the market-wide effect of independent directors, arguing that competitive pressures force firms to adopt value enhancing measures executed by their rivals even if they have weaker corporate governance structures.⁵³ Similarly, it can be expected that activist engagements that increase the share value of the target firm will be adopted by its rivals, even though they do not face the threat of an activist engagement.

An additional reason why engagement-driven changes in some firms may impact non-engaged firms is based on the force of social norms.

^{49.} See supra note 42.

^{50.} See supra note 42 and accompanying text.

^{51.} Jeffrey Gordon, The Rise of Independent Directors in the United States, 1950-2005: Of Shareholder Value and Market Prices, 59 STAN. L. REV. 1465, 1508 (2007).

^{52.} Sanjai Bhagat & Bernard Black, *The Uncertain Relationship Between Board Composition and Firm Performance*, 54 BUS. LAW. 921, 935–36 (1999); Sanjai Bhagat & Bernard Black, *The Non-Correlation Between Board Independence and Long-Term Firm Performance*, 27 J. CORP. L. 231, 239 (2002) (examining the correlation between independence of boards and its impact years ahead, in order to address the argument that the impact of independence of the firm is mainly in the long-run); *see also* Ozcan Isik & Ali Riza Ince, *Board Size, Board Composition and Performance: An Investigation on Turkish Banks*, 9 INT'L BUS. RES., 74, 81 (2016) (finding a negative but statistically insignificant correlation between the percentage of outside directors on the board and firm performance in the Turkish banking industry). For similar results that found a negative correlation between the number of outside directors on the board in UK companies, and profitability measures, Tobin's Q, and stock returns, see Paul M. Guest, *The Impact of Board Size on Firm Performance: Evidence from the UK*, 15 Eur. J. FIN. 385, 386 (2009).

^{53.} Gordon, supra note 51.

Managers and boards care about market norms.⁵⁴ They may, therefore, be reluctant to adopt certain practices that promote their own self-interest, if they are uncommon among other market actors. Managers and board members do not want to be perceived as outliers in the adoption of certain aggressive measures, irrespective of market threats, such as activist engagements. Due to individuals' self-concept maintenance, i.e., their desire to maintain their ethical self-image, they are concerned with behaving in a socially accepted manner, even if they would have been able to increase their private payoffs otherwise.⁵⁵

A possible example of this is the declining trend of adopting antitakeover clauses, such as staggered boards and poison pills. Managers and boards have been willing to adopt antitakeover provisions when such provisions are pervasive in other firms, but are reluctant to adopt them when the market norm is to shun them. This may explain the steep decrease in the adoption of such measures between the beginning of the 21st century and a decade later. ⁵⁶ Each shareholder engagement for the cancelation of such clauses not only affects the likelihood that the firm they engage with will cancel such measures, but also the likelihood that another firm will maintain these provisions. Accordingly, the beneficial effects of activism extend well beyond the target firm and creates value for other market actors.

II. A Tax Mechanism for Enhancing Active Investment

The classic economic solution to the problem of externalities—both negative and positive—is to impose a tax or subsidy on the externality-generating activity. As Louis Kaplow and Steven Shavell have explained, "The traditional view of economists has been that corrective taxes are superior to direct regulation of harmful externalities when the state's

^{54.} See generally Melvin A. Eisenberg, Corporate Law and Social Norms, 99 COLUM. L. REV. 1253 (1999) (examining the interrelation between social norms and the desire for financial gain as motivators for corporate actors). Social norms also function as the basis for the utilization of shaming in the realm of corporate law. See David A. Skeel, Jr., Shaming in Corporate Law, 149 U. PA. L. REV. 1811, 1820 (2001) ("Shaming sanctions are so integrally connected to social norms that it is not entirely clear where one leaves off and the other begins."). For a more general discussion of the role of social norms in the legal realm, see Robert C. Ellickson, The Evolution of Social Norms: A Perspective from the Legal Academy (Yale Law Sch., Program for Studies in Law, Economics & Public Policy, Working Paper No. 230, 1999), https://ssrn.com/abstract=191392 and Cass R. Sunstein, Social Norms and Social Roles, 96 COLUM. L. REV. 903 (1996).

^{55.} For background studies on what factors influence the psychology of individual behavior when reacting to group norms, see generally Jay W. Jackson, *Reactions to Social Dilemmas Are Influenced by Group Identification Motives*, in 16 ADVANCES IN PSYCHOLOGY RESEARCH 167 (Serge P. Shohov ed., 2002) and Robert Cooter, Michal Feldman & Yuval Feldman, *The Misperception of Norms: The Psychology of Bias and the Economics of Equilibrium*, 4 REV. L. & ECON. 889 (2008).

^{56.} Re-Jin Guo, Timothy A. Kruse & Tom Nohel, *Activism and the Shift to Annual Director Elections*, 14 J. ACCT. & FIN. 83, 83 (2014) (describing a decrease in the number of firms with a staggered board from 60% of the S&P 500 in 2001 to fewer than 20% in 2014).

information about control costs is incomplete."⁵⁷ Taxes dominate regulation because they do not require the government to possess information regarding the cost of eliminating the negative externalities or the cost of generating the positive externalities. ⁵⁸ According to Kaplow and Shavell, this is true even when the magnitude of the external effects changes through time in order to reach the optimal amount of the external effect they dominate. ⁵⁹

Under the model that originated with Arthur Cecil Pigou, activities that generate negative externalities, i.e., harmful external effects, ought to be subjected to a positive tax.⁶⁰ The tax should be commensurate with the marginal social harm caused by the activity in order to reduce the level of the harm-causing activity to the social optimum. Otherwise, actors would fail to consider the full cost of their actions and we would face an excess supply of harm-causing activities. Activities that engender positive externalities, i.e., benefit others, 61 call for the mirror-image solution. Such activities will be undersupplied by the market since the actor captures only a portion of the benefit she produces.62 Hence, to induce optimal supply of benefit engendering activities, we propose that the state use negative taxes, in the form of tax credits, to make up for the shortfall in the incidence and magnitude of active engagements.⁶³ Because the state does not possess complete information regarding the real costs and private benefits of monitoring and active engagement, the use of taxes would induce private actors to internalize the external effects of monitoring and enable them to determine the amount they should invest in monitoring. Regulation, by contrast, on account of its rigidity cannot achieve this result.

Naturally, readers can agree with our policy analysis and our preference for taxation over regulation, but nonetheless wonder why the internalization of the benefits produced by active funds should be done on the firm level.⁶⁴

^{57.} Kaplow & Shavell, *supra* note 17; *see also* Lily L. Batchelder, Fred T. Goldberg, Jr. & Peter R. Orszag, *Efficiency and Tax Incentives: The Case for Refundable Tax Credits*, 59 STAN. L. REV. 23, 44–49 (2006) (explaining why employing Pigouvian subsidies is the most efficient way for the government to structure individual income tax incentives absent certain information); Peter S. Menell & Michael J. Meurer, *Notice Failure and Notice Externalities*, 5 J. LEGAL ANALYSIS 1, 40–42 (2013) (discussing the use of fees in patent law as a policy instrument to influence applicant behavior).

^{58.} Kaplow & Shavell, *supra* note 17, at 5–7.

^{59.} *Id.* at 11–12.

^{60.} PIGOU, supra note 11, at 172-174.

^{61.} See, e.g., id. at 178-79 (describing such a situation in the landlord-tenant context).

⁶² *Id*

^{63.} See infra subparts II(A-B).

