

Mirror Voting

Law Working Paper N° 940/2026

September 2026

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We provide the first evidence of how proposed changes to passive-fund voting rules would have altered historical outcomes. We find that market mirroring, in which the passive block votes shares in proportion to other votes cast, would have changed fewer than half a percent of outcomes, and potentially much less, depending on the methodology used. In contrast, voting rules that mirror management or proxy advisors would have had significant impacts, particularly for contentious items. We also test objections raised to market mirroring, including the limiting case in which the passive block mirrors no one, and we develop a refined vote-counting methodology that improves on the dominant approach in the literature. Although we do not endorse any particular reform, our findings indicate that market mirroring is the least disruptive and most neutral of the mirroring rules we study.

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Introduction

Four reform proposals now compete to change how the relatively small number of stewardship professionals at BlackRock, State Street, and Vanguard vote shares on behalf of millions of beneficial owners who never see a ballot.¹ Each can be conceptualized as assigning the voting decision from the stewardship team to a reference group that votes the passive block. Pass-through and standing voting instructions assign it to the fund’s own investors, or to whatever policy those investors select. Full abstention assigns it to no one. Market mirroring assigns it to the issuer’s other shareholders who vote.² These reform proposals are very different, yet there is no empirical study of how they would have impacted vote outcomes.

This Article supplies that evidence. We recast the four proposals as versions of a single mirroring rule, which makes them comparable, and we use that framework to evaluate them on common empirical ground. We focus on market mirroring, a proposal that has emerged recently as a widely-debated issue among scholars and policymakers, including at recent conferences and a June 2026 meeting of the Securities and Exchange Commission Investor Advisory Committee.³ Critics have framed their objections as mechanism claims, which makes them testable. Re-tabulating two decades of ballots, we find that market mirroring would have changed under half a percent of outcomes.

Policymakers and industry participants are racing to implement these policies, making empirical study even more urgent. Reports suggest that the White House is considering an executive order, one measure of which would require index-fund managers to mirror their votes “in line with clients who choose to vote.”⁴ The order that issued the following month

¹ Lucian A. Bebchuk & Scott Hirst, *Index Funds and the Future of Corporate Governance: Theory, Evidence, and Policy*, 119 COLUM. L. REV. 2029, tbl.1 (2019). The figures are as of 2019.

² We use “market mirroring” for a rule under which one set of voters mirrors the remaining voters proportionately. Suppose passive investors hold 20% of shares, and three-quarters of the non-block shares voting For or Against are cast in favor of a proposal. Passive investors following market mirroring would cast three-quarters of their shares in favor and one-quarter against.

³ Market mirroring appears as an operative if narrow exception in the pending INDEX Act. 119th Congress, *INvestor Democracy is EXpected Act (INDEX Act)*, S. 1670 (2025), <https://www.congress.gov/119/bills/s1670/BILLS-119s1670is.xml>. For the scholarly treatments, see Caleb N. Griffin, *We Three Kings: Disintermediating Voting at the Index Fund Giants*, 79 MD. L. REV. 954 (2020) (developing the theoretical case for disintermediating voting at the index-fund giants); Dorothy S. Lund, *The Case Against Passive Shareholder Voting*, 43 J. CORP. L. 493 (2018) (presenting mirror voting as a permitted alternative to restricting passive voting outright); Jonathan R. Macey, *Mirror Voting Can Prevent Index Funds from Undermining U.S. Stock Markets*, CLS BLUE SKY BLOG (Jan. 20, 2026), <https://clsbluesky.law.columbia.edu/2026/01/20/mirror-voting-can-prevent-index-funds-from-undermining-u-s-stock-markets/> (endorsing mirror voting as a simple reform matching passive funds’ votes to those of engaged shareholders); Nathan Atkinson & Jonathan Macey, *Mirroring the Market: Passive Voting and Outcome Non-Neutrality* (2026) (arguing that uniform proportional mirroring is not outcome-neutral across state-law voting denominators).

⁴ Jack Pitcher & Emily Glazer, *White House Explores Rules That Would Upend Shareholder Voting* (2025), <https://www.wsj.com/finance/regulation/trump-executive-order-proxy-index-fund-votes-638f396c>; (reporting that “[o]ne measure being discussed would require these index-fund managers to mirror their votes in

took a different course, aimed principally at proxy advisory firms.⁵ Congress has moved on a separate track: the INDEX Act, introduced in May 2025 and still in committee, would require covered advisers to vote their fund holders' instructions and bar them from voting the uninstructed remainder, leaving market mirroring as a narrow exception.⁶ The industry has not waited for either. ExxonMobil obtained no-action relief for a retail voting program in September 2025.⁷ The largest managers have launched voting-choice programs of their own.⁸ The Texas Stock Exchange has gone further, filing a rule with the Commission that would require its member brokers to vote uninstructed shares in proportion to the voting instructions each broker receives from its own participating customers, which mirrors the broker's instructing customers rather than the issuer's other shareholders. In September 2026 the Commission instituted proceedings to determine whether to approve or disapprove that rule.⁹

line with clients who choose to vote"). That formulation describes a pass-through rule rather than the market-mirroring rule we compute.

⁵ President of the United States, *Protecting American Investors From Foreign-Owned and Politically-Motivated Proxy Advisors* (2025), <https://www.govinfo.gov/content/pkg/FR-2025-12-16/pdf/2025-23093.pdf>; Executive Order 14,366 is directed principally at proxy advisory firms, and secondarily at the shareholder-proposal rules and ERISA fiduciary guidance; it does not require, adopt, or direct the adoption of any mirroring rule.

⁶ 119th Congress, *supra* note 3; U.S. Government Publishing Office, *Bill Status for S. 1670, 119th Congress*, <https://www.govinfo.gov/bulkdata/BILLSTATUS/119/s/BILLSTATUS-119s1670.xml> (last visited Jul. 31, 2026). The bill was read twice and referred to committee, and has not been enacted. Part I.B.4 sets out its architecture, including the routine-matter and majority-of-outstanding exceptions and the safe harbor, which protects a decision not to vote rather than a decision to mirror.

⁷ Davis Polk & Wardwell LLP, *SEC No-Action Relief for ExxonMobil Retail Voting Program* (2025), <https://www.sec.gov/rules-regulations/no-action-interpretive-exemptive-letters/division-corporation-finance-no-action/exxon-mobile-091525>; (request letter); the staff response of the same date is reproduced in *City of Hollywood Police Officers' Retirement System v. Exxon Mobil Corp., Complaint* (2025). The relief is a staff position on one company's described program rather than Commission approval or a rule of general application.

⁸ See *Voting Choice (Empowering Investors through Voting Choice)* (2022), <https://www.blackrock.com/corporate/about-us/investment-stewardship/blackrock-voting-choice>; 2024 *Investment Stewardship Annual Report* (2024); Alon Brav *et al.*, *The Proxy Voting Choice Revolution*, ECGI Law Working Paper No. 875/2025 (Dec. 2025) (documenting low opt-in rates and pro-management selection among participants in Vanguard's pilot). The programs' terms differ by manager, vehicle, eligibility, menu, and default.

⁹ *Self-Regulatory Organizations; Texas Stock Exchange LLC; Notice of Filing of a Proposed Rule Change To Amend Rule 13.003 Related to Proxy Voting*, Exchange Act Release No. 34-105623, 91 Fed. Reg. 35,593 (June 11, 2026) (File No. SR-TXSE-2026-008), <https://www.govinfo.gov/content/pkg/FR-2026-06-11/pdf/2026-11682.pdf> (proposed rule change, filed May 28, 2026, replacing broker discretionary voting on TXSE-listed securities with a mandatory proportional allocation of uninstructed shares); *Self-Regulatory Organizations; Texas Stock Exchange LLC; Order Instituting Proceedings To Determine Whether To Approve or Disapprove a Proposed Rule Change To Amend Exchange Rule 13.003 Related to Proxy Voting*, Exchange Act Release No. 34-106292, 91 Fed. Reg. 57,940 (Sept. 11, 2026) (File No. SR-TXSE-2026-008), <https://www.govinfo.gov/content/pkg/FR-2026-09-11/pdf/2026-18536.pdf> (instituting proceedings under Exchange Act § 19(b)(2)(B), with comments due October 2, 2026, and rebuttals due October 16, 2026, and identifying Exchange Act §§ 6(b)(5) and 6(b)(10) as the grounds under consideration, the latter requiring exchange rules to prohibit a member that is not the beneficial owner from granting a proxy to vote on the election of directors). The comment file includes opposition from the Council of Institutional Investors and qualified support from SIFMA, which endorses the goal of proportional voting while raising concerns about the proposal's operational feasibility. Letter from Jeffrey Mahoney, Gen. Counsel, Council of Institutional Inv'rs, to Vanessa A. Countryman, Sec'y, U.S. Sec. & Exch. Comm'n (Aug. 13, 2026) (File No. SR-TXSE-2026-008), <https://www.sec.gov/comments/SR-TXSE-2026-008/srtxse2026008-1002219-3169286.pdf> (stating that CII does not support the proposed amendments); Letter from Stephen Byron, Managing Dir. & Head of Operations, Tech., Cyber & BCP, and Anthony Macchiarulo, Vice President, Fin. Servs. Operations & Assistant Gen. Counsel, SIFMA, to Vanessa A. Countryman, Sec'y, U.S. Sec. & Exch.

These approaches differ materially, as we describe in Part I and show empirically in Part III, where the choice of reference group turns out to change both how many outcomes move and which way.

We measure those differences directly using a ballot-item-level panel which covers U.S. public-company proxy voting from 2005 through 2025. We re-tabulate every recorded outcome under each of the five rules at each of four ownership boundaries, which run from a narrow flag-based index definition out to include nearly all institutional investors. Because the panel, the ownership block, and the tabulation stay fixed, any difference in outcomes traces to whose votes the block copies.

We present three main findings. The first is that market mirroring would have changed little in aggregate, as fewer than half a percent of outcomes change. Such changes tend to concentrate in contentious items, those on which management disagrees with at least one proxy advisor. Director elections are not immune, and while outcomes rarely change, they tend to change more often when there is a proxy fight.

The second finding concerns direction. Of the changes, just over three-quarters move against management's recommendation. Even so, market mirroring is significantly less biased compared to alternatives such as deferring to management, or to proxy advisors, or not voting at all.

Third, we test the objections to mirror voting and find mixed support for them. One objection is that mirroring projects a thin and unrepresentative signal onto the whole block, and so should change the most outcomes at the worst-attended meetings. It does not: the flip rate is flat across the bottom six turnout deciles and falls off only among the best attended. A narrower version of the objection is that mirror voting would amplify activist interventions. In contested director elections at firms where a Schedule 13D filer disclosed between 10 and 20 percent, about two percent of items change, against roughly a tenth of a percent at uncontested meetings in the same ownership bin. But proxy fights are not randomly assigned, and we cannot say that activist stakes cause the difference. And margins move even where outcomes do not. About one item in twenty shifts by more than five percentage points short of a flip, seven in ten of them contentious.

Abstention and nonparticipation raise unique objections. A block that abstains still counts in the base against which a threshold is measured, so withdrawing its support raises the effective bar, and the items carrying the highest bars move most. More than a quarter of management supermajority items change outcome when the block abstains on everything, roughly ten times the abstention-wide rate, and every one of those changes runs against management. Under mirroring the same items flip about one and a half percent of the time, in both directions. Unlike an abstention ballot, nonparticipation can lead to quorum failures.

Comm'n (July 13, 2026) (File No. SR-TXSE-2026-008), <https://www.sec.gov/comments/SR-TXSE-2026-008/srtxse2026008-958359-2960046.pdf>.

Where the block does not participate at all, about one percent of testable items fall below the applicable quorum threshold, rising to nearly five percent under a uniform majority rule. That primary figure applies each firm-year's own bylaw threshold where one is available, covering roughly six in seven of the testable universe, and the Delaware statutory default otherwise. These are items rather than meetings, and they are not additional abstention ballots.

Three caveats are worth discussing. First, our estimates are static: we re-tabulate a historical record without modeling how stewardship leverage, engagement, solicitation strategy, bylaw drafting, or investor behavior would adapt to an adopted rule, and none of those channels is captured by a flip rate. We cannot discern from the historical record how various shareholders might change their votes in response to a particular mirroring scenario, and we have heard a range of conjectures about such likely responses.

Second, some of the quantities in our study are modeled rather than observed, since the broad passive boundary adds an estimate of voting power held through vehicles outside Form N-PX disclosure and assigns it direction by a family-specific model, while the institutional boundary is based on available filings; we report these as estimates with stated coverage. As described below, in an earlier draft we followed the standard peer-reviewed methodology in the academic literature to ascertain votes. After investigating the various data sources and this empirical approach based on a range of comments, we discovered that this widely-accepted methodology did not fully capture voting behavior, and we adjusted accordingly.

Finally, frequency is not welfare. A rule that changes fewer outcomes is not thereby better, and one producing more anti-management changes is not necessarily an improvement in governance. Our claims are positive, and we offer measured magnitudes so that the normative argument can proceed against evidence rather than assumption.

Part I surveys the four reforms and their legal status, and sets out how we assign each as a reference group for the passive block. Part II describes the data and the counterfactual construction. Part III reports the findings. Part IV evaluates the mechanism-level objections against the exhibits, and the Conclusion states what the measurement settles and what it leaves open.

Part I. Background

The academic literature has described the “Big Three” (BlackRock, State Street, and Vanguard¹⁰) as exercising more voting power than their economic incentives can support. Together they vote about a quarter of the shares of the typical S&P 500 firm,¹¹ and because

¹⁰ Fidelity Investments is sometimes included as a fourth major index-fund manager, but its substantial active management business and more heterogeneous voting behavior distinguish it from the pure-index Big Three. Following Bebchuk & Hirst and Lund, we refer to BlackRock, Vanguard, and State Street as the Big Three.

¹¹ Lucian A. Bebchuk & Scott Hirst, *The Specter of the Giant Three*, 99 B.U. L. REV. 721 (2019). (Big Three collectively vote about 25% of shares across S&P 500 companies); see also Jan Fichtner, Eelke M. Heemskerk & Javier Garcia-Bernardo, *Hidden power of the Big Three? Passive index funds, re-concentration of corporate ownership, and new financial risk*, 19 BUS. & POL. 298 (2017) (mapping Big Three ownership and showing they together constitute the

index funds must hold almost every stock in the benchmark, they vote on virtually every proposal at every major public company in the United States.

Four reform proposals now compete to address this incentive problem, three of which have drawn regulatory or market action within the past eighteen months. But the debate has proceeded almost entirely on theoretical intuition. No prior work has computed how market mirroring would have changed historical vote outcomes across the market; the one existing counterfactual of this kind examines a single manager's voting-choice program in a single year.

A. Agency-Cost Theory

Index funds have poor incentives to vote substantively, a problem that affects even the Big Three. Three structural forces produce that result, and they compound.

First, fees are too low to fund governance research. An index fund charges clients fees on the order of three to five basis points per year.¹² At that fee level, spending resources to research governance at any single portfolio company is a losing proposition. The benefit of improved governance at one firm accrues to the entire market, but the fund manager captures only a fraction through its fee. Lucian Bebchuk, Alma Cohen, and Scott Hirst document the mismatch.¹³ BlackRock's Investment Stewardship team, the largest in the industry, employed forty-five professionals as of 2019 to cover thousands of companies across dozens of markets, against twenty-one at Vanguard and twelve at State Street.¹⁴ Even if every team member devoted full time to U.S. proxy voting, each would be responsible for hundreds of companies. For every billion dollars invested in a portfolio company, BlackRock devotes fewer than four person-days and \$5,000 per year to stewardship at that firm, while Vanguard and State Street spend even less, at roughly half that rate.¹⁵ Total stewardship spending across all three managers amounts to less than 0.2% of fee income. The gap is not carelessness, it is the arithmetic of a business model that generates revenue through fee compression and asset gathering, not through governance outcomes at any particular firm.

