

Empowered or Eclipsed?
Re-Evaluating Minority Shareholders' Role in Corporate Voting

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Abstract

This article examines the effects of regulatory efforts aimed at enhancing minority shareholder power through voting mechanisms—particularly in markets characterized by concentrated ownership and by the use of majority-of-the-minority rules and remote (online) voting. While these mechanisms were intended to enhance public participation as a means to improve accountability and to subject potentially conflicted decisions—between managers, controlling shareholders, and the minority—to broader scrutiny, their eventual effect appears to have been the reinforcement of institutional investor influence. Retail investors, by contrast, appear to serve more as a defensive presence than an assertive force in corporate governance.

Although retail shareholders are envisioned as a balancing force in corporate governance, their participation emerges as limited and inconsistent. Notably, retail participation tends to decline when institutional investors are involved. Thus, rather than improving corporate governance and reducing conflicts of interest, voting mechanisms such as majority-of-the-minority rules may in fact diminish the influence of retail investors in the presence of institutional participation, thereby heightening the potential for conflicts and power imbalances.

Drawing on a unique dataset of shareholder votes requiring special approval procedures and enhanced disclosure, this study documents persistently low levels of retail engagement. Empirical analysis reveals that attendance at shareholder assemblies does not increase in response to the importance of proposals. Instead, participation appears to be driven by the number of items on the agenda, pointing to a focus on volume rather than substance. Retail voting patterns largely mirror those of institutional investors and show little intensification in more contested or consequential decisions.

Overall, findings indicate that retail investors play a relatively limited role in shaping voting outcomes compared to institutional investors across the full set of assemblies. However, their influence tends to be more pronounced when voting against proposals. Notably, when both retail and institutional investors participate, the influence of retail support on the approval of proposals appears very limited and even arbitrary in comparison to that of institutional investors.

These results highlight the unintended consequences of well-intentioned regulatory designs and call for a reassessment of how minority shareholder protections are operationalized in practice.

Keywords: Retail investors, Institutional investors, Shareholder voting, Concentrated ownership, Minority protection, Majority-of-the-minority, Corporate governance.

1. Introduction

For more than a decade, regulatory reforms in many countries have sought to enhance minority shareholder influence by restructuring corporate voting mechanisms—most notably through the introduction and expansion of “majority-of-the-minority” rules (Cao et al., 2024; Fried et al., 2020; Li, 2021). These mechanisms, often championed as tools for shareholder empowerment in concentrated ownership markets, were envisioned to create a meaningful counterbalance to controlling shareholders by activating public—namely, retail—participation. Yet the empirical evidence suggests a markedly different reality. Rather than leveling the governance field, these reforms have largely fortified the influence of institutional investors, while retail shareholders remain at the margins of corporate decision-making.

Drawing on a comprehensive dataset of shareholder votes in companies listed in a concentrated capital market (Tel Aviv stock exchange) over the years 2022–2024, this study investigates the scope, drivers, and consequences of retail shareholder participation in corporate governance. The findings reveal a consistent pattern: retail participation, while measurable, is generally low and structurally passive. On average, only 18% of eligible retail shares are exercised in general meetings—a figure that does not meaningfully increase in response to vote importance or controversy. Rather, the modest rise in participation correlates not with the stakes of the decision but with the sheer number of items on the agenda. The data thus point to a phenomenon of formal involvement untethered from substantive engagement.

More notable, is the consistent inverse relationship observed between retail and institutional participation. Across all models, higher institutional presence—whether measured by ownership levels, voting volume, or vote direction—is associated with lower retail turnout. This pattern holds even when accounting for company- and year-specific effects, and regardless of whether institutions vote in favor, against, or abstain. Interestingly, institutional abstentions exhibit the strongest negative association with retail engagement, potentially reflecting a dynamic in which retail shareholders withdraw when institutions signal uncertainty or disengagement. While the direction of causality remains open to interpretation, the data suggest a structural tension rather than a complementary dynamic between these two investor classes.