^{64.} There are various possible mechanisms by which the company could compensate active funds. For example, it can allocate a certain percentage of its revenues to cover the costs of the monitoring of institutional investors over the firm, or provide a portion of the companies' funds to certain outcomes caused by institutional investors, such as the acceptance of their shareholder proposals.

After all, the main benefactors of the monitoring and other interventions provided by active funds are the other shareholders of the company, and thus, so the argument goes, they alone should pay for the benefit bestowed upon them by active funds. This argument should be rejected for three reasons. First, as we noted, the positive externalities of active funds extend far beyond the individual firm. The introduction of improved governance standards in one firm, is likely to lead to similar improvements in competing firms. Second, engagements by active funds increase the profitability of firms, which in turn, raises tax revenues. Accordingly, the public at large also benefits from the activities of active funds. Therefore, it is fitting to fund the activities of active funds from the public fisc and thereby adopt a broader base for accounting for costs and benefits. Finally, the internalization of externalities on the company level would not necessarily eliminate free riding. If the company alone must fund the initiatives espoused by active funds, shareholders may opt to block the proposals of active funds, wait out a certain period, and then initiate the same measures on their own in order to avoid paying the fund. The use of tax credits would eliminate such free riding. For these reasons, we are of the view that the appropriate policy response to the plight of active funds must center on tax incentives.

Our view does not entail, however, that the tax incentives we envision must be financed by the public at large. On the contrary, the tax credit we propose can be budget neutral.⁶⁵ Under this design, the tax would be borne by investors at large. It is also possible to adopt a tax design that would impose the tax burden only on passive funds, by limiting the tax increase to gains generated by passive funds. Society at large, including members who do not invest in capital markets, does not have to incur the tax burden for financing the tax credit. The tax burden could be limited to investors at large or even be restricted to passive funds.

In designing a tax scheme that can level the playfield between passive and active funds, policymakers can employ two primary tools: effort-based tax credits and result-based tax credits. The two categories are not mutually exclusive and can therefore be combined. In the next two subparts, we offer a detailed blueprint of how the two types of tax incentives can be tailored to optimize the benefits generated by active funds.

A. Effort-Based Tax Credits

The most straightforward tax credit is one that directly subsidizes the activity we wish to enhance. If we want institutional investors to invest more

^{65.} Even though the nominal rate of tax imposed on investments in passive funds will be higher, it may equalize the effective tax rate paid on investments in passive and active funds. As we will explain further on in subpart III(B), because the turnover ratio in active funds is higher and realization of profits is much more frequent, the tax liability they generate is higher.

in stewardship and analysis, we could subsidize the expenses of the activity. For example, the federal government can give them a 50% tax rebate, on top of the standard deduction, on expenses incurred on employing analysts that monitor corporate governance or portfolio building and expenses on brokers that execute trade. Providing an additional tax credit would increase the institutional investors' investment in analysis personnel as it would reduce the net cost of such personnel for institutional investors. A tax credit for stewardship and analysis expenses can narrow the gap between active and passive funds. As we discussed in subpart I(B), passive funds free ride on the monitoring services provided by active funds.⁶⁶ As a result, they can afford to charge lower fees and attract more investments. On average, active funds are over four times more expensive than passive funds. ⁶⁷ Offering a favorable tax treatment to active funds can help level the playing field. First, it would reduce the expenses of active funds and enable them to charge lower fees. Second, it may increase the number of active funds both by inviting new entry and by converting some passive funds into active ones.

A different benchmark that may be utilized as a basis for tax credits is trading frequency. Most passive funds pursue a "buy and hold" strategy and do not engage in frequent trading, while active funds engage in a high level of trading. As discussed in Part I, such trading functions as a disciplining mechanism that benefits other shareholders as well, thus constituting a positive externality. In light of this difference between active and passive funds, it is possible to institute a tax credit that tracks trading frequency. Such a credit will also be more effective in distinguishing between real active funds and what the literature calls "closet index funds," i.e., passive funds that seek to pass themselves off as active funds.

^{66.} Dorothy S. Lund, *Nonvoting Shares and Efficient Corporate Governance*, 71 STAN. L. REV. 687, 696–697 (2019).

^{67.} BEN JOHNSON & ADAM MCCULLOUGH, MORNINGSTAR, U.S. FUND FEE STUDY 1 (Apr. 2019), https://www.morningstar.com/content/dam/marketing/shared/pdfs/Research/USFundFeeStudyApr2019.pdf?utm_source=eloqua&utm_medium=email&utm_campaign=&utm_content=17040 [https://perma.cc/FAS3-RYPN] (finding that the average fee in passive funds was 0.15% for 2018 and that of active funds was 0.67%).

^{68.} Russell R. Wermers, *Active Investing and the Efficiency of Security Markets*, 19 J. INV. MGMT. (forthcoming 2021) (manuscript at 9), https://ssrn.com/abstract=3353956 (describing the evidence in the financial literature of the positive correlation between stock more heavily held by actively managed funds and their liquidity level, i.e., higher trading frequency, and the evidence for the causal relationship: that the active managers generate the greater liquidity).

^{69.} See K.J. Martijn Cremers & Quinn Curtis, Do Mutual Fund Investors Get What They Pay For? Securities Law and Closet Index Funds, 11 VA. L. & BUS. REV. 31, 33, 38 (2016) (defining closet index funds and noting that active managers justify higher fees in part based on higher expenses associated with increased trading activity, even where active funds might not actually trade more frequently than passive funds). We address the issue of the manipulability of the benchmarks we propose in section III(B)(3).

One may argue that institutional investors, especially large ones, would be apathetic to the actual costs of such personnel. For example, the "Big Three"—BlackRock, State Street, and Vanguard—alone have under 5 trillion dollars under management and, hence, the proposed tax rebate will have no direct effect on them. Yet a careful examination of their costs suggests that our tax rebate will affect them. The Big Three's expenses on stewardship services constitute 0.00018% to 0.00029% of their assets under management. Accordingly, in the case of the Big Three, a 50% rebate could translate to estimated savings of 11.7 million dollars given *current* investment on stewardship services. It is no small amount even for the Big Three, and if our proposal is implemented, it would have the effect of inducing greater investment in stewardship services, and, correspondingly, greater tax returns.

One concern about tax credits in general is "leakage": subsidization of behavior that would have happened even without the favorable tax treatment. Awarding tax credits for behavior that would have occurred in their absence is wasteful from a social perspective as it involves significant cost for the public without affecting the behavior of the target group. To avoid this problem, we propose that the tax credit would only apply to expenditures in excess of passive funds' current spending on analysis services and trading. For example, if we know that currently, without a tax credit, large passive funds spend at least 0.14% of their aggregate fees and expenses on stewardship services, the tax credit should apply only to expenditures that surpass that percentage. Similarly, if passive funds engage in a certain number of trades per portfolio company, active funds would only be given credits for trades in excess of this number.

Of course, efforts may fall short of bringing about the desired outcome. Spending more on monitoring and analysis services does not necessarily result in better corporate performance. Yet, effort-based credits have an important virtue: they spur actors to try to bring about change when success is uncertain. In our case, it is especially important to offer effort-based tax credits because sophisticated investors often operate under conditions of uncertainty. Whether they are ultimately successful or not, they must sink considerable costs in the pursuit of their desired result. Furthermore, as we demonstrated in subsection I(B)(2)(a), even failed engagements generate

^{70.} These numbers are derived by dividing the estimated stewardship investment for each of the companies by the assets under management in each company. Lucian Bebchuk & Scott Hirst, *Index Funds and the Future of Corporate Governance: Theory, Evidence, and Policy*, 119 COLUM. L. REV. 2029, 2077–78 (2019).

^{71.} This figure is based on estimated expenses on stewardship services. *Id.* at 2078.