Second, no single manager can unilaterally invest more. Flagship index funds compete principally on cost, and any manager that raised fees to fund governance research would lose assets to lower-cost competitors.¹⁶ What the manager keeps of any gain it creates compounds

largest shareholder in 88% of S&P 500 firms); Dorothy S. Lund & Adriana Z. Robertson, *Giant Asset Managers, the Big Three, and Index Investing*, in BOARD-SHAREHOLDER DIALOGUE: POLICY DEBATE, LEGAL CONSTRAINTS AND BEST PRACTICES 158 (Luca Enriques & Giovanni Strampelli eds., 2024) (surveying the conceptual shorthand around index-fund concentration in the corporate-governance literature).

¹² Vanguard's Total Stock Market Index Fund, VTSAX, charges 0.04%; BlackRock's iShares Core S&P 500 ETF, IVV, charges 0.03%. These figures have been declining steadily since 2010.

¹³ Lucian A. Bebchuk, Alma Cohen & Scott Hirst, *The Agency Problems of Institutional Investors*, 31 J. ECON. PERSP. 89, 95–102 (2017).

¹⁴ Bebchuk & Hirst, *Index Funds*, *supra* note 1, at tbl.1. (reporting stewardship personnel of forty-five at BlackRock, twenty-one at Vanguard, and twelve at State Street); *see also id.* at 2039 (observing that the Big Three devote an economically negligible fraction of their fee income to stewardship relative to their assets under management and the number of their portfolio companies).

¹⁵ *Id.* at 2071–72.

¹⁶ Bebchuk & Hirst, *Index Funds*, *supra* note 1.

the problem, because that share is its fee and nothing more. Bebchuk and Hirst work the example: if BlackRock’s stewardship raised the value of its portfolio by \$1 million, BlackRock would earn roughly \$2,500 in additional fees, so it will spend up to \$2,500 to produce a gain its own investors value at \$1 million, and the rest of that gain accrues to everyone holding the same shares, competing index funds included.¹⁷ Thus, the competitive equilibrium selects for minimal stewardship.

Third, by design passive funds cannot exit their investment in any one firm. An active investor chooses to own a stock and can sell if governance deteriorates, deploying the threat of exit as a disciplinary tool.¹⁸ A passive investor, in contrast, holds by construction: the index fund must own every stock in the benchmark regardless of governance quality. The vote is the only governance tool available, but a manager whose fee structure cannot support its informed use still exercises it. Combining compulsory ownership with inadequate voting resources leaves passive shareholders in a worse position than their nominal voting power suggests.

One consequence of these three forces is heavy reliance on proxy advisors, principally ISS and Glass Lewis.¹⁹ Peter Iliev and Michelle Lowry identify a class of mutual funds whose votes track ISS recommendations nearly perfectly, raising concerns about uninformed “robovoting.”²⁰ The result is a second layer of delegation: voting power flows from millions of beneficial owners to three asset managers to two advisory firms.

Each of the four reforms below targets this two-step delegation, seeking to reclaim the vote from proxy advisors by rerouting or relocating the decision that index funds have outsourced. Congress, the White House, the SEC, and the Big Three themselves have each advanced such proposals.²¹

¹⁷ See Lucian Bebchuk & Scott Hirst, *Big Three Power, and Why It Matters*, 102 B.U. L. REV. 1547, 1582–83 (2022) (analyzing the incentive of each of the Big Three to underinvest in stewardship, and computing that on average 2020 fees a \$1 million increase in portfolio value would return BlackRock about \$2,500, so that “BlackRock itself will only be willing to invest up to \$2,500 in stewardship”). Bebchuk and Hirst state the underinvestment mechanism; they do not run a counterfactual in which one manager doubles its stewardship budget, and the characterization of the uncaptured gain as a free-riding benefit to rival managers is ours.

¹⁸ Lund, *Case Against Passive Shareholder Voting*, *supra* note 3. (discussing the threat of exit as a disciplinary tool that active investors deploy and that passive funds cannot, since “passive funds lack a credible exit threat: their indexing strategy often requires them to hold stock regardless of the company’s performance”).

¹⁹ see Andrey Malenko & Nadya Malenko, *Proxy Advisory Firms: The Economics of Selling Information to Voters*, 74 J. FIN. 2441 (2019); see also Stephen Choi, Jill E. Fisch & Marcel Kahan, *The Power of Proxy Advisors: Myth or Reality*, 59 EMORY L.J. 869 (2010) (measuring ISS influence on voting outcomes).

²⁰ Peter Iliev & Michelle Lowry, *Are Mutual Funds Active Voters?*, 28 REV. FIN. STUD. 446 (2015). (identifying a class of mutual funds whose votes track ISS recommendations nearly perfectly); see also John G. Matsusaka & Chong Shu, *Robo-Voting: Does Delegated Proxy Voting Pose a Challenge for Shareholder Democracy?*, 47 SEATTLE U. L. REV. 605, 612–15 (2024) (documenting reliance on advisor recommendations across mutual-fund voting).

²¹ Dorothy S. Lund, *The Past, Present, and Future of Proxy Voting Choice*, 50 J. CORP. L. 1075 (2025). (surveying the emergence of voting choice programs at the Big Three); for the legislative, executive-order, and SEC vehicles, see *supra* Introduction notes 1 & 2.

B. The Reform Landscape

The four reforms differ in who retains the voting decision, and that difference drives both their administrability and the size of the intervention each represents. How often each would have changed a historical outcome is an empirical question this Article answers; which is preferable is not.

1. *Full Abstention*

Dorothy Lund argues that passive shareholders, lacking the economic incentives to vote substantively, introduce noise and distortion into corporate elections.²² Removing them from the electorate would return voting power to active shareholders who chose to own the stock and bear the costs of informed engagement.²³

The proposal is mechanically simple: if index funds cannot vote well, the second-best outcome is that they do not vote at all, rather than casting uninformed or proxy-advisor-directed votes that distort the electorate. Not voting requires no computation, no reference-group definition, and no proportional allocation. The fund simply does not submit a proxy card.

Sean Griffith reaches the same destination from fiduciary premises rather than from incentives: a fund that lacks a comparative informational advantage cannot vote intelligently, so it should abstain.²⁴

The two proposals sound alike and are not. A block that submits an affirmative Abstain ballot is present at the meeting and counts toward quorum; a block that does not participate is absent from represented shares altogether. This Article therefore distinguishes between *ballot abstention* — an outcome counterfactual in which the block’s modeled contribution is placed in the Abstain column and the item’s recorded voting base applies — and *nonparticipation* in which the block is removed from represented shares.

To see why non-participation threatens quorum, consider that Delaware’s default requires a majority of the shares entitled to vote to be present, subject to a charter or bylaw provision that may set a different threshold but may not go below one-third, so withdrawing a fifth to a quarter of the shares can leave a meeting short of a quorum.²⁵ Lund recognized this problem

²² Lund, *Case Against Passive Shareholder Voting*, *supra* note 3.

²³ Lund, *Case Against Passive Shareholder Voting*, *supra* note 3; (providing that “voting stock would continue to provide the holder with the right to vote, but the passive institution would be restricted from exercising that right”). In the vocabulary this Article adopts below, that is nonparticipation rather than a ballot abstention, and the distinction is not cosmetic: it determines whether the withdrawn shares still count toward quorum and toward the base against which a threshold is measured.

²⁴ Sean J. Griffith, *Opt-in Stewardship: Toward an Optimal Delegation of Mutual Fund Voting Authority*, 98 TEX. L. REV. 983 (2020); (concluding that absent meaningful information about a governance reform’s effect on a specific firm, “mutual funds should abstain from voting on governance proposals,” and that “the votes should either be passed-through to investors or not voted at all”).

²⁵ Del. Code Ann. tit. 8, § 216 (flush text) (providing that in no event shall a quorum consist of less than one-third of the shares entitled to vote at the meeting); *id.* § 216(1) (majority default); *see* State of Delaware, *Delaware General Corporation Law Section 216: Quorum and Required Vote for Stock Corporations*,

and provided that restricted shares would not count in the denominator for quorum or director-election purposes.²⁶

Abstention leaves presence intact and works on the threshold instead. When a block holding twenty to twenty-five percent of outstanding shares stops casting For and Against votes, the shares still voting carry the outcome between them, and a proposal that would have drawn 52% support on the full share count may draw only 48% among that remainder, or the reverse. The size and direction of that shift depend on how the withdrawn block's split compares with the residual float's, and on the applicable voting standard, under which absence and abstention carry different weight.²⁷

Both authors land on mirror voting as the acceptable alternative to withdrawal, from opposite directions. Lund would let a passive fund keep its votes if it commits to mirror voting under all circumstances.²⁸ Griffith arrives at it as a means of abstaining rather than as an exception to abstention: mirroring reaches “the same outcome as abstention without complicating portfolio companies’ processes for counting votes,” so votes on governance proposals may default to abstention “either through mirror-voting or by a mechanism analogous to broker non-votes.”²⁹ We discuss mirror voting in Part I.B.4 below.

2. *Pass-Through and Voting Choice*

Pass-through programs seek to return the voting decision to the beneficial owners who bear the economic risk, rather than removing the passive block from the electorate altogether.

<https://www.delcode.delaware.gov/title8/c001/sc07/index.html#216> (last visited Jul. 31, 2026). Part II.C defines how we measure quorum failure under the nonparticipation reading and states the coverage of firm-year bylaw thresholds. Because firms set their own thresholds within that range, Part II applies each firm-year's own bylaw threshold where it is available and the Delaware default otherwise, reporting uniform one-third and one-half rules only as sensitivity checks.

²⁶ Lund, *Case Against Passive Shareholder Voting*, *supra* note 3, at 528 n.178. (specifying that “restricted shares would not be counted in the denominator for quorum or director election purposes”). That carve-out is what keeps a restricted block from failing a meeting's quorum, and it is worth being precise about the mechanism: the shares leave the denominator rather than being counted as present, so the quorum test runs on the unrestricted shares alone. Lund treats the reduced denominator as preserving the influence of informed investors rather than as a cost; the broader analysis of how removing a twenty-to-twenty-five-percent block shifts effective approval thresholds is the authors'.

²⁷ Atkinson & Macey, *supra* note 3. (arguing that the denominator effect varies by state-law voting standard, that an affirmative Abstain ballot is not equivalent to non-participation, and that a non-participating block can fail quorum altogether).

²⁸ Lund, *Case Against Passive Shareholder Voting*, *supra* note 3; (allowing a passive fund to retain its votes if it commits to “mirror voting” — voting in the same proportion as other shareholders — under all circumstances, as an alternative to full restriction).

²⁹ Griffith, *supra* note 24; (describing mirror voting as producing “the same outcome as abstention without complicating portfolio companies’ processes for counting votes,” and proposing that votes on governance proposals “default to abstentions, either through mirror-voting or by a mechanism analogous to broker non-votes”). Griffith also contemplates the denominator directly, though only for conflicted funds, who would abstain “eliminating their votes from both the numerator and the denominator, through mirror voting or some other method.”

Griffith, whose fiduciary argument for withdrawing the block is taken up in the preceding Section, treats pass-through as an acceptable way of carrying out that withdrawal.³⁰

Of the proposals to re-allocate passive fund voting power, pass-through has seen the most adoption among industry participants. BlackRock launched Voting Choice in 2022 for institutional clients; Vanguard and State Street followed with their own programs.³¹ By 2025, all three had adopted some version of pass-through. Pass-through takes two forms, which raise different concerns. *Institutional pass-through*, the first kind of pass-through offered, allows pension funds, endowments, and other large intermediary clients to direct their own votes. *Retail pass-through*, which BlackRock and Vanguard have more recently begun to offer, reaches individual fund investors.

The retail extension increases concerns about rational apathy in voting as retail investors are thought to have even less incentive to cast informed votes compared to institutional clients. If a stewardship team of a few dozen professionals cannot substantively research every proxy item, individual beneficial owners are unlikely to do so. The empirical record confirms these concerns. By the end of 2024, Vanguard's voting choice pilot had invited more than one million retail investors to participate; roughly 40,000 had enrolled, an opt-in rate under four percent.³²

Andrey Malenko and Nadya Malenko show that apathy is not the only problem with pass-through voting programs. In their model, what matters is why an investor keeps the vote. Keeping it to act on private *information* improves the outcome, because the vote then carries something the stewardship team did not know. Keeping it to act on private *preferences* does not, and investors can end up worse off for having been offered the choice at all. That second case does not depend on turnout.³³ The question is therefore not only how many beneficiaries vote, but what the ones who do are voting on.

Retail votes, when they are cast at all, cluster around management. Among retail shares that are actually voted, seventy-six percent support management on every proposal on the ballot at annual meetings, and share-weighted retail turnout is thirty-two percent.³⁴

³⁰ Griffith, *supra* note 24; (proposing that fund advisers delegate voting authority to those investors who opt in to exercising it, rather than exercising it centrally through a stewardship team).

³¹ BlackRock, *Voting Choice* (2022), <https://www.blackrock.com/corporate/about-us/investment-stewardship/blackrock-voting-choice>.

³² Brav et al., *supra* note 8. (reporting that “[b]y the end of 2024, out of more than 1 million invited investors, over 40,000 investors had elected to participate in voting choice” in Vanguard’s pilot).

³³ Andrey Malenko & Nadya Malenko, *Voting Choice*, REV. FIN. STUD., 1 (July 13, 2026) (advance access), <https://doi.org/10.1093/rfs/hhag065>; (finding that voting choice improves information aggregation and investor welfare when interests are aligned but can leave investors worse off under preference heterogeneity); *id.* at 4, 13 (investors who retain votes to act on preference rather than information choose in a way that is “individually optimal but collectively inefficient,” the inefficiency lying in the delegation decision’s externality on other investors rather than in the cost of voting).

³⁴ Alon Brav, Matthew Cain & Jonathon Zytznick, *Retail shareholder participation in the proxy process: Monitoring, engagement, and voting*, 144 J. FIN. ECON. 492, 500 & tbl.3 (2022). (reporting that seventy-six percent of retail shares cast support management on every proposal on the ballot at annual meetings, and that retail voters

The Vanguard pilot shows both halves of the problem at once. The ninety-six percent who did not opt in remain governed by the stewardship team, precisely the arrangement pass-through aims to avoid. Among the four percent who did opt in, the dominant selections were pro-management voting policies, so expansion of voting choice on current menu designs would move shares toward those policies rather than toward support for dissident or ESG proposals.³⁵ That is a fact about preferences in the Malenkos' sense, and it says nothing about where informational advantage lies. A standing policy selection resolves each item by a rule the investor chose in advance, so the share it governs carries the investor's view about who should decide rather than anything the investor knows about the firm; that holds for an ISS or mirroring selection as much as for a management one. Pablo Montagnes, Zachary Peskowitz, and Suhas Sridharan find that typical voting-choice policy menus incompletely represent both progressive and conservative retail preferences,³⁶ and Suren Gomtsian and Tom Gosling document parallel selection-bias dynamics in U.K. asset-management voting programs, where index providers cater to clients with stronger ESG preferences than the underlying beneficial-owner base.³⁷ Neither finding is a fact about beneficiaries. A menu is a designed object: someone chooses which policies appear on it, and someone chooses what becomes of the shares of everyone who never looks at it. Pass-through moves the vote without moving that authority, so the operative question is not whether beneficiaries are apathetic or biased, but who sets the menu and its default.

The pro-management direction also shows up in counterfactual outcomes. Had Vanguard's voting choice program applied to all of its shares in 2024, two shareholder proposals at Tesla's annual meeting that passed narrowly under the status quo would have failed, because the most popular selections among enrolled participants were pro-management defaults or no vote at all.³⁸ In those instances, the reform designed to empower dissenting shareholders would have reinforced the status quo it was meant to disrupt. Standing voting instructions, the next reform, try to address this by offering non-selectors something other than the stewardship team's default.

cast ballots for thirty-two percent of shares owned). The denominator for the first figure is shares voted, not shares held.

³⁵ *Id.* (finding that "most investors choose pro-management voting options in the Vanguard pilot" so that broader adoption of voting choice is unlikely to expand support for dissident or ESG proposals).