One might reasonably expect this pattern to break in moments of institutional disunity—when the professional investor class fractures and the retail vote could prove decisive. But here too, the evidence runs counter to intuition. In cases of institutional disagreement, retail participation does not increase. Nor does the directional composition of retail voting—i.e., the share of retail votes cast in favor versus against—materially diverge from institutional patterns. Even in scenarios of near parity between institutional support and opposition, where retail shareholders might theoretically “tip the scale,” no

statistically meaningful shift is observed. If anything, retail participation appears to decline in such instances.

Finally, and perhaps most consequentially, the influence of retail votes on actual outcomes is limited. While institutional support significantly increases the likelihood that a proposal will be approved, retail support carries far less statistical and practical weight. In assemblies where both retail and institutional investors are present, the effect of retail support on the outcome appears very limited and even arbitrary in comparison to that of institutional investors. In quantitative terms, the marginal effect of retail votes is often less than one-third that of their institutional counterparts. In qualitative terms, retail voting tends to mirror—not challenge—institutional trends.

Taken together, these findings complicate the normative promise of shareholder empowerment reforms. While the regulatory architecture may be built to include the retail investor, its actual operation reveals a more symbolic form of inclusion—one that legitimizes outcomes without meaningfully shaping them. As such, this article invites a reassessment of the governance role envisioned for retail shareholders and raises broader questions about the design of participatory mechanisms in capital markets where power remains structurally concentrated.

This study contributes to the literature in the following ways. First, we are the first to provide large-scale empirical evidence on retail participation in shareholder voting in a concentrated ownership market. Prior work (e.g., Brav et al., 2022; Hafeez et al., 2022) has largely examined dispersed capital markets, showing that retail attention or institutional presence can increase minority participation. However, insights from dispersed settings may not directly apply to concentrated markets, where controlling shareholders and majority-of-the-minority rules structure the voting process differently. We extend this line of research by showing that, in the concentrated market context, retail participation remains persistently low, inconsistent, and unresponsive to proposal salience. Our findings are therefore highly relevant for practitioners and regulators concerned with the efficacy of minority empowerment mechanisms.

Second, unlike prior studies—primarily in dispersed capital markets—that rely on proxies of non-participation to estimate retail involvement (e.g., Geoffroy, 2018; Hafeez et al., 2022), our study directly measures minority participation through unique disclosure requirements that report the actual votes of retail shareholders, institutional investors, and controlling shareholders. This provides a more accurate and granular picture of participation dynamics. In this respect, our approach, like that of Brav et al. (2022), captures actual voting behavior, but our contribution lies in analyzing these dynamics within a concentrated ownership setting.

Third, our study advances understanding of the interaction between retail and institutional investors. We show that increased institutional participation is systematically associated with lower retail turnout, suggesting a substitution effect rather than complementarity. This provides a microfoundation for concerns raised in the governance literature about the crowding out of small investors and highlights how regulatory reforms, though aimed at empowering minority shareholders, may effectively consolidate institutional dominance.

Finally, in line with contemporaneous research on conflicts and unintended effects of governance reforms, we demonstrate that minority-protection mechanisms such as majority-of-the-minority rules can produce outcomes opposite to their intended purpose. Our findings contribute to this growing literature by revealing that retail shareholders' voice is largely symbolic, and that institutional investors emerge as the primary beneficiaries of reforms designed to strengthen the minority.

The rest of this article proceeds as follows: Section 2 reviews the relevant literature on shareholder participation in corporate governance, with particular attention to retail shareholder behavior in concentrated ownership environments and under mechanisms designed to enhance voting power; it also develops the study's hypothesis within these frameworks. Section 3 describes the research methodology, the unique dataset—including the regulatory context that enabled its construction—and the operationalization of key variables. Section 4 presents the empirical findings, highlighting patterns of retail participation, its relationship with institutional behavior, and its impact on voting outcomes. Section 5 discusses the implications of these findings for the design and effectiveness of shareholder empowerment mechanisms, particularly in concentrated ownership environments. Section 6 concludes with reflections on regulatory reform and directions for future research.