^{72.} *Id.* (revealing that BlackRock's spending is 0.15% of its total fees and expenses, Vanguard's is 0.18%, and State Street Global Advisors' is 0.14%, which is the lowest of the three and could be used as a reference point).

positive externalities. The threat of engagement in and of itself affects managerial behavior.

Hence, it is very important that efforts, too, would entitle active investors to receive tax credits. It should be borne in mind that even though active funds do not typically face liquidity constraints, they may not be highly motivated to engage in measures that do not have a high probability of success. As noted earlier, monitoring corporate governance is not the bread and butter of most institutional investors, and thus when such activities involve risk, they may be reluctant to spend on uncertain initiatives. For this reason, they may be much more responsive to an effort-based tax credit scheme that offers them a reward for performing a certain desirable activity.⁷³

B. Result-Based Tax Credits

The second form of credit we propose is a result-based credit. The result-based credit is conditioned on the occurrence of a certain predetermined result. The use of result-based tax credits requires policymakers to address two distinct questions. First, they must determine which results qualify for the credit. Second, they must decide how to calculate it. Our discussion will address both issues.

1. Defining Desirable Outcomes of Active Trading.—In devising a list of outcomes that entitle institutional investors to tax credits, it is necessary to keep two objects in mind. First, the outcomes should lead to improvements in corporate governance. Second, the outcomes should be associated with activism—that is, they should be able to affect separation between active funds and passive funds and ensure that only the former are entitled to the credit. The outcomes we propose meet both criteria.

a. Informed Voting.—Informed voting constitutes an important vehicle for improving corporate governance. Voting on its own, though, does not necessarily entail substantive engagement with corporations. Nor does it create a meaningful separation between active and passive funds. The litmus test for separating active and passive funds should be informed voting. By our lights, voting is informed when it is based on specific analysis of the

^{73.} There is a literature on mechanism design, and in personal economics as well, that addresses this issue. See, e.g., EDWARD P. LAZEAR & MICHAEL GIBBS, PERSONNEL ECONOMICS IN PRACTICE 109–70 (2d ed. 2009) (discussing how to allocate decision-making in a company and how to structure a firm's overall organization); Canice Prendergast, The Tenuous Trade-off Between Risk and Incentives, 110 J. POL. ECON. 1071 (2002) (analyzing the relationship between pay-for-performance contracts and observed measures of uncertainty in the agency context to challenge the existence of a negative trade-off between risk and incentives). For a similar discussion regarding the optimal design of a Pigouvian tax, see Adi Libson, Confronting the Retirement Savings Problem: Redesigning the Saver's Credit, 54 HARV. J. LEGIS. 207, 240–44 (2017).

relevant firm. Hence, only funds that invest in analysts should be entitled to a tax credit.

There are two ways by which institutional investors can exert influence on firms' voice mechanisms. The first is their influence on substantive decisions the firms are facing, which require the approval of shareholders. This category includes conflicted transactions, compensation policy, and end-game decisions, such as mergers and acquisitions in particular. The second is by instituting pro-shareholder voting rules, such as proxy-access rules, cumulative voting rules, limitations on dual-class stock structures, and majority voting rules (instead of plurality voting rules). These goals are

74. The voting power of institutional investors is fairly high. Their large portion of the shares is compounded by their higher tendency to vote than retail investors. Scholars estimate that, on average, the votes of institutional investors constitute 87.7% of all votes cast. See Miriam Schwartz-Ziv & Russ Wermers, Do Institutional Investors Monitor Their Large vs. Small Investments Differently? Evidence from the Say-on-Pay Vote 9 (ECGI Working Paper Series in Finance, Working Paper No. 541/2017, 2018), https://ssrn.com/abstract=3096745 (stating that institutional investors constitute 69.63% of the outstanding shares of the average stock and vote 90% of their proxies, in contrast to retail investors whose voting rate is around 29%). Say-on-pay serves as an example for the utilization of shareholder votes in the ongoing monitoring of the company. Currently, 12.8% of shareholders vote against compensation packages in say-on-pay proxies. Id. at 10. The voting of institutional investors on say-on-pay matters is not solely determined by proxy advisors such as ISS. On average, 11% of institutional investors voted against the recommendation of proxy advisors on say-on-pay. Id. at 37. Regarding the agency problem of proxy advisors firms and how it could be addressed, see Asaf Eckstein, Skin in the Game for Credit Rating Agencies and Proxy Advisors, 7 HARV. BUS. L. REV. 221 (2017).

75. See CORP. GOVERNANCE POLICIES § 3.2 (COUNCIL OF INSTITUTIONAL INV'RS 2019), https://www.cii.org/files/ciicorporategovernancepolicies/09_17_19_corp_gov_policies.pdf [https://perma.cc/QF7P-SUMV] (stipulating that "[c]ompanies should provide access to management proxy materials for a long-term investor or group of long-term investors owning in aggregate at least three percent of a company's voting stock, to nominate less than a majority of the directors"); see also Lucian A. Bebchuk, Reply: Letting Shareholders Set the Rules, 119 HARV. L. REV. 1784, 1795–97 (2006) (proposing that "shareholder power over rules-of-the-game decisions should accompany a new default arrangement making it easier for shareholders to replace incumbent directors"). But see Jill E. Fisch, The Destructive Ambiguity of Federal Proxy Access, 61 EMORY L.J. 435 (2011) (arguing that even if proxy-access rules may have significant advantages, they should be left for private ordering and not be mandated); Marcel Kahan & Edward Rock, The Insignificance of Proxy Access, 97 VA. L. REV. 1347 (2011) (foreseeing that proxy-access rules would have a low impact on the nomination of new directors).

76. See Bernard Black & Reinier Kraakman, A Self-Enforcing Model of Corporate Law, 109 HARV. L. REV. 1911, 1947–49 (1996) (advocating for cumulative voting as "a central element of self-enforcing corporate law"); Jeffrey N. Gordon, Institutions as Relational Investors: A New Look at Cumulative Voting, 94 COLUM. L. REV. 124 (1994) (proposing the adoption of cumulative voting to give institutions additional leverage in board-composition negotiations and enhance the directors' sense of independence).

77. See Lucian A. Bebchuk & Kobi Kastiel, *The Untenable Case for Perpetual Dual-Class Stock*, 103 VA. L. REV. 585 (2017) (arguing for imposing a time restriction on the utilization of a dual-class structure).

78. See MATTEO TONELLO, THE CONFERENCE BD., PROXY VOTING ANALYTICS (2016-2019) AND 2020 SEASON PREVIEW 23 (2019), https://cclg.rutgers.edu/wp-content/uploads/Proxy-Voting-

achieved by amending a corporation's charter or its by-laws, and enabling small shareholders to have greater impact on the firm's decision via their voice. Active funds that partake in such activities should qualify for tax credits under our proposal.

b. Board Composition.—A second way by which institutional investors can influence corporate decisions is via changes in board composition. The most basic and most common level is by voting and supporting the most competent director on the slate. Cumulative voting enables institutional investors to have an impact on the board, even in companies with centralized ownership, by allowing institutional investors to concentrate all their voting power to support a certain candidate for the board, instead of spreading it on all candidates.

Institutional investors can amplify their voice by actively suggesting candidates up for vote, and not merely supporting certain candidates from a given list. Institutional investors' familiarity with the market puts them in a unique position to identify board candidates that fit the characteristics of each individual firm. Identifying suitable board candidates is a challenging and time-consuming task that may even require a proxy fight with the management in some cases. Although this type of conduct is atypical for institutional investors at present, its prevalence may grow if a tax credit is given for such behavior.