³⁶ B. Pablo Montagnes, Zachary Peskowitz & Suhas A. Sridharan, *How Well Do Voting Choice Policies Represent Investor Preferences?* (2025), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5093097;

³⁷ Suren Gomtsian & Tom Gosling, *The Emergence of Pass-Through Voting and Its Implications for Shareholder Stewardship* (Feb. 2026).

³⁸ Brav et al., *supra* note 8, at 19–20. (computing, under an assumption of full participation at one pilot fund's observed selection rates — a choice the authors describe as conservative — that the simple-majority-vote and board-declassification proposals at Tesla's 2024 annual meeting would have moved from 53.07% to 49.62% and from 53.31% to 49.86% respectively). The driver is that roughly a third of the affected shares would either not vote or select the management option. The counterfactual covers one manager's holdings in one year and assumes complete take-up; the authors report that a different fund's selection rates would have flipped more outcomes.

3. *Standing Voting Instructions*

Standing voting instructions address pass-through's apathy problem, that the large majority of beneficiaries never opt in, by removing the per-item decision entirely. Under an SVI regime, a shareholder selects a default rule once and it governs every subsequent ballot automatically. Jill Fisch, who documents the structural and business-model limits on passive-fund stewardship, proposes such a regime to restore meaningful retail voice within the intermediated-ownership structure.³⁹ Her menu is pluralistic: a beneficiary can instruct her broker to vote all proxies according to ISS recommendations, or according to Glass Lewis, or in proportion to how all other shareholders vote (market mirroring as an individual standing instruction), or consistently with management's recommendation, or to abstain on all items.⁴⁰ A retiree who trusts board judgment selects "follow management"; an environmentally conscious investor selects a sustainability-oriented advisor; an investor skeptical of both management and proxy advisors selects proportional mirroring. The mechanism accommodates heterogeneous governance preferences without requiring engagement at each meeting.

The practical challenge is in selecting the menu of standing voting instructions—and in particular selecting the default instructions. Some percentage of beneficiaries (likely the overwhelming majority, based on the pass-through participation data) will never make a selection. The default for non-selectors determines the program's aggregate effect. If the default is "follow the fund manager" (the status quo), SVI changes nothing for passive beneficiaries. If the default is "follow management," SVI converts a beneficiary's silence into recorded support for the board, adding weight to the tally without adding a decision to it. A proportional default is no more deliberate, but it forwards a division that other shareholders produced, while a board-aligned default records support that nobody expressed. The menu's neutrality depends entirely on the default, and the default is a policy choice the menu cannot make for itself.

The most developed concrete instance of SVI in the United States is ExxonMobil's Retail Voting Program. A participating retail holder signs a standing instruction once, and the board's recommendation governs every ballot thereafter, subject to override at any meeting and to prospective opt-out. The staff of the Division of Corporation Finance agreed not to recommend enforcement the same day the company asked, on the strength of a program the company described but had not yet run, and without reaching whether the arrangement is a solicitation at all.⁴¹ For our purposes the program is notable because it collapses a pluralistic

³⁹ Jill E. Fisch, *The Uncertain Stewardship Potential of Index Funds*, in GLOBAL SHAREHOLDER STEWARDSHIP 454 (Dionysia Katelouzou & Dan W. Puchniak eds., 2022); (locating the shortfall in the economics of index-fund stewardship rather than in any individual adviser's choices).

⁴⁰ Jill E. Fisch, *Standing Voting Instructions: Empowering the Excluded Retail Investor*, 102 MINN. L. REV. 11 (2017).

⁴¹ Davis Polk & Wardwell LLP, *supra* note 7. (request letter dated September 15, 2025, seeking confirmation that the staff would not recommend enforcement action under Rules 14a-4(d)(2) and 14a-4(d)(3), describing a program the company "intends to implement," and expressly not seeking relief on whether the

menu to a board-aligned default, which makes it a management-deference rule applied to a subset of retail shares rather than a market-mirroring rule.

The City of Hollywood Police Officers’ Retirement System has sued, alleging that the program would weaponize a disengaged retail base to dilute opposing votes.⁴² A board-aligned standing instruction is management deference applied to a subset of shares, so the management-deference scenario in Part III supplies the closest available benchmark for a program of this design. The benchmark has limits: it applies the rule to a modeled ownership block, whereas the program would reach only those retail shares whose holders enroll.⁴³

4. *Market Mirroring*

Market mirroring sidesteps the default question standing instructions leave open. Rather than ask each shareholder to choose a voting policy, or offer a single board-aligned option to those who opt in, as Exxon’s program does, market mirroring specifies the rule at the regime level. Under market mirroring, a passive fund casts its shares in proportion to the votes of non-passive shareholders. If sixty percent of non-passive shareholders vote for a director and forty percent vote against, the passive fund casts sixty percent for and forty percent against.

Mirror voting has its roots in legal scholarship. Caleb Griffin develops the theoretical case, acknowledging that fractured rather than unified index-fund voting is a feature, not a bug.⁴⁴ Jonathan Macey endorses mirror voting as a “simple reform” that would fix the accountability deficit at passive index funds,⁴⁵ though he and Nathan Atkinson separately argue that current uniform-mirroring proposals are not outcome-neutral across state-law voting denominators.⁴⁶

program involves a “solicitation” under Rule 14a-1(l) or on action by written consent). The staff response of the same date is reproduced in *City of Hollywood Police Officers’ Retirement System v. Exxon Mobil Corp.*, Complaint, *supra* note 7 (“Based on the facts and represent[ations] presented in your letter the Division of Corporation Finance will not recommend enforcement action to the Commission ... if Exxon Mobil Corporation implements the Retail Voting Program as described in your incoming letter.”). The program is voluntary and free to participants. A staff no-action position is not Commission approval, does not bind the Commission, and settles nothing about whether the program is lawful in general; the relief reached only the two cited rules, and only annual and special meetings rather than action by written consent.

⁴² *City of Hollywood Police Officers’ Retirement System v. Exxon Mobil Corp.*, Complaint, *supra* note 7. (putative class complaint in the District of New Jersey alleging federal proxy-rule violations and breach of fiduciary duty, and asserting that the program would “weaponize a largely disengaged body of retail” shareholders and dilute opposing votes). The objection is pleaded in litigation rather than submitted as a comment letter.

⁴³ Brav, Cain, & Zytneck, *supra* note 34, at 500 & tbl.3. (76% of retail shares *cast* support management on every proposal on the ballot; share-weighted retail turnout 32%; large-cap retail share approximately 16%). The denominator for the first figure is shares voted, not shares held. The characterization of a board-aligned standing instruction as management deference applied to retail shares is the authors’ synthesis built on these data.

⁴⁴ Griffin, *We Three Kings*, *supra* note 3 (arguing for market mirroring while acknowledging the concern that it produces “fractured power” rather than a “unified voice” in index-fund stewardship).

⁴⁵ Macey, *supra* note 3; (proposing a “simple reform called mirror voting, which matches passive funds’ votes to those of engaged shareholders,” as the fix for the accountability deficit caused by passive index funds).

⁴⁶ Atkinson & Macey, *supra* note 3. (arguing that uniform proportional mirroring, by tracking only the ratio of votes cast, is not outcome-neutral across state-law voting denominators, and proposing “context-dependent mirroring” as a corrective).

Federal action has been tipping toward mirroring in one form or another. A reported draft executive order would have had index-fund managers mirror the votes of clients who choose to vote, which resembles the pass-through proposals discussed above.⁴⁷ The INDEX Act, still in committee, would bar fund managers from voting the shares of investors who send back no instructions, but mirroring is one of the two exceptions under which those shares may still be cast.⁴⁸ The evolution tracks the literature described in Part I.B.1 in arriving at mirroring as an acceptable alternative.⁴⁹

Supporters divide into two camps with conflicting objectives. Reformers want the rule to reduce Big Three voting power; others want it to curb proxy-advisor influence, an objective the executive order pursues directly rather than through any mirroring requirement.⁵⁰ The two aims may collide, because if the non-indexed shareholders whose votes would be mirrored themselves follow advisor recommendations, mirroring transmits advisor positions rather than diminishing them.

Critics press the opposite worry, that mirroring amplifies a narrow signal into the covered block's full voting share. White & Case warns that mirror voting "can inadvertently result in an interested minority determining the outcome" of proposals requiring approval of a majority

⁴⁷ Pitcher & Glazer, *supra* note 4. (reporting that "[o]ne measure being discussed would require these index-fund managers to mirror their votes in line with clients who choose to vote"). The reference group in that formulation is the fund's own instructing investors rather than the issuer's non-indexed shareholders, which makes it a pass-through variant rather than the rule this Article computes. The reported draft and the order that issued are distinct documents, and only the latter has legal effect. The order that issued, Executive Order 14,366, is titled *Protecting American Investors from Foreign-Owned and Politically-Motivated Proxy Advisors* and directs its principal operative measures at proxy advisory firms; section 2(b) directs the Commission to consider revising or rescinding the shareholder-proposal rules, including Rule 14a-8, and section 4 addresses fiduciary status and proxy voting by plans under ERISA. It does not require, adopt, or direct the adoption of market mirroring. President of the United States, *supra* note 5.

⁴⁸ 119th Congress, *supra* note 3; U.S. Government Publishing Office, *supra* note 6. (introduced May 8, 2025, by Senator Dan Sullivan and eight cosponsors; read twice and referred to the Committee on Banking, Housing, and Urban Affairs; not enacted). The bill is principally a pass-through-voting measure. It would add Investment Advisers Act § 208A, applicable where a covered adviser's voting authority over a passively managed fund's holdings in an issuer, combined with that of entities under common control, exceeds one percent of that issuer's outstanding voting authority. Within that scope the adviser must vote proportionately in accordance with instructions received from the persons holding interests in the fund, and may not vote the proportion for which it receives no instructions. § 208A(b). Two exceptions qualify that prohibition. The adviser may vote uninstructed shares on routine matters, a category the bill defines by exclusion and which does not reach counter-solicited proposals, mergers other than certain wholly-owned-subsidary mergers without appraisal rights, sales of substantially all assets, or director elections. § 208A(e)(1). And on matters requiring the approval of a majority of the issuer's outstanding securities, it may vote uninstructed shares in proportion to the votes submitted by all other holders. § 208A(e)(2). The safe harbor at § 208A(g) does not declare that mirroring satisfies fiduciary duty; it provides that an adviser which chooses not to solicit instructions on a non-routine matter is not in violation of any federal or state duty *for failing to vote* those shares, which is a safe harbor for abstaining rather than for mirroring. And the default runs opposite to the usual description: uninstructed shares are generally not voted at all, rather than mirrored by default. Section 3 of the bill is a separate amendment to Exchange Act § 14(b)(1) concerning customer voting instructions and does not contain the fiduciary safe harbor sometimes attributed to it. In the preceding Congress, Representative Bryan Steil sponsored a related House package that was not enacted. Protecting Americans' Retirement Savings from Politics Act, H.R. 4767, 118th Cong. (2023) (Rep. Steil).

⁴⁹ Griffith, *supra* note 24; Lund, *Case Against Passive Shareholder Voting*, *supra* note 3.

⁵⁰ President of the United States, *supra* note 5.

of the outstanding shares entitled to vote, a category that includes many say-on-pay and Rule 14a-8 items.⁵¹ Testifying on the INDEX Act, John Coates added that where advisers receive few instructions, mirroring could magnify the power of the investors who do submit them and “possibly shift voting power to proxy advisers and activist hedge funds instead of empowering individuals.”⁵² James Copland runs the other way, arguing that the INDEX Act forces abstentions wherever pass-through fails and that a forced abstention inflates the effective approval threshold, a defect he thinks the Act’s mirroring exception is drafted too narrowly to cure.⁵³ None of these concerns has been tested against historical voting data. Part IV takes up each, subject to the limits of a descriptive design.

Each of the four reforms discussed above is now live, and each fixes a different reference group for the passive block: no one, the fund’s own investors, whatever policy those investors select, or the issuer’s remaining shareholders. What none of them has is a measured effect. Part II builds the item-level panel that supplies one.

Part II. Data and Counterfactual Construction

This Part constructs a ballot-item-level counterfactual panel for U.S. public-company proxy voting from 2005 through 2025. The exercise asks a limited historical question: holding each meeting’s agenda, turnout, ownership, and non-block votes fixed, how would the recorded outcome change if a specified ownership block followed one of five voting rules? It does not identify investors’ latent preferences, predict how firms or investors would respond to a new rule, or establish which rule is normatively superior.

A *flip* is the unit of measurement throughout, and it is a narrow one. For each agenda item we recompute the recorded outcome from the recorded vote counts, under the voting base and threshold that item actually carried, and then recompute it a second time after reassigning the block’s estimated votes according to one of five rules. A flip is an item on which those two determinations differ. Everything else stays at its historical value: the agenda, the meeting’s

⁵¹ White & Case LLP, *The INDEX Act: A Challenge to the Voting Influence of Institutional Investors That May Yield Unintended Consequences*, <https://www.whitecase.com/insight-our-thinking/index-act-challenge-voting-influence-institutional-investors-may-yield>;

⁵² Testimony of Professor John C. Coates at the Senate Banking Committee hearing on the INDEX Act, as reported in *id.* Coates’s separate published work observes that a significant fraction of shareholders do not vote, which he deploys to show that index blocks are pivotal rather than as a critique of mirroring. See John C. Coates IV, *The Future of Corporate Governance Part I: The Problem of Twelve* (2018).

⁵³ James R. Copland, *Index Funds Have Too Much Voting Power: A Proposal for Reform* (2024), <https://media4.manhattan-institute.org/wp-content/uploads/index-funds-have-too-much-voting-power-a-proposal-for-reform.pdf>. Copland’s worked example is that if a fifth of represented shares abstain, a majority rule becomes in effect a 62.5 percent rule. He reads the exception to reach only matters requiring a majority of shares outstanding, so that it “would not seem to apply at all to supermajority voting provisions, which are commonplace, or to ordinary voting situations in which the Delaware default rule applies.” His proposed remedy would require issuers to put to shareholders a separate resolution on whether to exclude such abstentions from required voting thresholds, including supermajority thresholds.

turnout, the ownership shares, the votes cast by everyone outside the block, and the recommendations management and the advisors issued.

A. Dataset Construction

The voting record comes from ISS Voting Analytics, which reports the outcome of every agenda item at a covered meeting together with the rule that governed it.⁵⁴ ISS' Form N-PX data supplies the other half of the voting evidence, recording how each registered fund voted item by item.

No single source reports the ownership the counterfactual needs, so it is assembled from several. Mutual-fund holdings come from Thomson S12, and institutional holdings from Thomson S34, which we supplement by parsing the underlying Form 13F filings.⁵⁵ Collective investment trusts file no holdings report of either kind, so for those we use Form 5500.⁵⁶ Fund attributes come from CRSP.⁵⁷

Voting and ownership share no identifier, so the two must be bridged before either can inform the other. We build that bridge from the SEC's own registration data and from MFLINKS on WRDS.⁵⁸

Four further sources support particular cuts below, and each carries a window of its own. Proxy-fight indicators come from SharkRepellent, whose coverage ends in December 2024. Activist blockholder positions come from Schedule 13D and 13G filings parsed from EDGAR.⁵⁹ Bylaw quorum thresholds come from the firms' own proxy statements.⁶⁰ And the advisor scenarios require recommendations the record does not always contain, which Jonathon Zytnick supplies by imputation.⁶¹

⁵⁴ For each item the file carries the votes cast for and against, abstentions, the voting base and threshold that applied, management's recommendation, and related meeting attributes.

⁵⁵ The Thomson institutional file omits filings and misassigns manager identifiers in ways that vary across the period. Parsing the filings themselves recovers the omitted positions; it does not close the disclosure gap, which is why the institutional boundary is reported as an upper bound rather than as an observation.

⁵⁶ Form 5500 is the annual return filed for an employee benefit plan. Its asset schedules are the only systematic public record of what a collective trust holds, which is why the modeled hidden component rests on them.

⁵⁷ CRSP supplies the index-fund flags that define the narrower boundaries in Part II.B and the market-equity figures the exhibits weight by.