2. Relevant Literature & Hypothesis

Shareholder participation is a vital component of successful and effective corporate governance (Easterbrook & Fischel, 1983; Pound, 1991) and shareholder voting is one of the instruments that enables shareholders to hold directors accountable and affect company behavior. The regulatory requirement of shareholder approval for a range of corporate issues, such as director nomination, is believed to reduce overall managerial agency costs and improve director accountability (Fisch, 2017). Nevertheless, without adequate shareholder participation, voting cannot play an effective role in monitoring management decisions and can result in difficulty for issuers in obtaining a quorum for resolutions that require a majority or supermajority of outstanding shares (Hirst, 2017:101), e.g., approving a merger or amending the company's charter or bylaws (Fisch, 2017: 16-17).

While institutional investors can provide the participation required to constitute accountability and quorum, corporate law researchers have raised a set of concerns related

to the extent and magnitude of institutional voting (e.g., Larcker et al., 2015; Bebchuk et al., 2017; Lund, 2018; Posner et al., 2017; Morton & Hovenkamp, 2018; Bebchuk & Hirst, 2019; Coates, 2018; Fisch et al., 2019; Rock & Kahan, 2020; Cucari et al., 2020;). Due to their enormous portfolio, those institutional actors who professionally manage other investors' money, occasionally become subject to conflict of interests when voting, so can impose agency costs on their investors, similar to those created between managers and shareholders.

In addition, in condensed capital markets—where public companies are often dominated by controlling shareholders—the dynamics between institutional investors and these controlling parties create an additional layer of potential conflicts of interest. While institutional investors might be viewed as independent monitors of the company and its managers, in practice their interests may be strategically aligned with those of the controlling shareholders due to business ties, cross-holdings, or dependence on management for access and information. This alignment can undermine their expected role as a counterbalance to concentrated control and raise concerns about the effectiveness of minority shareholder protections as implemented through supposedly disinterested institutional investors.

Thus, regulators around the world (ESMA, 2020; SEC, 2019; SEC, 2015; ISA, 2015), among them the SEC and the Israel Securities Authority (ISA), as well as researchers (e.g., Brav et al., 2019; Fisch et al., 2019; Kastiel & Nili, 2016; Solomon, 2016), have begun focusing on non-institutional participation, i.e., by retail investors, in a search for increased accountability by managers and improved corporate governance.

2.1. Shareholder Participation

While conventional wisdom holds that retail shareholders are characterized by rational apathy—lacking a sufficient stake to warrant the time and costs necessary to monitor firms and cast a fully informed vote—some empirical studies show that voting of retail investors does influence firms' behavior and board decisions (Hafeez et al., 2022; Lee & Southern, 2020). For instance, using a large sample of U.S. ownership and voting records, Brav et al. (2022) found that although retail shareholder participation is quite low relative to non-retail shareholders (i.e., institutional investors, who are generally obliged to vote), retail shareholders appear most likely to vote when monitoring is most needed, and their votes are informed by firm circumstances; ultimately, in contrast to conventional wisdom, retail investors “can and do provide meaningful feedback to firms through the voting process” (Brav et al., 2022:521).

While shareholder participation is believed to contribute to companies operating in all markets (Easterbrook & Fischel, 1983; Iliev et al., 2015; Pound, 1991; Stulz, 1988), it is pivotal for the successful regulation of markets in which ownership is concentrated and business groups are prevalent (La Porta et al., 1998). Investor protection rules in such

markets tend to apply rules that use voting of non-controlling shareholders (disinterested shareholders) to protect the rights of minority shareholders; for example—requiring every transaction in which a controlling shareholder has an interest to be approved (also) by a majority of the disinterested (minority) shareholders (Fried et al., 2020; Li, 2021). For such regulation to be effective, shareholders' participation is crucial, especially that of institutional and retail shareholders.