Appointing a candidate to the board is the most impactful measure that can be taken by an institutional investor. A board seat gives rise to two important advantages. The first is unmediated access to non-public information about the firm and the power to influence decision-making within the firm. The second is interaction with the top management of the company and an opportunity to provide meaningful input. The strategy of demanding a board seat is common among activist hedge funds. It is less common among conventional active funds. The reason is that board representation can be an obstacle to trading. An active fund that appoints one of its employees to the board of a company runs the risk of violating the regulations that restrict insider trading and must forgo various trade

Analytics-2016-2019.pdf [https://perma.cc/A329-MEK5] (reporting a significant increase in the 2019 proxy season of companies that adopted majority voting rules led by institutional investors—from five in 2018 to twenty-two in 2019); DAVID WEBBER, THE RISE OF THE WORKING-CLASS SHAREHOLDER: LABOR'S LAST BEST WEAPON 74–75 (2018) (describing how majority voting has transformed shareholder voting by "mak[ing] candidates and board members more accountable to shareholders"). But see Stephen J. Choi, Jill E. Fisch, Marcel Kahan & Edward B. Rock, Does Majority Voting Improve Board Accountability?, 83 U. CHI. L. REV. 1119, 1122 (2016) (presenting data that supports a skeptical view as to whether adoption of a majority voting rule has significant impact on firms); William K. Sjostrom, Jr. & Young Sang Kim, Majority Voting for the Election of Directors, 40 CONN. L. REV. 459, 487 (2007) (concluding that a majority voting rule does not have any real impact and "is little more than smoke and mirrors").

opportunities in order to remain compliant.⁷⁹ For this reason, board representation is not a strategy that standard active funds are likely to adopt.⁸⁰ If they do, it should entitle them to a tax credit.

- c. Shareholder Proposals.—Shareholder proposals provide another example of active, voice-based participation. Yet, their actual impact is rather limited. Shareholder proposals typically involve requests for greater disclosure. Shareholder proposals cannot be made regarding ordinary business decisions.⁸¹ Furthermore, the low cost of making such proposals implies that they can be easily manipulated. For this reason, lawmakers should carefully weigh the pros and cons of using shareholder proposals as a benchmark for granting tax credits. Of course, only proposals that are accepted should entitle funds to credit, and we are of the opinion that the credit, if recognized, should be relatively low.
- 2. Setting the Credit.—There are two possible ways to determine the value of result-based credits. First, it can be assessed in absolute terms based on the cost of the engagement. Alternatively, it is possible to set the credit as a certain percentage of the increase in firm value. In the proceeding discussion, we analyze the pros and cons of each method. Result-based tax credits can be pegged to share prices. Because we focus on public companies, it is possible to estimate the value of the engagement based on the change in price of the share after the engagement, while controlling all other relevant factors, such as general trends in the sector or the market.

^{79.} See 17 C.F.R. § 240.10b5–1(a) (2020) (limiting the ability of the insiders to the trade the company's stock, in order to eliminate insider trading). Regarding the ability to attribute the limitations on directors to the fund that they represent on the board, see Nader H. Salehi, Andrew J. Dunbar & Benjamin J. Hoffart, Trading by Corporate Directors and Their Affiliated Investment Funds, SIDLEY AUSTIN LLP (Nov. 2013), https://www.sidley.com/-/media/files/publications/2013/11/trading-by-corporate-directors-and-their-affilia_/files/view-article/fileattachment/final-best-law-firms-2014-article-2-pages—11-05__.pdf?la=en [https://perma.cc/U4JV-VFH8]. Leakage of nonpublic information through board members that represent funds also occurs. See John C. Coffee, Jr., Robert J. Jackson, Jr., Joshua R. Mitts & Robert E. Bishop, Activist Directors and Agency Costs: What Happens When an Activist Director Goes on the Board?, 104 CORNELL L. REV. 381, 418–27 (2019) (finding that an information leakage exists when activist directors are appointed to the board, but not when other activists are appointed).

^{80.} Nonetheless, there are active funds, specifically state pension funds, such as CalSTRS (California State Teachers Retirement System), CalPERS, and NYSTERS that are represented on boards. For example, CalSTRS, which held together with its partner Relational Investors LLC 7.3% of its outstanding shares of Timken, has a representative sitting on the board of Timken. *See* WILLIAM LAZONICK & JANG-SUP SHIN, PREDATORY VALUE EXTRACTION: HOW THE LOOTING OF THE BUSINESS CORPORATION BECAME THE U.S. NORM AND HOW SUSTAINABLE PROSPERITY CAN BE RESTORED 136 (2020) (detailing the co-investment of CalSTRS and Relational Investors LLC in Timken).

^{81. 17} C.F.R. § 240.14a-8(i)(7) (2020).

Using changes in share price as a measure of the value of an engagement has a clear advantage. One of the central challenges of Pigouvian taxes and subsidies is quantification. The use of Pigouvian taxes necessitates an estimation of the magnitude of the externality. Absent an accurate estimation, Pigouvian taxes and subsidies generate positive and negative errors. In our case, however, the market provides a potential mechanism for quantifying the positive externality. The positive externalities of engagements by active hedge funds is represented, in part, by the change in share price between the shares of the companies in their portfolio and the share prices of other companies in the same industry. Yet, the market may not be as effective a tool as it may first seem for estimating the economic value of engagements. There is much evidence suggesting that the stock market is not efficient in the strong sense. Hence, it may not necessarily readily reflect the full value of an engagement.

While we are fully cognizant of this problem, share price changes constitute a useful, albeit imperfect, measure for estimating the positive effect of sophisticated shareholder engagements. Tying the credit to changes in share price also requires policymakers to decide whether to rely on short-term or long-term effects. There is a heated debate among corporate law scholars as to which effect should dominate. According to the view that maintains that there is no gap between the short-term and long-term outcomes of activist engagements, the relevant date could be set closer to the date of the announcement of the engagement. According to the view maintaining that there is a gap between a target company's performance in the short term and in the long term, the effect of the engagement should be assessed two to three years after its occurrence.

Fortunately, we do not need to take sides. The tax credit mechanism we provide can be applied in the short term or long term. As we pointed out, it is a flexible tool that is perfectly adaptable for both scenarios. If policymakers are concerned about the long-term effect of engagements, they can calculate the credit based on the share price several years after the intervention. If, by contrast, they wish to intensify the rate of engagements, they can select a much shorter horizon, say of forty to sixty days.

^{82.} Admittedly, this measure does not capture the full positive effects of active funds. It does not reflect the broader market effects of their activities. Nonetheless, it is a useful benchmark.

^{83.} For a review of this literature, see generally Lynn A. Stout, *The Mechanism of Market Inefficiency: An Introduction to the New Finance*, 28 J. CORP. L. 635 (2003). For some of the classical studies on this issue, see generally ANDREI SHLEIFER, INEFFICIENT MARKETS: AN INTRODUCTION TO BEHAVIORAL FINANCE (2000) and Michael C. Jensen, *Some Anomalous Evidence Regarding Market Efficiency*, 6 J. FIN. ECON. 95 (1978).

^{84.} See Bebchuk et al., supra note 45, at 1130.

^{85.} See Cremers et al., supra note 6, at 9, 11, 19, 22 n.10.

An original solution to the short-termism versus long-termism dilemma that can be employed in the present context is to give institutional investors both options and let them decide. This approach would allow active investors to self-select. It would also provide valuable information to the market. The preferences of active investors reflect their estimations of future market trends and, moreover, are indicative of their own future plans. Institutional investors that plan to take long-term positions in firms and be actively involved in them may choose the long-term tax credit, especially if there is a cumulative effect to the engagements. Those that plan to make one-off engagements would probably prefer to accept a credit that is based on short-term performance.