⁵⁸ Form N-PX is filed for a registrant's individual series and classes, identified by the SEC's S000 and C000 numbers, while the holdings data are keyed on Thomson and CRSP fund identifiers carrying no such number. The SEC publishes annual investment-company series and class information files giving the CIK, series and class identifiers and names, and ticker for every registered fund; MFLINKS links Thomson fund numbers to CRSP portfolios through the WFICN identifier.

⁵⁹ We follow the filing-scanner approach of Miriam Schwartz-Ziv & Ekaterina Volkova, *Is Blockholder Diversity Detrimental?*, 71 MGMT. SCI. 1356 (2025), <https://doi.org/10.1287/mnsc.2023.00528>, whose parser recovers blockholder positions from the filings themselves rather than from a vendor's transcription of them.

⁶⁰ Parsed from DEF 14A filings on EDGAR. A firm-year threshold is recoverable for about four items in five; the remainder take the Delaware statutory majority.

⁶¹ Jonathon Zytnick, *Imputing Proxy Advisor Recommendations*, 22 J. EMPIR. LEG. STUD. 525 (2025). The recommendations are imputed by Bayesian iterative imputation over a 2005–2023 source period, with record linkage by fuzzy matching followed by manual review.

The unit of observation is the agenda item crossed with the ownership block, and the assembled panel holds 1,994,945 such observations covering 615,127 distinct agenda items. Because the sources do not span the same years or the same entities, an auxiliary field that fails to match stays missing rather than becoming a zero: an uncovered tail is not evidence that the characteristic was absent.⁶²

B. Voting Rules and Blocks

Counterfactual voting is specified by two choices: which shareholders make up the block, and what rule the block follows.

Four ownership levels run from narrow to broad. The *index* block is the narrowest, comprising the CRSP fund portfolios carrying the flag that identifies a pure index portfolio. The *passive* block widens that group to funds carrying any CRSP index-fund flag, together with funds the project's own name rule identifies as index vehicles; the name-parsing lineage follows Ian Appel, Todd Gormley, and Donald Keim, though the mapping here is this project's reproducible implementation rather than a result attributed to that article.⁶³ *Passive (All)* adds to the passive block the index voting power a family exercises through vehicles that file no Form N-PX, which the narrower two cannot see. The *institutional* block is the broad 13F bound, which sweeps in active institutions along with every narrower category.⁶⁴

Ownership levels are used to estimate the number of shares that a fund voted. From 2024, Form N-PX directly reports the number of shares a fund voted for, against, and abstaining, so for those years the disclosed block's contribution is observed rather than inferred.⁶⁵ For the two decades before that, a filing records how a fund voted but not how much, and both quantities have to be estimated: we take the block's contribution to the voted pool as its ownership percentage multiplied by the item's total recorded votes, which assumes it turned

⁶² Contest values for 2025 are missing for exactly that reason, SharkRepellent's coverage having ended in December 2024. Coding them as zero would record an absence of evidence as evidence of no contest.

⁶³ Ian R. Appel, Todd A. Gormley & Donald B. Keim, *Passive Investors, Not Passive Owners*, 121 J. FIN. ECON. 111 (2016).

⁶⁴ Summed Form 13F ownership can exceed a firm's shares outstanding, and legitimately so: the form reports long positions only, so a lent share is reported twice, once by the lender who still carries it and once by whoever bought it from the short seller. The double count is correct as a statement of ownership and wrong as a statement of voting power, because the vote on a lent share belongs to the borrower unless the loan is recalled before the record date. Reena Aggarwal, Pedro A.C. Saffi & Jason Sturgess, *The Role of Institutional Investors in Voting: Evidence from the Securities Lending Market*, 70 J. FIN. 2309 (2015). That is a second reason to read the institutional figure as an upper bound rather than as a count of votable shares. Netting short interest out of the institutional block lowers the market-mirroring flip rate from 4.5 to 3.7 percent across the items valid under both measures, and lowers it under all five rules; no item flips because of the netting, so the netted figure brackets the gross one from below rather than displacing it. That comparison re-tabulates the released panel rather than adding a scenario, and it is not reported as an exhibit. A netted measure could not simply replace the gross one in any event: short interest matches for about ninety-three percent of item-rows, and Aggarwal, Saffi, and Sturgess show that institutions recall lent shares before the record date precisely in order to vote, so short interest overstates the votes actually lost.

⁶⁵ Rule 14Ad-1 is what makes the voted-share counts available. The field is unpopulated from 2005 through 2022 and only an eighth populated in 2023, so we take the share weight from 2024 forward and fall back to total net assets for every earlier year rather than weighting a 2023 cell on a fraction of its funds.

out at the meeting-wide rate, and we take its direction from the reporting funds' own votes, weighted by their total net assets.⁶⁶ Weighting those funds by size, rather than counting each one alike, is important because larger ones lean further toward management, and so toward the status quo.⁶⁷

The Passive (All) boundary deserves additional explanation as it requires a second modeling step. Not all institutional investors file Form N-PX, and even within the same institution, not all funds are registered funds which are required to disclose their votes. Many of these are nonetheless passive vehicles which follow the same voting guidelines as the registered funds. To estimate whether these non-registered vehicles are passive funds we use two methods.

First, we obtain data on collective investment trusts from Form 5500 filings. A collective investment trust is a pooled fund a bank or trust company maintains for qualified retirement plans; because it is exempt from registration under the Investment Company Act it files no Form N-PX, but the plans that invest in it must identify each trust by name on their own annual return.⁶⁸ Those names carry the same information that mutual-fund names do, and we classify each trust as index or active by applying the name rule of Appel, Gormley, and Keim alongside our own.⁶⁹ Families whose undisclosed assets we can reach this way supply roughly seven-tenths of the hidden block.

Second, for the remaining three-tenths with no name list to read, we infer each family's index fraction by adapting to the family level the active-weight measure Hitesh Doshi, Redouane Elkamhi, and Mikhail Simutin developed for individual funds.⁷⁰ One leg is measured

⁶⁶ Where a reporting fund's net assets are missing or nonpositive the construction assigns the dataset's median positive value rather than discarding the vote, and withheld votes are treated as the Against-equivalent wherever the underlying record does so.

⁶⁷ An earlier version recovered the block's direction proportionally from the aggregate meeting tape rather than from the funds' own reported votes, and it changed twelve outcomes at the index boundary over the full period; the present figure at that boundary is 1,287, and widening the block to include hidden passive voting power raises it to 2,070. The comparison is not a clean decomposition of the weighting choice on its own, because the data sources and the counterfactual mechanics were also revised. *See* Part II.C.

⁶⁸ Form 5500 is the annual return filed for an employee benefit plan, and its Schedule D names the pooled vehicles in which the plan participates. That schedule is the only systematic public record of what a collective trust holds.

⁶⁹ Appel, Gormley, & Keim, *supra* note 63. Neither pattern dominates the other, so we take the union of the two. The published pattern catches embedded and numeric index terms ours misses; ours catches benchmark names such as ACWI and EAFE, and the word "passive," which together account for the largest family-level discrepancy between them.

⁷⁰ Hitesh Doshi, Redouane Elkamhi & Mikhail Simutin, *Managerial Activeness and Mutual Fund Performance*, 5 REV. ASSET PRICING STUD. 156, 156 (2015) (introducing active weight, "the absolute difference between the value weights and actual weights held by a fund, summed across its holdings," as a fund-level proxy for managerial skill). Doshi, Elkamhi, and Simutin define no family-level index fraction and make no claim about one; the aggregation to the family and its use as an index-share estimate are ours, and they rest on the authors' finding that a low active weight is symptomatic of a passive investment approach. We call this leg the unidentified residual rather than naming a vehicle type, because it is defined by subtraction: it is the part of a family's Form 13F position that its Form N-PX-voted shares do not account for. Separately managed accounts are one component, but so are sub-advised mandates, insurance separate accounts, foreign vehicles, private funds, trusts the name match missed, and measurement error. Appendix B reports the coverage of each leg.

and the other estimated, and the exhibits keep them apart for that reason. Part III.A reports what the construction recovers and situates it against the prior literature.⁷¹

We then evaluate five voting rules, in the order Part I introduces the reforms they implement:

1. **Ballot abstention.** The block casts an affirmative Abstain ballot. We assign its modeled vote contribution to the counterfactual Abstain column and then apply the item-specific voting base. Because an Abstain ballot is a vote in the outcome calculation, the block remains in the counterfactual cast tally; the scenario reallocates the modeled block among For, Against, and Abstain rather than removing it. This is the rule Part I.B.1 attributes to Lund and Griffith, in its ballot form. We separately analyze nonparticipation to evaluate the effects on quorum failures.
2. **Management deference.** The block follows management's recorded recommendation. The scenario is defined only where a management recommendation is available. It is the standing instruction ExxonMobil's program adopts, applied to the whole block rather than to enrolled retail shares, and it is a stylized rule rather than a claim that any adviser has adopted it or that fiduciary law prescribes it. *See* Part I.B.3;.
3. **ISS mirroring.** The block follows the available ISS recommendation, one of the standing instructions on Fisch's menu.
4. **Glass Lewis mirroring.** The block follows the available Glass Lewis recommendation, likewise a menu option rather than a proposal anyone has advanced as a mandate.
5. **Market mirroring.** The block votes For and Against in the same proportions as the residual, non-block For and Against vote. This preserves the residual vote's margin rather than collapsing it into a single all-For or all-Against block vote. It is the rule of Part I.B.4;.

The rest of this Part explains how we turn those items into outcomes, and what the exercise cannot show.⁷²

C. Outcomes and Limitations

Before anything can be recounted, it has to be clear what winning means. There is no single answer, because corporate law does not supply one. Whether a proposal carries depends on two things that vary from item to item: the fraction of the vote it must draw, and the pool that fraction is measured against.

Delaware supplies defaults and lets charters and bylaws depart from them. Directors are ordinarily elected by *plurality*, meaning the nominees with the most votes fill the available seats, so a nominee can be seated without a majority and indeed without an opponent. Most other business carries by a *majority of the votes cast*. Some matters demand more: a charter amendment

⁷¹ The regulatory asymmetry the construction exploits is not itself novel: a collective trust may hold and vote public-company shares while sitting outside the disclosure regime that makes mutual-fund voting observable, and that gap has been described. Natalya Shnitzer, *Overtaking Mutual Funds: The Hidden Rise and Risk of Collective Investment Trusts*, 134 YALE L.J. 1620 (2025);.

⁷² The five rules do not run on identical universes, since a scenario is defined only where its inputs exist, and each rate below is computed against its own denominator. Table 1, in Part III.B, gives the counts.

or a merger may require a majority of all *shares outstanding*, and a charter or bylaw may set a supermajority of two-thirds, three-quarters, or eighty percent.⁷³ The denominator moves with the threshold. Where the base is votes cast, abstentions are excluded and do not count against the proposal; where it is shares outstanding, an abstention has the same effect as a vote against, because the share sits in the denominator either way. The same ballots can therefore carry an item under one rule and defeat it under another.

We take each item's rule as we find it. The source records, for every agenda item, the voting base and the threshold that actually governed it, and we recompute the outcome twice under that rule: once from the votes as cast, and once after reassigning the block. A flip is an item on which those two computations disagree. Nothing is imposed uniformly, and in particular a charter amendment requiring eighty percent of outstanding shares does not become a votes-cast requirement because a counterfactual is being computed.⁷⁴

Plurality elections need a different treatment, because there is no threshold to cross. Nominees compete for a fixed number of seats, so the question is not whether a nominee clears a line but whether reassigning the block changes who finishes among the seats available, and we answer it by ranking nominees under both sets of totals. Almost all such elections are uncontested, with no more nominees than seats, and the counterfactual demonstrably changes nothing; those items stay in the denominator carrying a known zero, because dropping them would inflate every rate we report.⁷⁵

Quorum is a separate question with a separate rule, and it belongs to the meeting rather than to any item on the agenda. A meeting does no business at all unless enough shares are represented, and Delaware sets that floor at a majority of the shares entitled to vote, subject to a charter or bylaw that may raise or lower it but may not go below one third. Because firms set their own thresholds within that range, the applicable number is a fact about the individual company, and we read it from the company's own proxy statement, recovering it for about four items in five and applying the statutory majority otherwise. In sum, we go to some lengths to estimate these counterfactuals accurately: ownership assembled from several sources,

⁷³ See State of Delaware, *supra* note 25; Section 216 supplies the default rules for quorum and required vote and permits a charter or bylaw to specify otherwise; the plurality default for director elections and the majority-of-votes-cast default for other business both sit there.

⁷⁴ Where the base is votes cast, we rebuild the denominator from the counterfactual For, Against, and Abstain tally; because every rule reallocates the block rather than removing it, that total ordinarily matches the historical one. Where the base is shares outstanding, the denominator does not move at all. Where our recomputed baseline disagrees with the outcome the source recorded, we flag the disagreement rather than counting it as a flip: a discrepancy between the inputs and the historical record is not a change the counterfactual produced.

⁷⁵ An audit assigns each of the panel's 240,359 plurality director items to one of five bases. Only 889 are genuinely contested and decided by ranking; 1,141 cannot be resolved and are excluded rather than coded as zero flips. Appendix C reports the assignment. Plurality items also never enter the margin statistics, since a nominee can prevail by outpolling rivals without drawing a majority of votes cast, so movement in the For-share is not the event that decides the seat.

direction taken from the funds' own votes, and every item recounted under the rule that actually governed it.⁷⁶

What we cannot do is say how anyone would behave if the rule actually changed. The recount is static. Investors might vote differently knowing a block would mirror them; managers might alter recommendations, solicitations, or the agenda itself; advisors and intermediaries might redesign their products; firms might redraft bylaws or change meeting practice. None of those responses is modeled, so the results identify no equilibrium effect, no measure of investor welfare, no judgment about preference legitimacy, and no implementation cost.

Finally, the comparison does not rank the five rules. A lower flip count is not a welfare conclusion, a higher share of anti-management flips is not proof of better governance. Our contribution is mostly in the historical analysis which is reported in Part III.

Part III. Findings

Each of the five rules would have changed some historical outcomes and left the rest alone. This Part begins with the block itself, because how much voting power a rule reaches turns on which vehicles the disclosure record can see, and then reports how many outcomes change, in which direction, and how much both answers depend on where the block is drawn.

A. Ownership Boundaries and Hidden Passive Voting Power

Counting only the shares that leave a voting record understates passive ownership by roughly half. Form N-PX reaches registered funds alone, so shares a manager holds through collective investment trusts, separately managed accounts, sub-advised mandates, and other unregistered vehicles are absent from the disclosure record entirely. Adding the modeled hidden component raises value-weighted passive ownership from 17.34 percent of shares outstanding to 28.33 percent in 2024, and from 18.24 to 30.06 percent in 2025. Against the narrower CRSP index measure the multiple is larger still: Passive (All) runs 3.2 times index ownership in 2005 and about 1.7 times it in every year since 2018.

The gap falls very unevenly across the largest managers, and that is the more consequential fact. State Street votes 75.4 percent of its 13F position outside the disclosure regime and BlackRock 57.2 percent, while Vanguard and Fidelity vote essentially their entire books through registered funds, at roughly zero and 1.5 percent respectively. State Street and BlackRock together supply 52.3 percent of the modeled hidden block. A counterfactual built on N-PX filings alone would therefore observe all of Vanguard's 13F position but only 42.8 percent of BlackRock's and 24.6 percent of State Street's, even though Vanguard's position is more than twice the size of either. The disclosure record is not a scaled-down sample of index-

⁷⁶ The quorum construction applies the firm-year bylaw threshold where available and the Delaware statutory-majority default otherwise, with one-third and one-half reported as sensitivity rules. *See* State of Delaware, *supra* note 25; Atkinson & Macey, *supra* note 3.

fund voting power but a skewed one, and the skew tracks each family's choice of vehicle rather than anything about how that family votes. Figure 1 plots the split.