While studies of shareholders participation in markets with dispersed ownership (e.g., Brav et al., 2022) suggest an increasing effectiveness of retail shareholder voting as a monitoring mechanism (see also: Ricci & Sautter, 2023), its effectiveness in markets with concentrated ownership is far from trivial. Investors in firms with dispersed ownership must vote to monitor managers and assure the firm is properly managed by the most suitable directors etc. In contrast, when a company has a controlling shareholder, voting by non-controlling investors is not required for monitoring managers, but rather to protect minority shareholders (against the controlling shareholder). The limited role of voting in such environments may not be sufficient to incentivize retail shareholder participation, especially when these shareholders are satisfied with the company's overall financial performance and stock returns. Moreover, several studies have examined the disciplinary role of shareholders through a substitutive mechanism known as the "Wall Street Walk." Admati and Pfleiderer (2009) demonstrate that a large minority shareholder can exert influence over management by threatening to exit the firm, thereby putting downward pressure on its stock price. Edmans (2009) argues that blockholders monitor the firm's fundamental value and sell their shares upon receiving negative information, thereby aligning market prices with fundamentals and shaping managerial incentives. Kandel et al. (2011) introduce another perspective, suggesting that even small, non-strategic shareholders can affect firm value through their characteristics. Specifically, they demonstrate that age similarity among small shareholders can act as a coordination device, enabling collective influence in the absence of strategic action. Thus, the Wall Street Walk can serve as a substitute for voting.

In addition, endogenic properties of controlled firms and the effect a controlling shareholder has over the management may disincentivize participation. Studies show that ownership structures effect shareholders' participation; processing of the minutes of annual general meetings of public companies traded in Belgium, France, German, Netherlands and the UK, (Van der Elst, 2011) shows that small shareholder voting turnouts differ significantly according to the ownership structure of the company; different types of shareholder classes show different voting engagements according to the ownership concentration and the ownership structure. Similarly, a recent study by Aggarwal et al. (2025) finds that the entry of retail investors into certain companies, following the 2019 introduction of zero-commission trading by major U.S. brokerages, led to a significant decline in shareholder participation in governance, as measured by voting activity.

Moreover, studies show that shareholders access to information about the voted subject and the available voting methods—two elements directly controlled by the company’s management and thus indirectly by the controlling shareholder—affect participation and turnout (Geoffroy, 2018). Among others, the bundle of materials that a shareholder receives (proxy materials), which affects both readily available information and available voting methods, was found to substantially influence the likelihood of participation (Geoffroy, 2018; Brav et al., 2022). Lee & Southern, 2020, find that when additional voting support is needed, rather than just mailing shareholders a “notice-and-access” letter, companies maximize the turnout of retail investors by mailing a full set of proxy materials. More so, Choi et al. (2025) found that management manipulates the outcomes of votes on their proposals by employing several mechanisms, such as meeting adjournment and selective campaigning.

2.2. Retail Shareholder Voting

Existing studies on voting patterns in concentrated ownership environments have focused almost exclusively on institutional investors (e.g., Dressler, 2020; Hamdani & Yafeh, 2013). Retail investors, although fundamentally different (Varottil, 2020), have received scarce scholarly attention. At the same time, the well-established notion of shareholders’ rational apathy—and its dependence on participation costs and the perceived likelihood of making a meaningful impact—has led recent studies to focus on how reducing these costs, particularly by allowing shareholders to participate online, affects retail shareholder voting.

These studies show mixed results. On the one hand, available shareholder voting methods substantially influences the likelihood of voting (Brav et al., 2022; Lee & Southern, 2020); thus the reduction in voting costs by the option to vote remotely (online) can be expected to result in (a) increased shareholders participation that, supposedly, (b) contributes to better corporate governance. Using firms listed on the Shanghai and Shenzhen stock exchanges from 2005 to 2017, Gao et al. (2020) reports a mild but statistically significant across the board increase in shareholder participation in annual online general meetings; and so is Feng et al. (2021) and Zhang (2024) report a positive online voting effect on the corporate social responsibilities (CSR) performances of those companies who switched to online participation.