Admittedly, the proposed measurement technique does not fully capture the positive externality of the engagement. As noted above, there are two elements that comprise the positive externalities of sophisticated investors. The first is its positive impact on the other shareholders of the firm. The second is its positive impact on shareholders of other firms and society at large. The increase in share price captures only the first element. Hence, the actual externality is greater than the estimation on which the credit is based. Nonetheless, the change in share price provides a helpful approximation of the added value provided by active funds. The inability to quantify externalities accurately is an inherent problem in the deployment of Pigouvian taxes. As William Baumol has argued in his general discussion of this mechanism, "given the limited information at our disposal, it is perfectly reasonable to act on the basis of a set of minimum standards of acceptability."87 As is true of all approximations, it is imperfect. Yet, relative to other externalities such as industrial pollution, smoking, and traffic congestion, that require complex models to reach even a rough assessment of the external costs they impose, in our context, share price provides us with a handle for estimating the externality generated by the active investors. 88 The use of changes in share prices for calculating tax credits clearly represents an improvement over the existing state of affairs, where active funds are not rewarded at all for their actions. In this respect, it is good to recall the words

^{86.} Ian Ayres, *Menus Matter*, 73 U. CHI. L. REV. 3, 3 (2006) (explaining that a menu is "a contractual offer that empowers the offeree to accept more than one type of contract").

^{87.} William J. Baumol, *On Taxation and the Control of Externalities*, 62 AM. ECON. REV. 307, 318 (1972). The reason for the limited information is that the analysis of the optimal level of Pigouvian taxes is based on the estimation of a hypothetical competitive optimum, which cannot be estimated accurately, given our limited information regarding the production function of firms and utility functions of individuals. Dahlman, *supra* note 10, at 157.

^{88.} For multiple essays exploring examples of the complex models required for reaching a rough assessment of the external costs in various fields, see generally THEORY AND MEASUREMENT OF ECONOMIC EXTERNALITIES 179–259 (Steven A. Y. Lin ed., 1976).

of wisdom attributed to both John Maynard Keynes⁸⁹ and Amartya Sen,⁹⁰ that "it is better to be roughly right than precisely wrong."⁹¹

A different challenge to our proposal is that changes in share prices arise not only from the actions of active funds, but also from managerial performance. We do not dispute the fact that managerial decisions affect firm performance. This, however, does not affect our proposal. Active funds invest in multiple firms. Some of them have excellent management; others do not. This means that in some firms the positive effects of active funds are compounded by managerial performance. In others, poor management dilutes the positive effects of active fund involvement. In the aggregate, these effects should offset one another. Active funds would benefit from good management in some firms and suffer from poor management in others. Given that active funds have large portfolios of companies, on average, the two effects would even out. Thus, policymakers can rely on changes in share prices as a basis for estimating tax credits for active funds.

3. Addressing Manipulability.—Even if one accepts our theoretical framework and agrees with our analysis, she may oppose it on practical grounds. In the real world, tax credits often generate false positives: actors who claim to have satisfied the eligibility criteria in order to receive the credit, although in reality they have not. The same problem can arise in our context. Some passive funds may pass themselves off as active funds simply by presenting themselves to the world as active funds or by adopting token engagements that fall short of generating positive externalities. Furthermore, active funds may collude with managements to qualify for favorable tax treatment. This can be done by initiating interventions that the management would not oppose. For example, active funds can propose board members who are informally affiliated with the management, while portraying them as independent, knowing full well that they will not be opposed. The eligibility criteria can be manipulated in yet another way: our proposal may induce funds to engage in excessive trading solely for the purpose of receiving tax credits.92

^{89.} ROBERT SKIDELSKY, KEYNES: A VERY SHORT INTRODUCTION 20 (2010).

^{90.} LIAM MURPHY & THOMAS NAGEL, THE MYTH OF OWNERSHIP: TAXES AND JUSTICE 24 (2002).

^{91.} Even though this saying is commonly attributed to Keynes and Sen, it is an adaptation of a phrase by Carveth Read. *See* CARVETH READ, LOGIC, DEDUCTIVE AND INDUCTIVE 351 (4th ed. 1920) ("It is better to be vaguely right than exactly wrong.").

^{92.} In order to generate trades for the sole purpose of being classified as an active fund and receive the tax credit, funds do not necessarily have to make any meaningful change in their portfolio. They can constantly switch between two similar companies, e.g., United and American Airlines, in order to receive the credit, without generating any real benefit for the investors or the market at large. These practices are known in the corporate literature as "churning." See, e.g.,

It should be emphasized at the outset, that manipulability is a general concern in the tax realm. Every tax, negative and positive, is vulnerable to some extent to manipulation. This does not necessarily imply that the tax is undesirable. It would have been preferable, of course, if a tax scheme were immune to manipulation, but given all possible alternatives, taxation may still be the most effective tool from a societal standpoint. A tax, despite its susceptibility to manipulation, may constitute a second-best solution and society will be better off with it than without it.

We believe that the same holds true for our proposal. While our proposal is not manipulation proof, its susceptibility to manipulation is less significant than that of other taxes. If the credit amount is lower than the cost of generating the activity that qualifies funds for the credit, manipulation makes no economic sense as it would lead to a net loss. For example, if the trading credit enables a fund to receive a credit for a portion of the broker-costs of generating the credit, no fund would be interested in artificially generating trades that have no positive value in themselves: it would not increase their profits, but only cover the costs involved. Moreover, given that our scheme rewards efforts that exceed a certain threshold that reflects the level of activity of passive funds, artificially increasing the frequency of trades may prove a self-defeating strategy. A passive fund that increases its number of trades just for the sake of receiving credit, may lose its market share to rival passive funds. Trades that do not result in a benefit to investors imply higher costs as long as the credit is lower than the brokerage fee. Lastly, trading activities have tax consequences: they give rise to realization events that generate tax liability. Thus, the risk of "empty trading," or "churning" in an attempt to qualify for our credit is handled by the design of the tax system.

Admittedly, our effort-based credit plan is not completely immune to manipulation. Funds can manipulate our suggested effort-based credit by embedding the relevant tasks that create an entitlement for the credits in the job descriptions of senior corporate officers or other workers in the funds that do not actually focus on monitoring investments. For example, a credit for expenditures on financial market analytics may lead funds to include market analysis in its CEO's job description, and thus, pay a share of her compensation with public money received as a tax credit. Yet such manipulations are limited in their scope and are easy to detect and address. The risk of false credit claims can be addressed by requiring funds to set up

Norman S. Poser, *Options Account Fraud: Securities Churning in a New Context*, 39 BUS. LAW. 571, 571 (1884) (noting that churning "occurs when a securities broker or dealer who controls the volume and frequency of trading in a customer's account abuses the customer's confidence for his own personal gain"); see also Franklin Allen & Gary Gorton, *Churning Bubbles*, 60 REV. ECON. STUD. 813, 814 (1993) (noting portfolio managers are "churning their clients' portfolios in the hope of a speculative profit," as opposed to making trades prompted by "changes in information, liquidity shocks or risk sharing"). Our response to the challenge of manipulation of credit by trading activity addresses trading as well. *See supra* subpart (II)(B).

separate units that conduct market analysis and provide stewardship services. These units would be manned by independent personnel to ensure that no credit is claimed for the work of other fund employees.