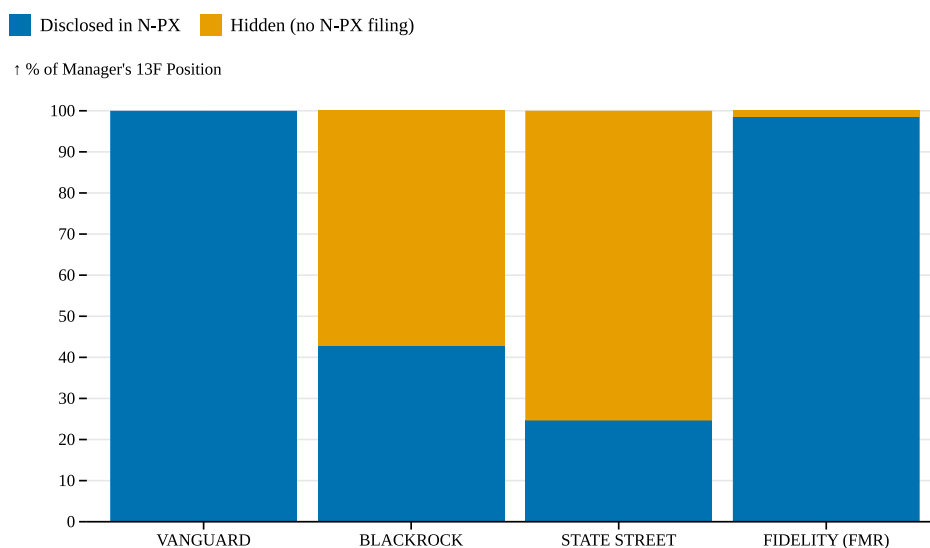


Figure 1: Disclosed versus hidden voting power, largest managers. Each family's 13F position is split by whether the shares are voted through an N-PX filing.

Two features of the construction make these particular estimates firmer than the modeled component as a whole. The first is that every manager named above derives its passive share from Form 5500 Schedule D, which reports the holdings of each collective investment trust by name. Their hidden shares are classified from an observed filing rather than inferred, unlike the unidentified residual leg that supplies the remaining 29.8 percent of the hidden block. The second is external corroboration. BlackRock's own annual report implies that roughly 92 percent of its average equity assets track an index, against the 90.3 percent index fraction the construction assigns it here.⁷⁷ Appendix Table B2 reports the decomposition manager by manager.

The prior literature has reached this same quantity from outside the disclosure record, in two different ways. Chinco and Sammon infer passive assets from the trading volume that index reconstitution generates, putting the 2021 passive share at 33.5 percent against an index-

⁷⁷ BlackRock, Inc., *Annual Report (Form 10-K) for the fiscal year ended December 31, 2023* (2024), <https://www.sec.gov/Archives/edgar/data/1364742/000095017024019271/blk-20231231.htm>. The figure is computed from the product-type table rather than quoted: for 2023 the filing reports equity ETFs at 24 percent and non-ETF equity index at 23 percent of average AUM against an equity subtotal of 51 percent, implying an index share of about 92 percent of equity assets; the 2022 columns imply about 91 percent. The comparison is corroborative rather than exact, because the filing measures a global book of equity assets under management while the index fraction here is measured over the family's collective investment trust holdings in the domestic panel.

fund share of 16.⁷⁸ Griffin works from manager-level ownership aggregates, scaled by the margin by which the Big Three's votes cast exceed their shares held, and finds those three already command enough voting power to decide a majority of shareholder proposals at Fortune 250 companies.⁷⁹ Both establish that the disclosed figure is too small. Neither can say whose shares make up the difference: reconstitution volume is a market-wide signal that attaches to no manager's name, and a Form 13F position reports what a family holds without separating the part that tracks an index from the part that does not.

Our contribution is to make the hidden block attributable: to say not merely that it is large, but whose it is, by a route that can be checked against the manager's own disclosure. Because Form 5500 Schedule D names each collective trust a family holds, we classify that family's index fraction from an observed filing rather than inferring it, which is what makes the comparison with BlackRock's own annual report above possible at all. And we run the construction for every family with an identifiable trust list rather than for the three largest alone, which matters because the shortfall does not respect the Big Three boundary in either direction. Within that group it ranges from three-quarters of State Street's position to none of Vanguard's. Outside it, Northern Trust votes 93.5 percent of its Form 13F position through vehicles that file no Form N-PX — the most opaque book of any manager whose index share we observe rather than model — and supplies 9.0 percent of the hidden block on a position roughly a tenth the size of Vanguard's, which supplies none at all. A study built on the Big Three as a unit recovers neither fact.

Figure 2 describes the distribution of ownership using the Passive (All) measure. Panel A reports Passive (All) ownership by NYSE size decile, with decile 10 the largest, value-weighted within decile and averaged over the last five years of the panel.⁸⁰ The relationship is not a simple monotonic increase with firm size. Passive (All) ownership rises from about 9.8 percent in the smallest decile to about 29.3 percent by decile 4, then remains in a band of roughly 27 to 31 percent through the largest decile. Within-decile value weighting means that the largest firms in each decile receive more weight, including within decile 10.

⁷⁸ Alex Chincio & Marco Sammon, *The Passive-Ownership Share Is Double What You Think It Is*, 157 J. FIN. ECON. 103860 (2024); Their construction is broader than ours in one respect, because the rebalancing signal also captures closet indexing, so the two figures agree in direction rather than in level.

⁷⁹ Caleb N. Griffin, *Margins: Estimating the Influence of the Big Three on Shareholder Proposals*, 73 SMU L. REV. 409 (2020); The ownership data are commercial manager-level aggregates rather than fund-level holdings, and the voting-share adjustment is drawn from Bebchuk & Hirst, *Specter of the Giant Three*, *supra* note 11;

⁸⁰ The decile breakpoints are computed on NYSE-listed firms alone and then applied to every firm in the panel, which is why the deciles are not equal-count: over the last five years the smallest decile holds between roughly 1,100 and 1,700 firms while the largest holds about 200. Cutting deciles unconditionally would place the bulk of small-capitalization NASDAQ firms in the bottom bucket and leave the top bucket too thinly populated to characterize, and the NYSE-breakpoint convention is the standard correction. Panel A therefore covers the whole panel rather than NYSE-listed firms only. In any year for which NYSE coverage is too thin to support a meaningful breakpoint, the construction falls back to all-firm quantiles for that year.

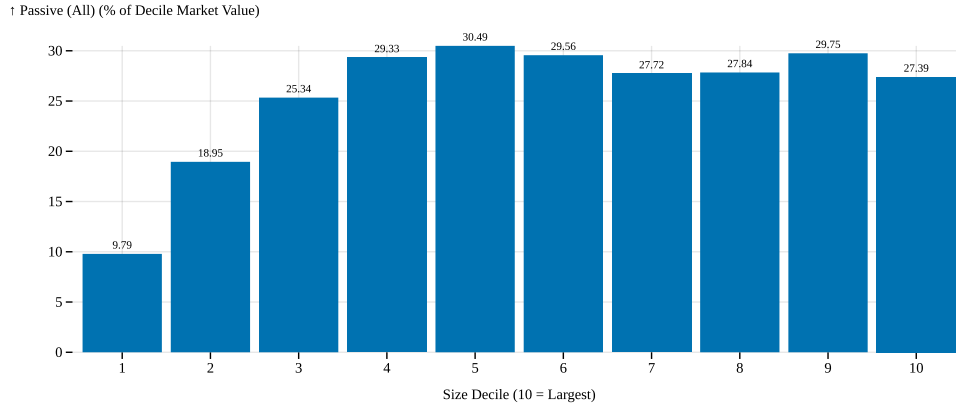


Figure 2, Panel A: Passive (All) ownership by NYSE size decile, value-weighted within decile.

Panel B conducts a similar analysis over time by membership in the disjoint S&P 500, S&P 400, and S&P 600 indexes. In 2024, Passive (All) ownership is 28.61 percent for S&P 500 members, 30.74 percent for S&P 400 members, and 40.14 percent for S&P 600 members. The differences across index membership are therefore sharper than the upper-decile pattern in Panel A. Membership is measured from LSEG Datastream constituent spells with recorded exits; the three plotted indexes are disjoint components of the S&P 1500.

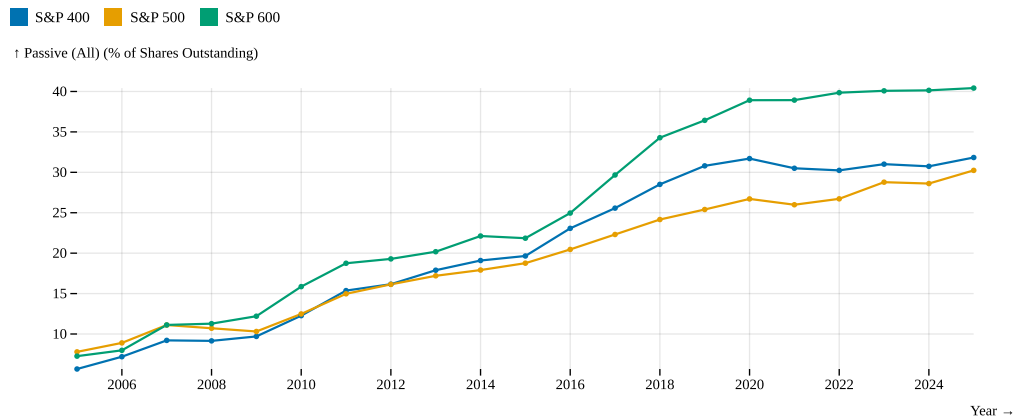


Figure 2, Panel B: Passive (All) ownership by membership in the disjoint S&P 500, 400, and 600 indexes, from LSEG Datastream constituent spells with recorded exits.

Both panels reflect the measurement limits described in Part II. The hidden component depends on family mappings, stock-quarter matches, matched-family direction coverage, and the fallback to visible-passive direction when no hidden direction can be constructed. Figure 2 and the supporting appendix tables should therefore be read as estimates under a disclosed model, not as direct observations of unreported voting.

Given the block sizes, what remains is to ask what turns on it. The rest of this Part applies the five voting rules to that block and reports what the historical record would have looked like under each: first the aggregate comparison across all four boundaries, then the

composition of the outcomes that change, their frequency and direction across the panel period, and finally the proposal types where they concentrate.

B. Comparing the Five Voting Rules

Table 1 reports the five scenarios at each of the four ownership boundaries defined above. Under market mirroring, 2,070 of 523,843 valid items flip, a rate of 0.40 percent. Under ballot abstention, 14,334 of 523,886 flip, or 2.74 percent. Management deference flips 1,530 of 523,886, or 0.29 percent. ISS mirroring flips 5,166 of 521,345, or 0.99 percent, and Glass Lewis mirroring flips 4,798 of 498,870, or 0.96 percent.

Table 1: Headline reform comparison across four investor-block levels

Five counterfactual scenarios, 2005-2025. Block size from ownership; direction from the observed TNA-weighted N-PX split. Passive (All) adds the CIT + residual voting power that never appears in N-PX.

Block	Scenario	Rule	Items	Flips	Flip Rate (%)	Anti-Mgmt (%)
Index	Mirror Pro-Rata	Mirror (pro-rata)	572,653	1,287	0.2247	77.1
Index	Abstain	Full Abstention	572,698	3,715	0.6487	93.2
Index	Management	Management deference	572,698	846	0.1477	0
Index	ISS	ISS advisor mirror	564,265	2,811	0.4982	99
Index	Glass Lewis	Glass Lewis advisor mirror	518,099	2,216	0.4277	93.6
Passive	Mirror Pro-Rata	Mirror (pro-rata)	522,229	1,446	0.2769	75.3
Passive	Abstain	Full Abstention	522,272	4,046	0.7747	93.3
Passive	Management	Management deference	522,272	867	0.166	0
Passive	ISS	ISS advisor mirror	519,748	2,925	0.5628	99.4
Passive	Glass Lewis	Glass Lewis advisor mirror	497,460	2,339	0.4702	94.1
Passive (All)	Mirror Pro-Rata	Mirror (pro-rata)	523,843	2,070	0.3952	78.2
Passive (All)	Abstain	Full Abstention	523,886	14,334	2.7361	95.7
Passive (All)	Management	Management deference	523,886	1,530	0.292	0
Passive (All)	ISS	ISS advisor mirror	521,345	5,166	0.9909	99.2
Passive (All)	Glass Lewis	Glass Lewis advisor mirror	498,870	4,798	0.9618	95.5
Institutional	Mirror Pro-Rata	Mirror (pro-rata)	500,068	22,075	4.4144	93.3
Institutional	Abstain	Full Abstention	500,123	200,164	40.023	99.3
Institutional	Management	Management deference	500,123	2,813	0.5625	1.1
Institutional	ISS	ISS advisor mirror	491,630	12,251	2.4919	98.7
Institutional	Glass Lewis	Glass Lewis advisor mirror	446,214	15,374	3.4454	97.9

Two other patterns stand out. Management deference changes the fewest outcomes of the five, and the reason is not that deferring is a mild rule but that the block is already voting that way: the large funds whose votes dominate the block support management most of the time, so instructing them to follow the board asks them to change little. Ballot abstention changes the most, at almost seven times the market-mirroring rate, because withdrawing the block's For and Against votes while leaving its shares in the base raises the share of the remaining

votes an item needs to carry. Low disruption and neutrality are therefore different things, and management deference has the first without the second.

The second pattern is how much the block definition alone moves the count. Market mirroring flips 1,287 items at the narrow index boundary, 1,446 at the passive boundary, 2,070 at Passive (All), and 22,075 at the institutional bound — a twentyfold spread produced by nothing but the choice of which funds a rule would cover. The steps are not alike. Widening from index to passive adds 159 flips, because those two definitions differ only in how a registered fund is identified. The next step, from passive to Passive (All), adds 624, and does so without changing the definition of passive at all: as Part III.A describes, those are the same managers' shares sitting in vehicles that file no N-PX report.

The prior literature could not take that step. Its measures of index-fund voting power rest on one of two disclosed universes, and each is blind in a different direction. Studies working from Form 13F capture every discretionary account a manager runs, but report at the manager level and cannot say which of those shares track an index. Studies working from fund-level holdings or from Form N-PX identify index strategy precisely, but reach registered funds alone. Part III.A sets out what each universe supports: aggregate estimates of the passive share in the finance literature, and estimates of Big Three pivotality in the legal literature. A mirroring rule binds the intersection — passive shares, held by an identified manager — and it is that intersection the disclosure record has never made visible. The 624 additional flips are the size of what the narrower measures omit: a 43 percent increase over the passive boundary, drawn entirely from vehicles no filing identifies. The counterfactuals reported here are, as far as we are aware, the first computed over passive voting power rather than over the disclosed part of it.

C. What the Market-Mirroring Flips Contain

Table 2 decomposes the 2,070 Passive (All) market-mirroring flips. Director elections account for 339; other management items account for 985; and shareholder proposals account for 746. These three parent categories sum exactly to the headline total. The indented rows in the table decompose the parent categories. Management-routine and management-supermajority items, for example, are components of the 985 other-management flips, not additional categories.

Table 2: Mirror pro-rata flips by vote category

Passive (All), 2005-2025. Bold rows are headline totals, indented rows decompose them.

Category	Items	Flips	Flip Rate (%)	Share of Flips (%)	Anti-Mgmt	Pro-Mgmt	Direction Undet.
Categories — partition, sums to Total							
Director elections	369,743	339	0.0917	16.4	237	32	70
Other management	142,809	985	0.6897	47.6	715	270	0
Mgmt routine	139,396	938	0.6729	45.3	685	253	0

Category	Items	Flips	Flip Rate (%)	Share of Flips (%)	Anti-Mgmt	Pro-Mgmt	Direction Undet.
Mgmt supermajority	3,413	47	1.3771	2.3	30	17	0
Shareholder proposals	11,291	746	6.607	36	613	133	0
Rule 14a-8 governance	5,667	526	9.2818	25.4	447	79	0
Rule 14a-8 social/environmental	3,737	125	3.3449	6	107	18	0
Rule 14a-8 (unclassified)	1,887	95	5.0344	4.6	59	36	0
Total	523,843	2,070	0.3952	100	1,565	435	70
Overlapping conditions — not additive							
Contentious	89,306	1,792	2.0066	86.6	1,329	428	35
Proxy fight	8,044	173	2.1507	8.4	82	29	62
Turnout below 70%	105,684	508	0.4807	24.5	373	121	14

The three rows below the midrule state conditions that cut across the categories above rather than partitioning them. An item is *contentious* where management’s recommendation disagrees with ISS or Glass Lewis, and those items flip at 2.0 percent against 0.06 percent for the non-contentious items, which the table does not show separately: 261 flips among 432,906 items, a ratio of thirty-three to one. Items at meetings with a *proxy fight* flip at 2.2 percent, roughly five times the rate across all items. Items at meetings where *turnout fell below seventy percent* flip at 0.48 percent, barely above the 0.40 percent overall — which is the opposite of what the amplification objection predicts, and Part IV.B takes it up at decile resolution.⁸¹ Items with no imputable advisor recommendation fall outside the contentious row, and the proxy-fight flag ends in December 2024.