On the other hand, following the introduction of an online platform for Turkish listed companies (“e-GEM”), Ergincan & Karağaçlı (2015) examined the total number of participants for the two years following its launch in 2012, reporting an increase of 146% in the total number of general meeting participants since e-GEM became operational. Thus, claiming (a supposedly) “dramatic changes in shareholder participation in such a short time period justifies the regulatory reforms that aimed to raise the level of shareholder democracy in Turkey by setting up the legal framework for an electronic GM platform”

(Ergincan & Karaağaçlı, 2015:110). However, they also reported that while participation by institutional investors (mainly foreign) soared by 342%, individual participation dropped by 45% in the period from 2011 to 2014 (Ergincan & Karaağaçlı, 2015:112). Furthermore, when participation by share-of-capital is examined, mixed results were found: one of the examined years shows a net increase in participation while the others show a decrease (Ergincan & Karaağaçlı, 2015:112). Additionally, other empirical findings show that switching voting method from mail and telephone to online voting caused a drop in the participation of those shareholders who voted in the past using telephone or mail (Brav et al., 2022:512).

Findings of other studies suggest that reducing participation costs, can be opportunistically used in concentrated ownership environments: Abdennadher & Cheffi (2020) focused on the effects of internet voting on shareholder meetings in French corporations. Following a qualitative study applying different data collection strategies, including interviews with managers and shareholders, they found that the adoption of internet voting corresponded to opportunistic behavior by corporate directors. Abdennadher & Cheffi (2020) claim that the adoption of the e-voting system proved to be a rhetorical inducement and a manipulation strategy by executives rather than genuine willingness to involve shareholders, arguing that instead of being monitored by shareholders, executives turned the new tool into a means for monitoring shareholder power.

Similarly, focusing on online shareholder meetings at large: Schwartz-Ziv (2021) found virtual-only (online) meetings to be shorter, dedicate less time to addressing shareholders' concern and when shareholders are more critical of management, limitations on communication with shareholders were introduced (Schwartz-Ziv, 2021:5); on the other hand, Brochet et al. (2024) finds virtual meeting to exhibit less activity on average, consistent with critics' concerns, but such reduced activity does not appear to cause a loss in information content nor does it appear to reflect an attempt to avoid scrutiny.

Facing mixed findings regarding retail investor participation—its contribution to improved corporate governance and its effectiveness under reduced participation costs—this article offers an additional contribution by presenting comprehensive data on retail investor participation in concentrated ownership environments with lowered participation barriers (e.g., online voting), and, most notably, by identifying factors that influence retail engagement in such settings and the dynamics created between retail and institutional investors.

2.3. Hypothesis

Similar to Brav et al. (2022), we adopted the rational-choice framework of Riker and Ordeshook (1968), which sets the utility from a voter's participation as:

$$U = B \times P - C + D$$

where B is the differential benefit that an individual shareholder receives from the success of his preferred proposal over his less preferred one; P is the probability that the shareholder will, by voting, bring about the benefit B ($0 \leq P \leq 1$); C is the cost to the shareholder of the act of voting; and D is any consumption benefit the shareholder has from voting per se.

2.3.1. Voting expectation (B x P)

In concentrated ownership environments that empower minority shareholders, e.g., by requiring the approval of a majority of the minority for a variety of corporate decisions, P is high even for a relatively small number of shares owned. Accordingly, we expected (B x P) to contribute to consistently high retail shareholder turnout across proposals.

2.3.2. Cost of voting (C)

The cost of voting is dependent on the methods available to the shareholder. Institutional investors enjoy tools that simplify the mechanics of the voting process. For example, Institutional Shareholder Services (ISS), provides its clients (mainly US based) with end-to-end management of their proxy voting process. ISS' ProxyExchange® allows institutional investors to control voting policy and final proxy vote decisions while leveraging ISS in the processing and data management elements of the proxy voting process. Glass Lewis and Broadridge, two other service providers for the institutional market, also provide their clients with similar services. Retail investors, by contrast, typically do not have access to such tools in most markets. However, in some jurisdictions, regulators have introduced mechanisms—such as online voting—to encourage retail investor participation by enabling them to vote remotely.