It is true that relative to effort-based credits, result-based credits are more susceptible to manipulation. For example, funds can increase the frequency of their trades, participate in more votes, or propose a larger number of board candidates to get credits. It should be remembered though that such actions would increase the operation costs of funds and if they do not lead to better results, it would adversely affect fund performance. Hence, engaging in such measures perfunctorily may be a self-defeating strategy. Furthermore, in the case of our suggested result-based credits, there is a trade-off between their greater susceptibility to manipulation and their greater alignment with actual positive externalities (compared to our effort-based credits). Under our proposed scheme, result-based credits are reserved to cases in which there is an actual positive externality (as opposed to effort-based credits that target *potential* for positive externalities, even if it does not materialize).

Finally, lawmakers can fend off manipulation attempts by requiring funds to satisfy the effort and outcome benchmarks we discussed. Concretely, credit for participation in important corporate votes would only be restricted to funds that prove adequate expenditures on analysis services. This should screen claims by passive funds that vote in an uninformed manner. Combining the criteria would sift out spurious claims by passive funds, without adversely affecting active institutional investors whose business model is tailored to the eligibility criteria.

III. The Advantages of Tax Incentives over Competing Mechanisms

In this Part, we compare our proposal to existing proposals that seek to compel, or induce, passive funds to become more active. Our proposal has three potential advantages over competing proposals that seek to force passive funds to become more active. First, taxes constitute a highly effective tool for altering behavior as they transform the underlying motivations of the subject. Tax credits are a flexible tool that could be designed to generate optimal incentives in complex situations. Second, our proposal has the potential to create a virtuous financial cycle: the expected increase in tax revenues from both the increase in investments with more frequent realization events and the improved performance of firms generated by the tax credits should far surpass the cost of providing the credits. Third, and finally, from a political economy standpoint, due to its noncoercive nature, our proposal will not attract opposition from the investment industry and thus stands a realistic chance of being adopted.

A. Efficacy of Tax Incentives in Altering Behavior: Comparison to Alternative Solutions

The potential of active funds to improve corporate governance has not escaped the probing gaze of other scholars. Nor have they missed the fact that passive funds have experienced dramatic growth at the expense of active ones, in recent years. Unease with the current trend has led theorists to propose various mechanisms for encouraging activism on the part of institutional investors. These mechanisms range from mandating active participation, to coordinated management arrangements, to the use of dual class stocks to enhance engagements. In the proceeding paragraphs, we review each of the existing proposals and explain why it is dominated by the tax credit solution we propose.

A straightforward solution to the low participation of sophisticated investors in corporate governance is mandatory participation. Unsurprisingly, this solution has been endorsed by some scholars who argued that certain institutional investors should be required to vote in shareholder meetings. Others have advanced a softer mechanism requiring institutional investors to disclose whether or not they voted, without actually forcing them to vote. The theory behind this measure is that forcing institutional investors to disclose whether they voted would induce a strong motivation to exercise their voting rights, lest they be perceived as shirking their duties. An

^{93.} See Eilís Ferran, COMPANY LAW AND CORPORATE FINANCE 248 (1999) (noting that mandatory voting has been proposed as a solution to the "absentee landlord" problem and discussing the merits of such a solution); Chris Mallin, Institutional Investors: The Vote as a Tool of Governance, 16 J. MGMT. & GOV. 177, 184 (2012) (observing how institutional investors' fear of a mandatory voting requirement being imposed by the government contributed to a substantial uptick in participation by those investors). For a discussion of the imposition of such a mandate on institutional investors, see Paul H. Edelman, Randall S. Thomas & Robert B. Thompson, Shareholder Voting in an Age of Intermediary Capitalism, 87 S. CALIF. L. REV. 1359, 1367–84 (2014). For a general discussion regarding the efficacy of compulsory voting, see Note, The Case for Compulsory Voting in the United States, 121 HARV. L. REV. 591, 596–98 (2007).

^{94.} The first to do so was the Department of Labor, which serves as the regulator of defined-benefit pension plans and has required institutional investors of defined-benefit plans to vote their proxies. For the origination of the voting mandate, see Letter from Alan D. Lebowitz, Deputy Assistant Sec'y, Pension & Welfare Benefits Admin. of the U.S. Dep't of Labor, to Helmuth Fandl, Chair of the Ret. Bd., Avon Products, Inc. (Feb. 23, 1988) (1988 WL 897696, at *2). For the codification of this mandate, see Interpretative Bulletin Relating to the Exercise of Shareholder Rights and Written Statements of Investment Policy, Including Proxy Voting Policies or Guidelines, 29 C.F.R. § 2509.08–2 (2011), superseding 59 Fed. Reg. 32607 (June 23, 1994).

^{95.} Margaret H. McFarland, Deputy Secretary, *Proxy Voting by Investment Advisers, Exchange Act Release No. IA-2106*, SEC. & EXCH. COMM'N (Jan. 31, 2003), http://www.sec.gov/rules/final/ia-2106.htm [https://perma.cc/FY76-8FCD] [hereinafter Investment Advisers Exchange Act Release]. According to this rule discussion,

The duty of care requires an adviser with voting authority to monitor corporate actions and vote client proxies. Therefore, the adviser should have procedures in place designed to ensure that it fulfills these duties. We do not suggest that an adviser that

alternative proposal has been recently suggested by Lucian Bebchuk and Scott Hirst, who called on lawmakers to compel index funds to allocate a certain percentage of the money they invest toward stewardship activities. ⁹⁶

The main drawback of all of the aforementioned measures concerns their efficacy: it is questionable whether forcing passive funds to make unwanted expenditures will generate effective stewardship services. As several scholars have noted, the efficacy of such mechanisms is relatively low. Forcing institutional investors to cast votes cannot in and of itself ensure a deliberative process leading up to the vote, let alone encourage serious monitoring on an ongoing basis. Requiring passive funds to provide a service they are disinclined to perform when left to their own devices would lead them to do a half-hearted job, at best, and find ways to subvert the mandate, at worst.

A different path for leveling the playfield between passive and active funds has been proposed by Dorothy Lund: a dual class stock structure consisting of voting and non-voting shares. The existence of non-voting shares alongside voting shares can enable efficient sorting to take place. Active funds would purchase voting shares, while passive funds would acquire non-voting shares, at a discounted price. This, in turn, would enable active funds to monitor firms and shape their policies, while lowering the cost of raising capital. The structure funds to monitor firms and shape their policies, while lowering the cost of raising capital.

Unfortunately, Lund's proposed solution may actually exacerbate the problem it sets out to solve. Lund's proposal aims to decrease the power and voice of passive funds by separating equity rights and voting rights. Passive funds and their investors free ride on the monitoring of active investors. Lund's dual class stock structure intensifies the free riding problem by increasing the gap between the costs of passive index funds and active index funds. Passive funds will purchase non-voting shares at a discounted price, compared to the price of the voting shares that active funds will purchase, while the equity rights associated with both types of funds remain identical.

Our tax credit mechanism avoids these pitfalls. It is designed to induce meaningful value-enhancing engagements. Tax incentives are a powerful tool for altering behavior, especially when the desired form of behavior is

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fails to vote every proxy would necessarily violate its fiduciary obligations. There may even be times when refraining from voting a proxy is in the client's best interest . . . .
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We are requiring public disclosure as a means of informing fund shareholders how the fund (or its adviser) voted proxies of the shareholders' fund.

Id. (emphasis removed).

^{96.} Bebchuk & Hirst, *supra* note 70, 2121–22.

^{97.} Richard L. Hasen, Voting Without Law?, 144 U. PA. L. REV. 2135, 2174-75 (1996).

^{98.} Lund, supra note 66, at 695-96.

^{99.} Id.