The category-specific rates differ substantially. Market mirroring flips 0.09 percent of valid director-election items, 0.69 percent of other management items, and 6.6 percent of shareholder proposals. These rates answer a within-category question: conditional on an item being in that category, how often does the counterfactual reverse the recorded outcome? Other management items supply the largest number of flips even though shareholder proposals have the highest within-category rate.

To put the two percent flip rate for contentious items in perspective, contentious items are seventeen percent of the sample but carry eighty-seven percent of the flips, so almost all of the effect sits on the items where management and an advisor already disagree. Overall, contentious items flip at a rate thirty-three times higher than non-contentious items, and nearly every flip that runs toward management is contentious too.

The signed direction of the 2,070 changes is predominantly against management. Of the total, 1,565 move against management’s recommendation and 435 move toward it. The remaining 70 are plurality director outcomes for which seat ordering determines the change but a single management-direction label is not available. Among the flips whose direction can be classified, then, 78.2 percent move against management, though the full accounting retains

⁸¹ The seventy-percent line is a round number rather than a derived one, and it happens to select about the bottom fifth of meetings, the second turnout decile ending at 69.8 percent.

the undetermined plurality cases rather than assigning them to either side. We discuss the direction of the flips in more detail in the next subsection.

D. Frequency and Direction over Time

Figure 3 plots annual flip rates from 2005 through 2025 for the five rules at the fixed Passive (All) boundary, on a logarithmic scale. The log scale is necessary because the annual rates span roughly two orders of magnitude: ballot abstention reaches 7.3 percent in 2023, while management deference and market mirroring remain below 0.7 percent in every year. Equal vertical distances therefore represent multiplicative, not additive, differences.

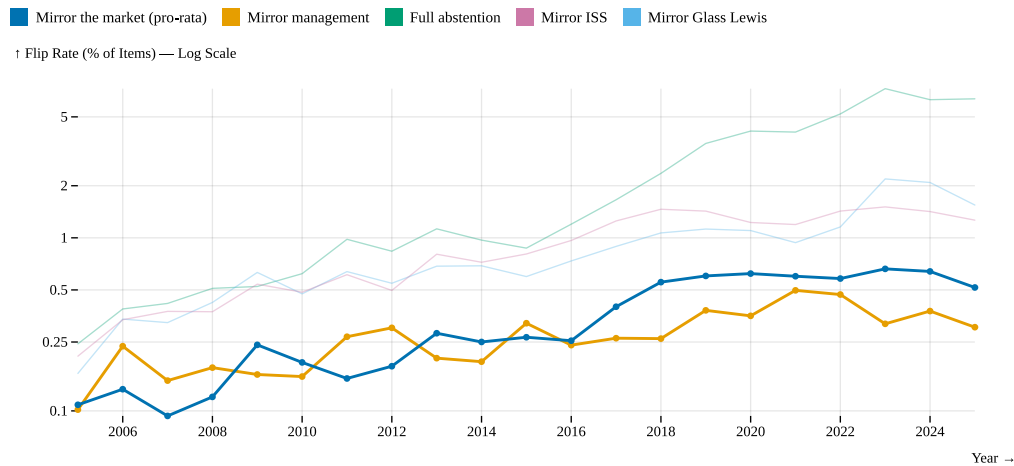


Figure 3: Annual flip rate by reform, Passive (All) block, 2005–2025. Rates are plotted on a logarithmic scale; each rule is computed on its own valid items, so the denominators vary by year and scenario.

Market mirroring and management deference are the two lower-frequency series throughout the period, and management deference lies below market mirroring in fifteen of the twenty-one years, including every year from 2017 through 2025. The advisor-mirroring series generally lie above those two, while ballot abstention is highest. Annual rates are computed on each rule’s available items, so the plotted denominators vary by year and scenario just as the pooled denominators do in Table 1; The later annual rates are generally higher than the early-period rates, especially for ballot abstention which could be due to the rise in institutional ownership and the growth of the passive block.

Figure 4 supplies the directional information. It uses one observation for each flipped, non-plurality item across the five Passive (All) scenarios, 27,547 observations in total, and plots the counterfactual shift in each item’s For-share, measured in percentage points, signed relative to management’s recommendation and faceted by reform. Positive values mean that the rule moves the outcome toward management’s position; negative values mean that it moves against management. Plurality flips are excluded rather than assigned a zero margin because seat ordering, not a For-share threshold, determines those outcomes.

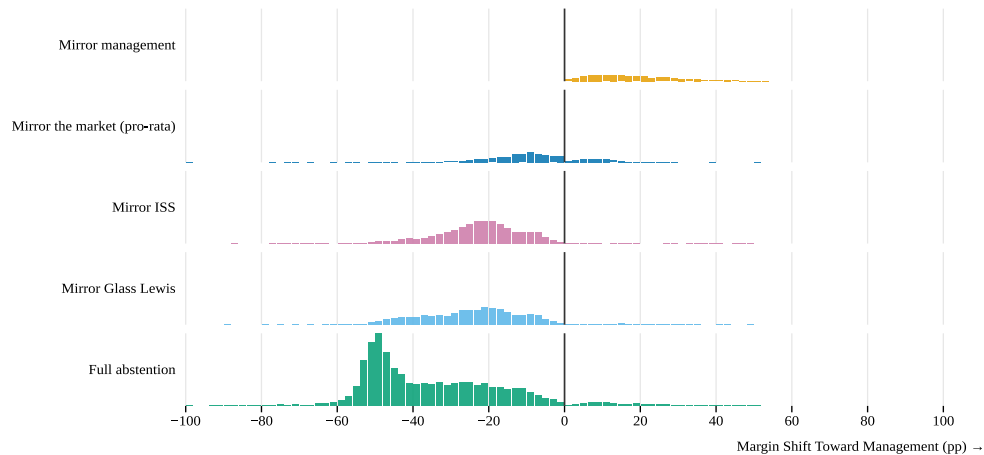


Figure 4: Signed For-share shift for each flipped, non-plurality item, faceted by reform. Positive values move the outcome toward management, negative values against it.

Unlike with flips, management deference predictably produces flips biased *towards* management. Most of the other scenarios produce flips almost entirely *against* management. By contrast, market mirroring has observations on both sides of zero. Its median shift is 8.4 percentage points against management, its interquartile range runs from 14.7 points to 1.0 point against management, and 21.8 percent of its non-plurality flips move toward management. Market mirroring is therefore not directionally neutral but is closest to neutral compared to median shifts of 21.6, 22.7, and 39.6 percentage points against management for ISS mirroring, Glass Lewis mirroring, and ballot abstention, respectively.

Taken together, market mirroring changes somewhat more outcomes and is net anti-management among the outcomes it changes, but it has meaningful mass on both sides of zero.

E. Which Proposal Types Flip

Figure 5 moves from the three broad Table 2 categories to the ISS proposal codes. The horizontal axis is the market-mirroring flip rate within each proposal type. The figure displays the twenty highest-rate types among those with at least 100 valid items; that floor ensures that one additional flip changes a type's rate by no more than one percentage point. The bar labels report the number of items in the type, and color distinguishes shareholder- from management-sponsored items.

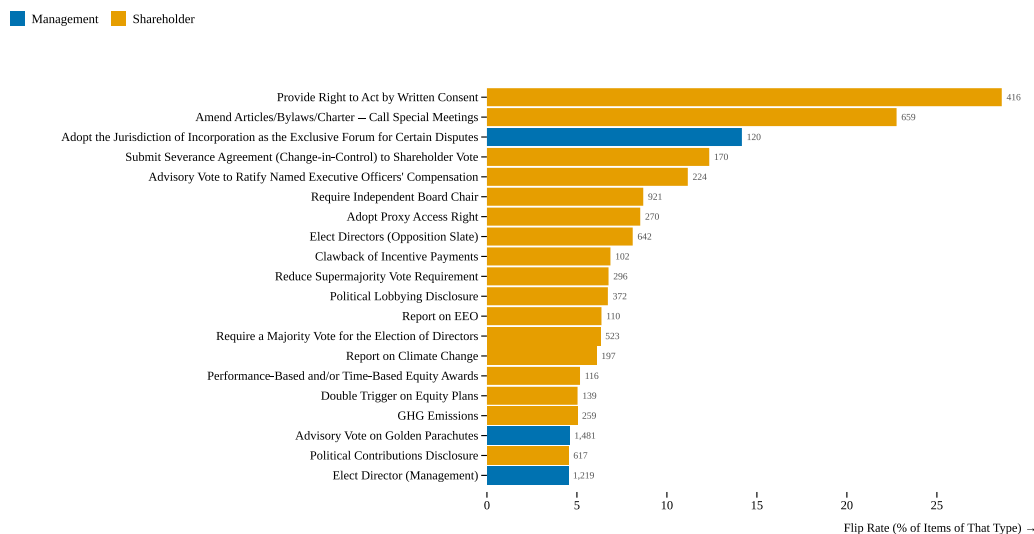


Figure 5: The twenty proposal types with the highest within-type market-mirroring flip rate, among types with at least 100 valid items.

The highest within-type rates appear on shareholder proposals concerning control rights. Proposals to provide a right to act by written consent flip at a rate of 28.6 percent, and proposals to permit shareholders to call special meetings flip at 22.8 percent. The third-highest rate, however, belongs to a management-sponsored proposal to adopt an exclusive forum for specified disputes, at 14.2 percent. Other high-rate types include shareholder proposals concerning change-in-control severance, shareholder-sponsored say-on-pay votes, independent board chairs, proxy access, majority voting, political disclosure, equal-employment reporting, and climate or emissions reporting. The list is heterogeneous: it contains both allocations of governance authority and disclosure-oriented environmental or political proposals.

Sponsor is nonetheless a visible divider. Seventeen of the twenty displayed types are shareholder-sponsored. That concentration is descriptive of the qualifying proposal codes and should not be converted into a claim that all shareholder proposals, or all proposals on any listed subject, are likely to flip. The figure excludes types with fewer than 100 items and drops a residual company-specific organizational code that does not describe a coherent proposal type.

The ranking by rate must also be distinguished from contribution to the 2,070 flips. A relatively uncommon type can have a high within-type rate but contribute few total changes. Management-sponsored say-on-pay runs the other way. Its within-type rate is only about 1.3 percent, but it appears on 39,044 ballots, and so contributes 494 flips, or 23.9 percent of the total. And Elect Director items contribute 249 flips, or 12.0 percent; across all director-election types.

The findings in this Part are bounded historical descriptions. They show that the five rules differ along at least three dimensions: how often they change an outcome, which direction those changes take, and how sensitive the result is to the ownership boundary. They do not establish how investors or issuers would respond to an adopted rule, whether any changed outcome is socially desirable, or which reform best reconciles fiduciary, corporate-law, and governance objectives. Part IV uses these distinctions to evaluate the mechanisms and objections without treating the flip count as the answer to the normative question.

Part IV. Mechanisms, Objections, and Design Tradeoffs

The objections to market mirroring are mechanism claims. Each asserts that the reform redirects outcomes through a particular channel—margin pressure short of a flip, thin turnout, concentrated activist stakes, elevated approval thresholds—and each therefore predicts a pattern that is empirically testable.

This Part evaluates those mechanisms against the exhibits, subject to three cautions that govern the whole discussion. Every cut below is descriptive. The design holds the agenda, ownership, turnout, residual votes, and recommendations fixed; it does not identify a causal effect of turnout, activism, or threshold design on anything. The denominators are not interchangeable either. Category cuts, turnout deciles, director-election bins, supermajority items, quorum-testable items, and each ownership boundary rest on different universes, and a rate from one does not transfer to another. And a changed outcome is a departure from the historical record, not a welfare judgment. Nothing in this Part ranks the five rules.

A. Margin Movement Short of a Flip

A flip is a coarse measure. An objection may describe pressure on the vote that never crosses a threshold, and a reform that moves many margins substantially is not equivalent to one that moves none, even if both produce the same flip count. Table 3 reports the distribution of absolute margin movement by category.

Table 3: Mirror pro-rata absolute margin-shift distribution, by vote category

Passive (All) block, 2005-2025. Bold rows are parent buckets, indented rows decompose them.

Category	Items	99th Pct. Shift (pp)	Max Shift (pp)	Shifts > 5pp
Categories — partition, sums to All items				
Director elections	369,743	9.968	80.78	15,243
Other management	142,809	11.767	99.37	7,643
Mgmt routine	139,396	11.876	99.37	7,567
Mgmt supermajority	3,413	7.735	22.66	76

Category	Items	99th Pct. Shift (pp)	Max Shift (pp)	Shifts > 5pp
Shareholder proposals	11,291	23.291	50.06	2,916
Rule 14a-8 governance	5,667	21.323	50.06	1,862
Rule 14a-8 social/environmental	3,737	15.872	39.11	663
Rule 14a-8 (unclassified)	1,887	34.441	44.71	391
All items	523,843	11.21	99.37	25,802
Overlapping conditions — not additive				
Contentious	89,306	19.165	83	17,953
Proxy fight	8,044	21.092	50.18	1,010
Turnout below 70%	105,684	11.438	99.37	5,781

As before, the rows above the midrule partition the sample: every item falls in exactly one category, each parent is the exact union of its children, and the three parents sum to all items, so a parent and its children must never be added together. The rows below the midrule are overlapping conditions rather than categories, and they sum to nothing. A parent's 99th-percentile shift is a percentile of the pooled distribution rather than an aggregate of its children's percentiles.

Pooled across all 523,843 items, the 99th-percentile absolute shift is 11.2 percentage points, and 25,802 items move by more than five points. Shareholder proposals show the widest distribution, with a 99th-percentile shift of 23.3 points and 2,916 items above five. The overlapping contentious condition—items where management's recommendation disagrees with at least one advisor—shows a 99th-percentile shift of 19.2 points and 17,953 items above five, roughly seven in ten of all material movements.

B. Turnout and the Minority-Amplification Objection

The amplification objection holds that market mirroring projects a thin and possibly unrepresentative active signal onto the whole passive block. Where few non-block shares are cast, the argument runs, the mirrored proportion rests on a narrow base, and the reform should do its greatest work there. The concern is stated most directly in the practitioner commentary on the INDEX Act, which warns that proportional voting would let the preferences of a small number of active shareholders determine outcomes for all index-fund investors.⁸² The objection is no longer confined to commentary. In the comment file on the Texas Stock Exchange's proportional-voting rule, SIFMA warns that the proposal would substitute for a broker's informed judgment a rule that mechanically amplifies "a small, potentially unrepresentative sample of instructed votes," and it anchors the warning to the

⁸² White & Case LLP, *supra* note 51. The memorandum addresses an earlier iteration of the pass-through legislation; the concern is quoted for the mechanism it identifies, not as a description of the bill's current text.

filing’s own Example 2, in which three instructed shares out of a hundred fix the direction of the other ninety-seven; the Council of Institutional Investors puts the same arithmetic as a claim about silence, objecting that the rule would “perpetuate distortions in voting outcomes by assigning votes to shares that have not in fact voted.”⁸³ Neither comment is directed at the rule this Article computes. Both address broker-level mirroring, whose reference group is the broker’s own instructing customers, while market mirroring takes its reference group from the issuer’s other voting shareholders; the Investment Company Institute, which reads the TXSE filing as an issuer, expressly declines to extend its views on proportional voting to mirror voting by funds or their advisers.⁸⁴ What the two settings share is the projection ratio, and the ratio is what the turnout deciles below test.