Agency costs theory (Jensen & Meckling, 1976; Jensen, 1986) implies that delegating control to managers while restricting shareholder control creates costs associated with principal-agency relationships. These include monitoring expenditures incurred by the principal designed to limit aberrant activities of the agent; bonding expenditures incurred by the agent (that is, resources spent by the agent to guarantee that certain actions that would harm the principal will not be taken or to ensure that the principal will be compensated if such actions are taken); and residual loss (that is, the reduction in welfare experienced by the principal as a result of the divergence between the agent's decisions and those decisions which would maximize the welfare of the principal). Accordingly, proponents of the agency costs theory advocate reforms that would allocate more control to shareholders, or to be more precise—would allow them to exercise control, and thus reduce agency costs. Shareholder voting is a governance instrument with which shareholders monitor management and are asked to exercise control by voting.

Online voting and majority-of-the-minority rules serve to lower voting costs and strengthen shareholder power, thereby facilitating monitoring and control by shareholders. Under agency cost theory, these mechanisms are expected to encourage high rates of shareholder participation (Klein, 2022).

2.3.3. Benefit a shareholder has from the act of voting (D)

The study of retail shareholders participation in markets with dispersed ownership found the benefit from voting (D) per se to be positive and greater, at least for some shareholders, than the cost of the voting act;¹ furthermore, indexed by proposal type—the turnout of retail shareholders is greater for ballots involving governance-related proposals (Brav et al. 2022:509). In concentrated ownership environments, we assume D is (further) affected by the existence of a controlling shareholder and is thus indexed to voting content of shareholders: whether voting with the controlling shareholder or against him. A controlling shareholder who is in-need of supporting votes, e.g., to approve a self-dealing transaction, can approach potential voters ex-ante, or more practically—a broker who has clients that hold shares, and lobby (“recruit votes”) (Klein, 2023). Ex-post, a controlling shareholder can reward participating voters, or take revenge on those who voted against (e.g., voting against their proposals in other companies, etc.) Accordingly, we assumed that some votes offer greater benefits for participation (D) than others—such as those involving lobbying or recruitment efforts by the controlling shareholder—and therefore will see higher retail investor turnout for certain types of proposals.

All in all, we hypothesize that under the rational-choice framework (Riker & Ordeshook, 1968), retail shareholder participation should be systematically high in concentrated ownership environments that implement mechanisms designed to empower minority shareholders. Particularly, when both the expected value of voting ($B \times P$) and the intrinsic or strategic benefit of voting (D) are significant, and the cost of voting (C) is reduced. Accordingly, we expected high² retail turnout in regimes that combine majority-of-the-minority voting rules with online participation tools, as these reduce costs and increase voting power, aligning with agency cost theory. We further hypothesized that retail participation will vary with proposal content: turnout should rise in cases involving potential private benefits for controlling shareholders or direct engagement with retail voters.

However, as detailed below, empirical findings reveal that retail participation remains limited, inconsistent, and largely symbolic. Thus, even where regulatory reforms are in place to enhance retail influence, institutional investors appear to dominate the decision-

¹ $D > C$ explains a positive turnout even when firms have a single institutional owner with more than 50% holdings.

² In Section 6, we clarify what is meant by “high” for the purposes of this article.

making process, suggesting that these mechanisms—rather than leveling the playing field—may have disproportionately bolstered institutional power.

3. Research Design & Methods

To analyze public participation under regulations aimed at empowering minority shareholders in a market with concentrated ownership, we collected and examined shareholder voting data from companies listed on the Tel Aviv Stock Exchange (TASE), leveraging enhanced disclosure obligations that enabled us to identify voting patterns by shareholder type.