^{100.} Id.

complex and cannot be reduced to a simple maxim.¹⁰¹ This is certainly the case in the context of enhancing activism: policymakers do not necessarily have a precise goal to guide them. They do not necessarily want activists to push for a certain resolution in a specific firm or reach a set level of expenses on active monitoring of firms. In such cases, tax incentives constitute a much more effective way of altering behavior than hard regulatory interventions.

It is noteworthy that tax incentives are especially effective when applied to sophisticated actors, such as institutional investors. While tax incentives can influence all actors, the calculative mode they introduce may cause them to be less effective in the case of non-sophisticated actors. ¹⁰² By contrast, there is substantial evidence that sophisticated actors, such as corporations, are sensitive to even the slightest tax benefits. ¹⁰³ Active funds are highly calculative sophisticated actors. For this reason, they are likely to respond to changes in the tax regime.

It should be further noted that tax credits provide a flexible policy tool. Tax credits are non-binary and do not have to be uniform. Lawmakers can employ tax credits in a continuous fashion, in a way that distinguishes among different types of socially desirable activities. As we demonstrated, tax credits can target effort or outcome and can even be used to differentiate among various outcomes based on their social importance. More importantly, perhaps, tax credits can be adjusted over time. If we decide that we are approaching the socially optimal level of engagement, we can reduce the tax credit. If, on the other hand, we believe that we have not reached the full market effect, we can make the credit larger.

^{101.} See Kaplow & Shavell, supra note 17, at 2 (endorsing the view that Pigouvian taxes dominate regulation in internalizing externalities).

^{102.} For an example of sizeable tax incentives that have failed to alter behavior significantly, even when it is a pure gain for taxpayers, see James J. Choi, David Laibson & Brigitte C. Madrian, \$100 Bills on the Sidewalk: Suboptimal Investment in 401(k) Plans, 93 REV. ECON & STAT. 748, 759 (2011) (pointing to the phenomenon that many individuals over the age of 64.5, who will have a net gain from depositing funds into a 401(k) plan, do not do so). For a more general discussion on low sensitivity to tax incentive in the context of tax credits for retirement saving, see Libson, *supra* note 73, at 226–33.

^{103.} For studies regarding the strong impact of tax incentives on corporations, see generally Sanjay Gupta, Yuhchang Hwang & Andrew Schmidt, An Analysis of the Availability and Incentive Effects of the R&D Tax Credit After the Omnibus Budget Reconciliation Act of 1989 (2010), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=535742; Kenneth J. Klassen, Jeffrey A. Pittman & Margaret P. Reed, A Cross-National Comparison of R&D Expenditure Decisions: Tax Incentives and Financial Constraints, 21 CONTEMP. ACCT. RES. 639 (2004); Michelle Hanlon & Shane Heitzman, A Review of Tax Research, 50 J. ACCT. & ECON. 127, 148 (2010); Nirupama Rao, Ending the R&D Tax Credit Stalemate, PENN. WHARTON PUB. POL'Y INITIATIVE ISSUE BRIEFS, Apr. 2015, at 1, https://repository.upenn.edu/pennwhartonppi/34/?utm_source=repository.upenn.edu %2Fpennwhartonppi%2F34&utm_medium=PDF&utm_campaign=PDFCoverPages [https://perma.cc/5L82-L7M9]; and Ming-Chin Chen & Sanjay Gupta, The Incentive Effects of R&D Tax Credits: An Empirical Examination in an Emerging Economy, 13 J. CONTEMP. ACCT. & ECON. 52, 61 (2017).

B. Macro-Economic Stability

Even though it may seem, at first glance, that implementation of our proposal would impose a significant cost on the federal budget, its net budgetary effect is likely to be neutral or positive. This is so for two reasons: first, active funds generate much higher tax revenues than passive funds. Taxes are paid only in instances of realization of a capital gain. 104 Because passive funds follow the buy and hold strategy, they generate far fewer realization events than active funds. Active funds, by their very nature, trade more frequently, and thus generate many more realization events. The average turnover ratio for passive funds has been found to be 24%, in contrast to that of active funds that has been found to be more than three times as high—74%. 105 Hence, active funds are subject to a higher effective tax rate even if both types of funds have similar profits in the long run. 106 For instance, a long-term study between the years 1999 and 2014 has found that on average active funds pay annually nearly 40% more taxes than passive funds. 107 Incentivizing investors to switch to active funds is thus likely to increase tax revenues: the higher value of tax collected from active funds is expected to offset and even surpass the cost of the tax credits we use to motivate investors to switch to active funds. 108

The second reason why we believe that our proposal would not have a negative effect on the budget is that in our case the use of tax credits is expected to create a virtuous cycle. The credits we propose are likely to improve corporate governance across the board. They are likely to generate market effects that extend beyond individual firms and enhance public trust in financial markets. If implemented, they are likely to increase the profitability of firms and correspondingly, the tax base and even tax revenues. 109

^{104.} I.R.C. § 305 (2018).

^{105.} Alan D. Crane & Kevin Crotty, *Passive Versus Active Fund Performance: Do Index Funds Have Skill?*, 53 J. FIN. & QUANTITATIVE ANALYSIS 33, 39 (2018).

^{106.} This is due to the time value of money. Even though in the aggregate passive funds generate the same tax liability for a given gain to that of active funds, because the payment is more frequent and sooner, in present value terms, the tax liability of active funds is higher.

^{107.} Laura Saunders, *How Passive Funds Trim Your Tax Bill*, WALL ST. J. (Oct. 21, 2016, 10:26 AM), https://www.wsj.com/articles/how-passive-funds-trim-your-tax-bill-1476968401 [https://perma.cc/7LVE-P29S].

^{108.} Regarding the higher tax liabilities from investment in active funds compared to passive funds, see Kent Thune, *How Index Funds Minimize Taxes*, BALANCE (Apr. 1, 2020), https://www.thebalance.com/how-index-funds-minimize-taxes-4019593 [https://perma.cc/86XZ-QDH5].

^{109.} The ability of the decrease in the tax burden to fund itself in this case is distinctive from the general ability of tax reduction to fund themselves, as expressed by the Laffer curve. The Laffer curve focuses on conventional taxes whose main purpose is raising revenue. Laffer pointed out that a reduction in the tax rate may increase revenues by incentivizing a higher level of economic activity. See Jude Wanniski, Taxes, Revenues, and the "Laffer Curve," PUB. INT., Winter 1978, at

Real-world financial facts and assessments lend support to our prediction. The financial literature estimates that agency costs in public companies account for approximately 5% of their value. Enhanced active monitoring by institutional investors will not eliminate agency costs, but should clearly reduce them. Even on the very conservative assumption that an enhanced level of monitoring will reduce agency costs merely by 10%, given that the total value of public companies is \$30 trillion, 111 this would represent a \$160 billion increase in the total value of firms. A \$1 increase in market cap is estimated to increase tax revenues by roughly \$0.40, 112 which translates to \$72 billion in additional tax revenues. This means that even a 1% reduction in agency costs will generate \$7.2 billion in additional taxes. A 10% reduction would mean a \$72 billion increase in taxes.