Meeting turnout is the natural test. Table 4 sorts the 522,299 items for which turnout is measurable into ten equal-count deciles by votes cast as a share of shares outstanding, and reports the market-mirroring flip rate in each.⁸⁵

Table 4: Mirror pro-rata flips by meeting-turnout decile

Equal-count deciles on turnout as a share of shares outstanding. The shift columns are the 99th percentile and the maximum of the absolute pro-rata margin shift, the same measure Tables 5 and 6 report and computed over all items in the decile. A percentile is a percentile of the pooled within-decile distribution rather than an aggregate of anything, so those two columns cannot be summed or averaged across rows.

Decile	Turnout Range (%)	Items	Flips	Flip Rate (%)	Anti-Mgmt (%)	99th Pct. Shift (pp)	Max Shift (pp)
1	0.0-59.8	52,230	230	0.4404	74.6	11.737	80.78
2	59.8-69.8	52,230	274	0.5246	75.9	11.014	99.37
3	69.8-75.3	52,230	265	0.5074	78.9	11.255	99.22

⁸³ SIFMA Comment Letter on TXSE Rule 13.003, *supra* note 9, at 5 (objecting that broker discretion “has historically served as a safeguard against exactly this distortive outcome, allowing brokers to exercise informed judgment on routine matters rather than mechanically amplifying a small, potentially unrepresentative sample of instructed votes,” and citing the proposal’s Example 2, in which “only 3 of 100 shares are instructed” and “the proportional allocation formula distributes 97 uninstructed shares in proportion to just 3 instructed votes”); CII Comment Letter on TXSE Rule 13.003, *supra* note 9, at 3 (urging disapproval and quoting its own earlier comment that proportional voting assigns “votes to shares that in fact have not voted”).

⁸⁴ Letter from Paul G. Cellupica, Gen. Counsel, and Matt Thornton, Deputy Gen. Counsel, Inv. Co. Inst., to Vanessa A. Countryman, Sec’y, U.S. Sec. & Exch. Comm’n, 1 n.3 (July 2, 2026) (File No. SR-TXSE-2026-008), <https://www.sec.gov/comments/SR-TXSE-2026-008/srtxse2026008-921959-2833551.pdf> (stating that the letter addresses funds “as issuers” and that “our comments about proportional voting in this context should not be understood to apply in other contexts (e.g., regarding mirror voting by funds or investment advisers of shares of portfolio companies they hold)”).

⁸⁵ The decile universe is the 522,299 market-mirroring items for which meeting turnout is measurable. It is narrower than the 523,843-item market-mirroring valid universe reported in Table 1, and the decile rates must not be applied to that larger denominator.

Decile	Turnout Range (%)	Items	Flips	Flip Rate (%)	Anti-Mgmt (%)	99th Pct. Shift (pp)	Max Shift (pp)
4	75.3-79.3	52,230	293	0.561	77.1	12.172	74.76
5	79.3-82.5	52,230	279	0.5342	81.3	11.583	55.39
6	82.5-85.1	52,230	228	0.4365	80.6	11.496	50.06
7	85.1-87.5	52,230	174	0.3331	77.3	11.609	79.8
8	87.5-90.0	52,230	187	0.358	83.4	12.09	47.54
9	90.0-93.0	52,230	103	0.1972	76.3	10.32	49.23
10	93.0 and above	52,229	37	0.0708	67.7	8.015	54.25

The flip rate traces a low-to-middle plateau followed by a decline, which is neither the shape the objection predicts nor its opposite. The lowest-turnout decile flips 230 of 52,230 items, a rate of 0.44 percent. The rate does not fall from there; it rises to a peak of 0.56 percent in the fourth decile, 293 of 52,230 items, and remains between 0.43 and 0.56 percent through the sixth. Only in the top four deciles does it decline, reaching 0.07 percent in the highest, 37 of 52,229 items. The overlapping low-turnout condition reported in the composition exhibit tells the same story from a different angle: items with turnout below 70 percent flip at 0.48 percent, 508 of 105,684, modestly above the pooled rate rather than dramatically above it.⁸⁶

C. Proxy Fights and Schedule 13D Ownership

The strongest version of the amplification objection identifies a specific actor. An activist holding a disclosed Schedule 13D position, the argument runs, could dominate the residual vote during a contested election and thereby leverage the mirrored block into control of the outcome. This claim is tested in Table 5;

Table 5: Mirror pro-rata in director elections by 13D activist-ownership bin

Panel A: fight meetings (N = 4,866). Panel B: non-fight meetings (N = 345,702).

Panel	13D Ownership (%)	Items	Flips	Flip Rate (%)	99th Pct. Shift (pp)	Max Shift (pp)
A: Proxy fight	0	0	0	—	—	—
A: Proxy fight	(0,5]	13	0	0	4.508	4.51
A: Proxy fight	(5,10]	1,655	17	1.0272	11.946	32.22
A: Proxy fight	(10,20]	2,284	41	1.7951	18.479	42.19
A: Proxy fight	(20,100]	558	4	0.7168	9.401	12.53

⁸⁶ The low-turnout row is an overlapping condition in the composition exhibit, not a decile. Overlapping rows cut across the category partition and cannot be summed with it.

Panel	13D Ownership (%)	Items	Flips	Flip Rate (%)	99th Pct. Shift (pp)	Max Shift (pp)
B: No proxy fight	0	0	0	—	—	—
B: No proxy fight	(0,5]	2,164	1	0.0462	6.444	26.65
B: No proxy fight	(5,10]	120,476	33	0.0274	7.845	80.78
B: No proxy fight	(10,20]	143,229	166	0.1159	11.749	57.07
B: No proxy fight	(20,100]	48,120	24	0.0499	9.568	79.8

13D ownership is the maximum disclosed position per company-year (the panel is blockholder-level, up to 32 rows per company-year).

The fight panel shows materially elevated rates. In the bin holding more than 5 and up to 10 percent, 17 of 1,655 director items flip, a rate of 1.0 percent. In the bin above 10 and up to 20 percent, 41 of 2,284 flip, or 1.8 percent—the highest rate in the panel. Above 20 percent the rate falls to 0.72 percent, 4 of 558. The comparable non-fight bins are an order of magnitude lower: 0.03 percent, 0.12 percent, and 0.05 percent respectively.

Similar to the minority amplification results above, the rate does not rise monotonically with disclosed ownership; it peaks in the middle bin and falls in the highest, which is inconsistent with a simple story in which a larger activist stake mechanically produces more mirrored leverage.

The parallel concern about shareholder proposals is that a social-impact filer with a disclosed stake could leverage mirroring to advance a narrow agenda. Table 6 reports the 14a-8 social and environmental items matched to the ownership panel.

Table 6: Mirror pro-rata, 14a-8 social and environmental items by 13D bin

No fight/non-fight split: this exhibit spans the full 2005-2025 window.

13D Ownership (%)	Items	Flips	Flip Rate (%)	99th Pct. Shift (pp)	Max Shift (pp)
0	0	0	—	—	—
(0,5]	39	0	0	5.822	5.82
(5,10]	2,056	58	2.821	11.445	16.74
(10,20]	1,042	59	5.6622	22.407	31.79
(20,100]	274	6	2.1898	16.785	30.09
All SRI (matched)	3,737	125	3.3449	15.872	39.11

Across the 3,737 matched items, 125 flip, a rate of 3.3 percent—the highest category rate reported anywhere in this Part. The displayed bins are 0 of 39 in the lowest, 58 of 2,056 at 2.8

percent, 59 of 1,042 at 5.7 percent, and 6 of 274 at 2.2 percent. Those bins do not sum to the total: as in the director-election panel, items that could not be matched to a disclosed ownership bin are omitted rather than coded as zero, leaving a residual of 326 items and two flips outside the displayed rows. The bin pattern again peaks in the middle rather than at the top, and the smallest bin is too thin to carry weight.

D. Ballot Abstention, Elevated Thresholds, and Quorum Nonparticipation

Abstention is the reform most often proposed, and the one whose name conceals two different acts. A block can cast a formal *Abstain* ballot, in which case its shares are recorded and stay in the base against which the required vote is measured. Or it can simply not participate, in which case its shares leave the represented total altogether. The two differ in what they do to a denominator, and so in what they break: an Abstain ballot inflates the threshold an item must clear, while nonparticipation erodes the quorum the meeting needs to transact at all. This Part therefore reserves *ballot abstention* for the first and *nonparticipation* for the second, and uses neither term loosely.⁸⁷

Abstention also carries a distinct objection in the policy commentary, one about arithmetic rather than about aggregate volume. Copland observes that state law fixes the voting base in a variety of ways, by majority of shares outstanding, majority present, majority voting, plurality, or supermajority of shares present, voting, or outstanding, and that a rule forcing a large block to abstain can be outcome-determinative under any of them. His mechanism is threshold inflation. Because abstaining shares stay in the base against which the required vote is measured, withdrawing them from the For and Against columns raises the share of the remaining votes needed to carry the item. On his worked example, if a fifth of represented shares abstain, a majority rule becomes in effect a 62.5 percent rule. He treats the INDEX Act's two prophylactics as inadequate to that problem, because mirroring as drafted would reach only matters requiring a majority of shares outstanding, and so "would not seem to apply at all to supermajority voting provisions, which are commonplace, or to ordinary voting situations in which the Delaware default rule applies."⁸⁸

That arithmetic cuts both ways, and the regulatory record now holds both halves of it. Urging the Commission to disapprove the Texas Stock Exchange's proportional-voting rule, the New York State Common Retirement Fund runs Copland's calculation in the opposite direction: where approval requires a majority of the shares outstanding rather than of the votes cast, "unvoted shares currently operate as votes against," so converting that "silent, largely

⁸⁷ The released exhibits label both counterfactuals "Full Abstention," which is the artifact's internal scenario name rather than a description of what each computes. The labels are reproduced unaltered from the frozen release, so an exhibit titled "full abstention" may implement either. Where it matters, the text says which.

⁸⁸ Copland, *supra* note 53; Copland would require issuers to put to shareholders a separate resolution on whether to exclude passive-fund abstentions from required voting thresholds, expressly including supermajority thresholds. The objection is directed at the abstentions the Act would force where pass-through fails, not at mirroring's reach as such.

retail bloc into votes cast” can carry a failing proposal to passage.⁸⁹ The data here speak to Copland’s direction and not to the Fund’s, because every scenario reallocates a block that already votes and holds turnout fixed: Table 7 can measure what removing the block from the approval base does, while nothing in this design estimates what follows when shares that now sit out begin to be cast.

Table 7 examines the difference in outcomes if the block is in, or out of the denominator. Its first count is the ballot-abstention flip already reported, in which the block’s shares move to the *Abstain* column and remain in the base the required vote is measured against; its second re-derives passage and failure after removing those shares from that base, which is the remedy Copland proposes. Neither column disturbs the recorded outcome each flip is measured against. The base-out denominator follows the disclosed voting rule. Where ISS records the requirement as a share of votes cast, the block’s voted shares leave the counterfactual cast tally. Where the requirement runs on shares outstanding, the recorded base never counted turnout to begin with, and the exclusion is instead a haircut of the block’s ownership share.

Table 7: Ballot-abstention flips with the block in and out of the approval base. Passive (All), 2005–2025, every threshold-decided item. The two blocks are the two voting-base regimes; the last row of each is that regime’s total, and the final row pools both.

Category	Items	Flips, Block in Base	Flips, Block out of Base	Change (out – in)
Votes-cast base — base-out denominator is votes cast less the block’s voted shares				
Director elections	82,553	3,293	151	–3,142
Mgmt routine	87,058	3,146	487	–2,659
Mgmt supermajority	687	65	6	–59
Shareholder proposals	6,193	354	418	64
All votes-cast items	176,491	6,858	1,062	–5,796
Shares-outstanding base — base-out denominator is the recorded base times (1 – b)				
Director elections	75,401	3,226	130	–3,096

⁸⁹ Letter from Liz Gordon, Exec. Dir. of Corp. Governance, N.Y. State Common Ret. Fund, to Vanessa A. Countryman, Sec’y, U.S. Sec. & Exch. Comm’n, 1 (Aug. 21, 2026) (File No. SR-TXSE-2026-008), <https://www.sec.gov/comments/SR-TXSE-2026-008/srtxse2026008-1010819-3234289.pdf> (arguing that the proposal “would circumvent majority voting requirements in cases when few shareholders have cast votes,” and that by converting the silent bloc into votes cast “the rule can push a failing proposal to passage”). The letter addresses a broker voting its own customers’ uninstructed shares rather than a fund mirroring the issuer’s other shareholders, and its concern is the activation of shares that are not voted today. Copland’s concern is the silencing of shares that are.

Category	Items	Flips, Block in Base	Flips, Block out of Base	Change (out – in)
Mgmt routine	52,339	2,972	476	–2,496
Mgmt supermajority	2,726	902	44	–858
Shareholder proposals	5,132	308	311	3
All outstanding-base items	135,598	7,408	961	–6,447
All threshold-decided items	312,089	14,266	2,023	–12,243

Across all 312,089 items, ballot abstention changes 14,266 outcomes and taking the block out of the approval base leaves 2,023. Copland’s mechanism therefore accounts for the bulk of what abstention does: about six flips in seven are artifacts of the inflated base, and the residual 2,023 are what withdrawing the block’s votes does once the base is corrected. Under a votes-cast requirement the count falls from 6,858 to 1,062; under an outstanding-share requirement, from 7,408 to 961.

Table 8, Panel A: Full abstention flips by vote category

Passive (All), 2005-2025. Bold rows are headline totals, indented rows decompose them.

Category	Items	Flips	Flip Rate (%)	Share of Flips (%)	Anti-Mgmt	Pro-Mgmt	Direction Undet.
Categories — partition, sums to Total							
Director elections	369,751	6,587	1.7815	46	6,512	7	68
Other management	142,810	7,085	4.9611	49.4	7,058	27	0
Mgmt routine	139,397	6,118	4.3889	42.7	6,091	27	0
Mgmt supermajority	3,413	967	28.3328	6.7	967	0	0
Shareholder proposals	11,325	662	5.8455	4.6	76	586	0
Rule 14a-8 governance	5,667	428	7.5525	3	4	424	0
Rule 14a-8 social/environmental	3,737	98	2.6224	0.7	1	97	0
Rule 14a-8 (unclassified)	1,921	136	7.0796	0.9	71	65	0
Total	523,886	14,334	2.7361	100	13,646	620	68
Overlapping conditions — not additive							
Contentious	89,321	5,326	5.9628	37.2	4,694	597	35
Proxy fight	8,056	518	6.43	3.6	405	53	60
Turnout below 70%	105,727	2,197	2.078	15.3	2,063	120	14

Table 8 Panel A shows that flips concentrate on management’s own business. Other-management items are 27 percent of the agenda and 49 percent of the flips, changing at 4.96 percent against 2.74 percent overall, and the supermajority items within them change at 28.33 percent. Director elections, two and a half times as numerous, change at 1.78 percent. Below the midrule, contentious items—those where management’s recommendation disagrees with ISS or Glass Lewis—change at 5.96 percent against 2.06 percent for the rest, a ratio of three to one.

Table 8, Panel B: Quorum failure under full abstention, at the meeting level

Meeting condition	Meetings	Meetings Failing	Failing (%)
All testable meetings			
Total	74,217	2,181	2.94
Overlapping conditions — not additive			
Has at least one director election	69,112	1,745	2.52
Has at least one shareholder proposal	6,214	137	2.20
Has at least one contentious item	42,394	1,166	2.75
Has at least one proxy fight item	1,105	58	5.25

Panel B examines the effect of nonparticipation on quorum failures across 74,217 meetings. The result is 2,181 failed meetings, close to three in a hundred, computed under the threshold each firm's own bylaw sets with the Delaware statutory majority as the labeled fallback. Most of the failure rates are around 2-3%, although meetings carrying a proxy fight fail at double that rate.

In sum, abstention and nonparticipation are both disruptive in flipping outcomes mostly due to threshold inflation and in raising the risk of quorum failure. This concludes our empirical analysis of the mechanical effects of various mirroring strategies. The objections that remain are of a different kind, and the Section that follows takes them up.

E. Objections the Exhibits Cannot Settle

1. Fractured Stewardship and the Unmeasured Block

Critics argue that market mirroring dissolves the centralized voting power that the largest managers now hold, and with it the leverage that supports private engagement. Proponents of restricting passive voting power treat that dissolution as the objective rather than a cost. Both positions are normative recharacterizations of the same mechanical fact, and this Article cannot adjudicate between them.

What neither side has priced is how much voting power is available to be dissolved. Because Form N-PX reaches registered funds alone, the block a mirroring rule would reach is substantially larger than the block a reader of voting records can see, and the difference is not a rounding term.

State Street, BlackRock, and Northern Trust together supply about three-fifths of the hidden block, and Vanguard supplies essentially none of it—not because Vanguard votes differently, but because its collective trusts feed registered funds and so already vote through N-PX. A rule keyed to the disclosure record would leave one of the three largest managers' stewardship operations nearly intact while reaching most of two others'.

A rule that reaches passive voting power rather than passive fund shares requires that someone be able to say which shares are passive, and for much of the block nobody currently can. Roughly seventy percent of the hidden block takes its classification from Form 5500 Schedule D, which names each collective investment trust and can be read; the remaining thirty percent has no name list, and this Article assigns it an index share by model rather than by observation. No filing now required would let a regulator do better. A drafter who wants mirroring to bind the whole of passive voting power is therefore proposing two instruments rather than one—the voting rule, and a disclosure regime adequate to measure what it binds—and the second should be priced alongside the first rather than assumed.

2. *Fiduciary Duty and the Status of the Proposals*

The fiduciary objection holds that an adviser who routes each vote to other shareholders abandons the best-interest determination the Advisers Act requires.

To be sure, the current regime already involves extensive delegation: to advisory firms, to standing voting guidelines, and to stewardship teams covering large numbers of issuers. Whether that delegation is better or worse than mirroring is a normative question this Article does not answer. The relevant enforcement authority establishes that an adviser may not vote mechanically without following its own disclosed process; it does not establish that any particular substantive voting rule is required or forbidden.⁹⁰

For example, the INDEX Act attempts this through statute by stating that an adviser that chooses not to solicit instructions on a non-routine matter is not to be considered in violation of any federal or state duty *for failing to vote* those shares. But it is primarily a safe harbor for not voting, not a legislative declaration that mirroring satisfies fiduciary duty.⁹¹

Currently no authority requires mirroring but as a practical matter the question of fiduciary duty may be the most significant barrier to its adoption. Three institutions could resolve these questions, at three different prices. The Commission could act fastest and most specifically, by rule or by interpretive guidance under the Advisers Act, but its reach runs to advisers rather than to the state-law duties that also bind them, and an interpretation one Commission adopts the next can withdraw. Congress could settle the question durably and could reach federal and state duty together, which is what the INDEX Act's safe harbor attempts, but legislation is slow and the bill on offer speaks to declining to vote rather than to mirroring. The courts could give the most authoritative answer, though likely the least useful one, because it would

⁹⁰ *In re Toews Corporation* (2022), <https://www.sec.gov/files/litigation/admin/2022/ia-6139.pdf>. (settled order finding that an adviser voted at more than 200 meetings without reviewing proxy materials, always supporting management proposals and always opposing shareholder proposals, contrary to its own disclosed policies). The order establishes a process failure under the adviser's stated policy; it does not prescribe a substantive voting rule.

⁹¹ 119th Congress, *supra* note 3; U.S. Government Publishing Office, *supra* note 6. The safe harbor and rule of construction appear at proposed Investment Advisers Act § 208A(g), added by section 2(a) of the bill; section 3 of the bill separately amends Exchange Act § 14(b)(1) to address customer voting instructions. The mirroring exception appears at proposed § 208A(e)(2) and the routine-matter exception at § 208A(e)(1).

arrive only after an adviser had been sued, either for adopting mirroring or for other breaches potentially related to mirroring. That last asymmetry is why the question will not resolve on its own without a test case, so the clarification likely has to come from one of the other two.

3. *Proxy-Advisor Benchmarks*

A related concern is that mirroring would not reduce advisor influence but reroute it: if the residual voters follow ISS and Glass Lewis, then mirroring their votes transmits advisor positions into the block.

The advisor scenarios in Table 1 speak to this only as benchmarks. At Passive (All), ISS mirroring changes 5,166 of 521,345 outcomes and Glass Lewis mirroring 4,798 of 498,870, against market mirroring's 2,070 of 523,843. The three scenarios are separate counterfactual rules evaluated on separate valid universes, and the gap between them is a comparison of rules, not an estimate of how much advisor influence flows through the residual vote. Nothing in this design identifies the causal contribution of advisor recommendations to any actual voting outcome, and the advisor rows should not be read as measuring advisor power.

One limit on the benchmark reading is likely to grow. ISS and Glass Lewis increasingly sell customized voting policies rather than a single house recommendation, and the advice a client receives under a custom policy can depart materially from the published benchmark. To the extent customization displaces the house recommendation, that recommendation describes a shrinking share of what advisors actually tell their clients, and any scenario built from published recommendations—including the two reported here—increasingly benchmarks a rule that fewer and fewer voters are given.⁹²

Conclusion

Debates about who should cast the votes attached to passive-fund shares have proceeded largely on theoretical intuition. This Article supplies measured magnitudes in place of that intuition, and the measurement cuts across the debate's existing alignments rather than confirming any of them.

Three findings survive the exercise. Market mirroring modeled at the broadest passive boundary changes under half a percent of votes, but those changes concentrate in contentious items — those on which management's recommendation disagrees with a major proxy advisor — and run predominantly against management. Management deference, the rule that looks least interventionist when described, changes fewer historical outcomes than market mirroring at every ownership boundary we test, precisely because it aligns the block with the party that usually prevailed. Non-voting in the form of Abstain votes are the most disruptive, and when

⁹² See Edwin Hu, Nadya Malenko & Jonathon Zytznick, *Custom Proxy Voting Advice*, ECGI Finance Working Paper No. 975/2024 (Mar. 2024), <https://ssrn.com/abstract=4770971>; Edwin Hu, Nadya Malenko & Jonathon Zytznick, *Other People's Votes: The Law and Economics of Proxy Advice*, 115 GEO. L.J. (forthcoming 2027);

implemented as nonparticipation, the withdrawal of the block leaves about four percent of testable items, and about three percent of meetings, below their applicable threshold.

Statistical Appendix

This Appendix supplies the supporting exhibits for the paper. Appendix exhibits are numbered independently of the main text.

A. Supporting Exhibits

Appendix Table A1 reports the block-ownership time series underlying the boundary definitions in Part II.B, value-weighted at the firm level for each year of the panel. Its universe is the full panel of firm-years, the same universe partitioned by decile in Figure 2 Panel A, but broader than the index-membership universe in Panel B, which is restricted to S&P constituents. The flip-count boundary comparisons in Part III.A come from Table 1 rather than from this table, which reports ownership rather than outcomes.

Appendix Table A1: Ownership by block, value-weighted at the firm level

Percent of shares outstanding. One observation per firm-year, weighted by market equity.

Year	Firms	Index	Passive	Passive (All)	Institutional	Hidden Addition (EW)	Hidden Additions	Multiple of Index
2005	2,284	2.28	2.64	7.31	62.59	3.4	4.67	3.21
2006	2,409	2.6	2.91	8.37	63.58	4.16	5.46	3.22
2007	2,288	2.64	3.02	10.51	65.17	5.99	7.49	3.98
2008	2,389	3.32	3.75	10.17	67.03	5.29	6.42	3.06
2009	2,592	4.31	4.72	10.03	71.15	3.74	5.31	2.33
2010	2,479	4.22	4.65	12.16	72.27	5.94	7.51	2.88
2011	3,056	6.69	7.15	14.42	70.65	5.35	7.27	2.16
2012	3,270	7.4	7.93	15.62	72.09	5.12	7.69	2.11
2013	3,358	8.14	8.7	16.66	73.07	5.27	7.96	2.05
2014	3,373	8.83	9.4	17.31	73.46	5.26	7.91	1.96
2015	3,623	9.81	10.34	17.99	72.16	4.56	7.65	1.83
2016	3,652	10.43	11.02	19.95	74.66	5.74	8.93	1.91
2017	3,745	11.71	12.33	21.7	72.6	6.33	9.37	1.85
2018	3,740	13.39	14.05	23.7	75.23	6.85	9.65	1.77
2019	3,842	14.48	15.16	25.04	73.89	7.11	9.88	1.73
2020	3,842	15.25	15.96	26.6	76.72	7.63	10.64	1.74
2021	4,016	14.57	15.25	25.52	73.16	7.6	10.27	1.75
2022	4,518	15.43	16.1	26.16	70.6	6.6	10.06	1.7
2023	4,408	16.65	17.29	28.42	72.14	7.09	11.13	1.71
2024	4,238	16.74	17.34	28.33	69.28	7.38	10.99	1.69
2025	3,329	17.66	18.24	30.06	69.4	8.64	11.82	1.7

The index block is CRSP's index-fund flag set to 'D'. The passive block is that flag or the Appel-Gormley-Keim name regular expression (regex) search. Passive (All) adds the CIT and unregistered-residual voting power that never appears in N-PX, classified by the same regex, so passive and Passive (All) share a definition of passive and differ only in which vehicles are visible.

B. Hidden Passive Voting Power

The Passive (All) boundary adds the passive voting power a family exercises through vehicles that file no Form N-PX. We do this in two steps.

Where a family's undisclosed assets sit mainly in collective investment trusts, the holdings are on the public record: the Form 5500 schedules report what each trust holds, and we classify those holdings as index or active by fund name, using a rule that takes the union of the Appel, Gormley, and Keim pattern and our own.⁹³ Everything else is a residual, arrived at by subtraction: the part of a family's 13F position that its Form N-PX-voted shares do not account for. No filing reports what those shares sit in, so we infer their index fraction from the family's active weight, the holdings-based activeness measure of Doshi, Elkamhi, and Simutin. Coverage is measured over item-block observations, matched on the stock-quarter.

Appendix Table B1 decomposes modeled hidden voting power by measurement basis, and Appendix Table B2 reports the hidden component attributable to the largest managers. Together they show which measurement choices drive the size of the modeled addition described in Part II.B.

Appendix Table B1: Hidden voting power by measurement basis

Which method set each family's index fraction, and how much of the hidden block it explains. The residual leg is defined by subtraction, not by observed vehicle type.

Basis	Managers	13F Shares (bn)	Hidden Shares (bn)	Mean Hidden Fraction	Share of Block (%)
Form 5500 Sch. D	10	286.5	66.9	0.482	70.2
Active weight	21	115.3	28.4	0.63	29.8

CIT families take their index share from Form 5500 Schedule D — an observation of trust names classified by the AGK regex. The residual leg has no name list, so its index share is inferred from the Doshi-Elkamhi-Simutin active weight. The split matters because one leg is measured and the other modeled. The residual is not known to be separately-managed accounts: it is the part of a family's 13F position that N-PX-voted shares do not account for, identified by subtraction. Separately-managed accounts are one component, but so are sub-

⁹³ The pattern catches embedded and numeric index terms our own rule misses; ours catches benchmark names such as ACWI and EAFE, and the word "passive," which together account for the largest single family-level discrepancy between the two.

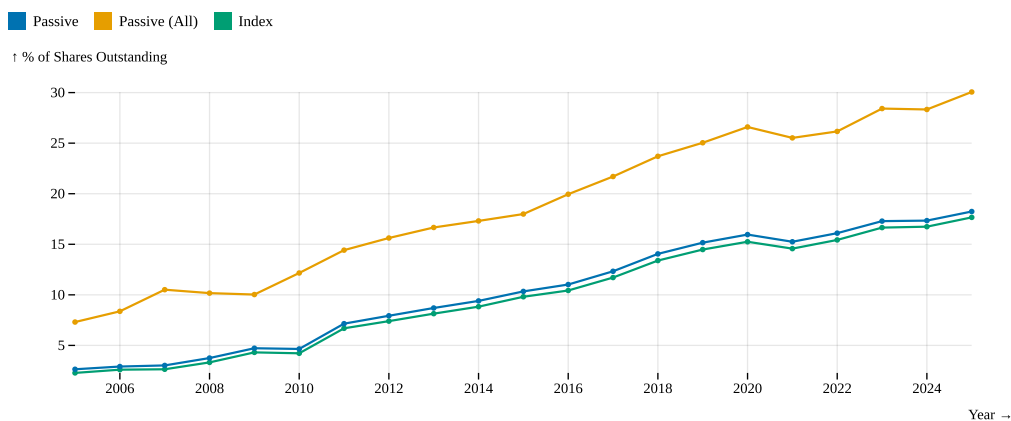
advised mandates, insurance separate accounts, UCITS and other foreign vehicles, private funds, CITs the name match missed, and measurement error. We never observe the vehicle, so we do not name it.

Appendix Table B2: Hidden voting power of the largest managers

The weight column is the hidden fraction times the index fraction: the share of the hidden block each family supplies. Top 8 by hidden power, plus the Big-4 by 13F size.

Manager	13F Shares (bn)	Hidden Fraction	Index Fraction	Weight	Basis	Share of Block (%)
STATE STREET	44.7	0.754	0.781	0.589	Form 5500 Sch. D	27.6
BLACKROCK	45.5	0.572	0.903	0.516	Form 5500 Sch. D	24.7
NORTHERN TRUST	10.9	0.935	0.843	0.788	Form 5500 Sch. D	9
MORGAN STANLEY	14.7	0.95	0.531	0.504	Active weight	7.8
UBS	8.4	0.95	0.625	0.594	Active weight	5.2
GOLDMAN SACHS	7.1	0.891	0.57	0.508	Active weight	3.8
GEODE	12.3	0.265	1	0.265	Form 5500 Sch. D	3.4
JPMORGAN	14.4	0.629	0.315	0.198	Form 5500 Sch. D	3
FIDELITY (FMR)	23.3	0.015	0.067	0.001	Form 5500 Sch. D	0
VANGUARD	106.1	0	0.161	0	Form 5500 Sch. D	0

Vanguard is a unique case as it is the largest family by 13F size and supplies ~0% of the hidden block, because its CITs are feeders into registered funds and therefore already vote through N-PX. Appendix Figure B1 plots passive, index, and Passive (All) ownership across the panel period, and is rendered from the frozen figure-data exhibit of the same name in the release.



Appendix Figure B1: Passive versus Passive (All) ownership, 2005–2025.

C. Plurality

Plurality director contests are decided by seat ordering rather than by crossing a For-share threshold, so they require a separate determination procedure. We classify each of 240,359 plurality director items to one of five categories: Uncontested, inferred; Uncontested, seats known; Ranked; Unresolved contest; and Inference falsified. The first three categories are used in our analysis, the last two are excluded.

The categories are assigned in a fixed order of evidence, each defined by what the ones before it have ruled out. A plurality contest has no threshold to cross, so whether a reallocation of votes can change anything turns on two facts: how many seats were up for election, and how many nominees stood for them. Where ISS records both, the answer is simple. Nominees exceeding seats is a real race, and the item is *ranked* nominees at or below seats means every nominee is seated whatever the votes fall out to, and the item is *uncontested, seats known*. Where the seat count is absent, the classification falls to evidence about the meeting. A definitive proxy fight in SharkRepellent, or an ISS meeting type of proxy contest, establishes that a race occurred without establishing how many seats it was for, which leaves the item an *unresolved contest*. Absent any such evidence, an election in which every nominee was seated is taken to have been uncontested, and 235,820 items rest on that inference. An election in which a nominee nonetheless failed contradicts it, and those 58 items are recorded as *inference falsified* rather than absorbed into the category whose premise they defeat.

Appendix Table C1: Plurality basis assignment

Basis	Items	Treatment
Uncontested, inferred	235,820	Definite no-flip determination
Uncontested, seats known	2,509	Definite no-flip determination
Ranked	889	Decided by the seat-ranking engine
Unresolved contest	1,083	Excluded
Inference falsified	58	Excluded
Total	240,359	

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