C. Overcoming Political Economy Barriers

Proposals for legal reform must be assessed through the prism of political economy. The public choice literature teaches that strong interest groups are likely to block reforms that harm them even if they are highly desirable from a broad societal perspective. Accordingly, the fate of legal reforms critically depends on the identity of the "winners" and "losers" that

- 3, 4 (describing the Laffer curve's illustration of the relationship between tax rate and tax revenue). In this case, because of the Pigouvian function of the subsidy, its impact on revenue does not arise from incentivizing more economic activity, but rather from reducing an element of the cost that companies incurred, increasing their net revenue. Not every Pigouvian Tax could fund itself in this way. A Pigouvian tax subsidy may increase social welfare, but not every increase in social welfare could be monetized easily. In our case, it can—the benefit to the companies increases their revenues which directly translates to higher revenues from corporate taxes, capital gains taxes on shareholders, and income taxes of workers in the company since their salaries and bonuses may increase.
- 110. James S. Ang, Rebel A. Cole & James Wuh Lin, *Agency Costs and Ownership Structure*, 55 J. FIN. 81, 93 tbl.1 (2000). It should be noted that their assessment is based on companies in which the largest stockholder owns only 1%, while currently, in most public companies the largest shareholders, mostly institutional investors, hold close to 5%. Yet as noted earlier in the paper, the fact that the institutional investor holds a relatively large block of shares is not effective in terms of monitoring and curbing agency problems, because of the specific agency problem that pertains to institutional investors. *See* Gilson & Gordon, *supra* note 20 and accompanying text.
- 111. Market Capitalization of Listed Domestic Companies (Current US\$) United States, WORLD BANK, https://data.worldbank.org/indicator/CM.MKT.LCAP.CD?locations=US [https://perma.cc/T8H9-XVD9].
- 112. This figure represents the increase in revenues from corporate taxes (21%) and the increase in revenues from capital gains (15–28% on long-term capital gains, higher for short-term, depending on income). See 26 U.S.C. §§ 11(b), §1(h) (setting the corporate tax rate and maximum tax rate for capital gains). It should be noted that it is not possible to infer directly how an increase in the market cap of a firm would impact tax revenue. Market cap, of course, is not taxed directly. It is taxed only indirectly: through the increase in future profits which are taxed via the corporate tax, through trades of shareholders who realize their taxable capital gains, and through a tax on dividends, which are taxed on the individual level.

they are expected to generate, and not necessarily on their net impact on social welfare.

Mancur Olson identified the factors that determine whether a certain policy proposal would be adopted. One factor is the formation of a lobby that supports the adoption of the proposal. Olson has underscored that the size of the group is critical in this context, explaining that small interest groups have a superior ability to form lobbies (relative to large groups) on account of their lower coordination costs. In addition, policy proposals that benefit groups that have a prior form of institutional cooperation mechanism stand a better chance of being adopted. For example, one of the explanations for the political influence of the NRA is that gun owners have a preexisting institutional mechanism for facilitating cooperation in the form of common military service, tournaments, and shooting ranges. An additional determinant is the funds that a group has at its disposal—the more money it has, the more it can spend on lobbying.

In light of Olson's analysis, it is easy to understand why sophisticated investors constitute such a powerful political lobby. There are merely three actors that practically dominate the market of institutional investors: Vanguard, State Street, and BlackRock.¹¹⁵ While they are mainly comprised of passive funds, they all have active funds and thus would benefit from such a credit.¹¹⁶ They could easily transform their passive funds to active funds in order to take advantage of the tax benefits we propose. Aside from the small number of actors and the high level of concentration in the financial sector, they also have preexisting institutional cooperation mechanisms that facilitate the creation of a powerful lobby.

The upshot of the discussion is straightforward. Policies seeking to coerce the investment industry to act in ways that are incompatible with their

^{113.} OLSON, supra note 25, at 2.

^{114.} JOSH SUGARMANN, NATIONAL RIFLE ASSOCIATION: MONEY, FIREPOWER & FEAR 25–42 (1992) (describing the emergence of the political power of the NRA).

^{115.} For example, the growing ETF market is dominated by these three actors, who together absorbed over 82.4% of the inflow to all funds in the last decade (2009–2018), and yet the pace has increased in recent years. For example, in 2018 they have absorbed 128.6% of the inflow to all funds. Lucian Bebchuk & Scott Hirst, *The Specter of the Giant Three*, 99 B.U. L. REV. 721, 732 tbl.3 (2019).

^{116.} For example, BlackRock has active funds such as Advantage Small Cap Core Fund, Advantage Large Cap Core Fund, and Advantage International Fund. *Active Equities*, BLACKROCK, https://www.blackrock.com/us/individual/education/equities/active-equities [https://perma.cc/3ZKM-EFCS]. Vanguard has active funds such as Equity Income Admiral Shares, Windsor Admiral Shares, and Explorer Admiral Shares. *Vanguard Funds List: Index and Active Mutual Funds*, VANGUARD, https://investor.vanguard.com/mutual-funds/list?%EF%AC%81lterIndexFunds=false&%EF%AC%81lterFiftyThousandAndUp=true#/mutual-funds/asset-class/month-end-returns [https://perma.cc/Y6Q4-ZT2T]. State Street Global Advisors have actively managed ETFs, such as the SPDR DoubleLine Total Return ETF, SPDR SSGA Income Allocation ETF, and SPDR SSGA Ultra Short Term Bond ETF. *Fund Finder*, STATE ST. GLOB. ADVISORS, https://www.ssga.com/us/en/individual/etfs/fund-finder [https://perma.cc/RS4F-CT5K].

interests stand very small chance of being adopted. Furthermore, even if such proposals are ultimately adopted, it will happen after long and bitter battles involving massive expenditures on both sides. 117 These expenditures constitute pure waste from a societal perspective. By contrast to most competing proposals that rely on sticks, i.e., coercive measures, our proposal employs a carrot and does not represent a threat to institutional investors. Thus, it is unlikely to spark strenuous opposition on the part of the investment industry. True, passive funds may prefer to keep things as they are right now. But passive funds should know, too, that the current state of affairs is not sustainable in the long run and our proposal gives them the option to become active and claim the tax benefits, as all other active funds. This means that passive funds would be given a choice between adhering to their present investment strategy or taking on a more active role. So while we do not assume that our proposal will be met with absolutely no resistance, the opposition it would face would be much smaller than that which competing proposals would encounter. Correspondingly, it would lead to less waste of social resources than the alternatives.

Conclusion

Capital markets are undergoing a transformation. In September 2019, for the first time ever, most of the shares traded in the U.S. were held by passive funds. The increase in the market share of passive funds comes at the expense of active funds. Passive funds lure investors away from active ones by offering them lower management fees and also by providing low tax liabilities accomplished by infrequent trades. To keep the fees to the bare minimum, passive funds refrain from monitoring their portfolio companies or engaging their management in order to ensure better performance. These crucial tasks are avoided at all costs and left exclusively to their active peers. Passive funds, in other words, freeride on the stewardship services and engagements of active funds and other market participants. The diminishing popularity of active funds raises concerns not only about the future of active funds, but also about the quality and integrity of corporate governance in U.S. companies. Without the monitoring services and engagements of active funds, corporate managements would have greater liberty to pursue their own self-interest and enrich themselves at the expense of the firm's shareholders.

In this Essay, we explored the possibility of employing tax credits to enhance the attractiveness of active funds and ensure their long-term sustainability. The stewardship services that active funds perform in combination with their participation in corporate decision-making generate positive externalities for other shareholders and the market at large. The standard economic solution to the presence of externalities is the institution

of a Pigouvian tax that would lead to the internalization of the external effect. Since the external effect is positive in our case, it should be dealt with via the grant of tax credits. Accordingly, we suggested that the positive externalities created by sophisticated investors be addressed by two types of tax credits: effort-based and result-based tax credits. We demonstrated that tax credits, by virtue of their effectiveness and malleability, can succeed where other measures failed and can prompt institutional investors to assume a more active role in corporate governance. This, in turn, would produce innumerable benefits to our economy, in general, and financial markets, in particular.