We focus on TASE-listed companies for two main reasons: first, the market is characterized by the majority of firms being held by a controlling shareholder (Dressler, 2020; Hamdani & Yafeh, 2013); second, securities regulations and exchange rules in most markets require firms to disclose only aggregated voting outcomes. Companies are not required to disclose disaggregated information identifying individual voters or their voting choices. Thus, identifying the retail vote within the aggregated results using companies' public disclosures is by and large impossible (Brave et al. 2022:497; Hafeez et al., 2022:432). Nevertheless, in order to increase transparency and control over votes in which minority shareholder voting becomes crucial, e.g., when majority-of-minority rule applies, Israeli securities regulations require issuers to report not only aggregated voting results but also to include in the reports details of “the manner of voting of the securities holders who are interested parties, senior officials, institutional bodies or fund managers” (Securities Regulation, 1970 § 36D). Thus, the TASE setting—given its ownership structure and disclosure rules—makes detailed voting data available. This combination enables systematic empirical analysis that would not be possible in most other jurisdictions.

Accordingly, our initial data included all general meetings held TASE-listed companies, as reported on the Israel Securities Authority's MAGNA website.³ From this broader set, we focused on votes requiring majority-of-the-minority approval, as such votes arise in the presence of a controlling shareholder and trigger enhanced disclosure obligations that make it possible to identify voting outcomes by shareholder type. Specifically, these disclosures enable the calculation of retail shareholder participation, making them particularly suitable for analyzing the extent and nature of public involvement in corporate decision-making.

The study focused on observations from March 2022 onward. This start date was selected because, beginning in March 2022, companies became subject to a regulatory requirement to attach detailed voting results in structured Excel files. This new format significantly improved the accuracy and efficiency of data collection.

The selected years were chosen to capture voting behavior within the online voting era, following the 2015 launch of Israel's “Vote-Hon” online voting platform for TASE-listed

³ <https://www.magna.isa.gov.il/>

companies (ISA, 2015). The three-year span (2022–2024) aligns with regulatory requirements mandating periodic re-approval of certain resolutions—such as recurring related-party transactions or the appointment of external directors—which typically occur every three years.

The following table summarizes the process by which the observations included in the study were identified and selected. Overall, the final sample comprises 4,161 observations.

<u>Step</u>	<u>Description</u>	<u>Remaining Observations</u>	<u>Removed Observations</u>
1	Collection of sample observations by entering a date range from 01.01.2022 to 31.12.2024 and selecting only Form 049 types	14,099	0
2	Filtering observations where Majority_required = “Majority-of-minority” (in both Hebrew and English)	4,452	9,647
3	Filtering out observations dated before 01.03.2022 (since from this date companies were required to attach an Excel file with vote details)	4,231	221
4	Observations found to be erroneous during validation, including duplicate reports	4,161	70
5	Total valid observations	4,161	

Table 1 - Sample Construction and Filtering Process for Shareholder Voting Data

We used the detailed reports to aggregate the total number of shares voted by interested parties, senior officials, and institutional investors (collectively, “non-retail”), as well as the number of shares voted for, against, and abstained by these non-retail participants. For each vote, we then inferred the corresponding figures for retail investors—including total votes, as well as votes for, against, and abstained—by calculating the difference between the overall aggregated voting results and the disclosed votes of non-retail participants.

We relied on the information provided by the company in its outcome reports to classify each vote into one of the following 12 categories, which are used to examine and control whether the type of proposal influenced retail participation.

#	Category	Description	n.
1	Appointment of external (independent) director	Proposals to appoint a director who meets legal independence criteria and is not affiliated with the controlling shareholders or management.	1,175
2	Related-party transaction with controlling shareholder	Proposals seeking approval for a transaction involving the controlling shareholder or their affiliates, which could raise conflict of interest concerns.	522

#	Category	Description	n.
3	Executive compensation policy	Proposals to approve or amend the general framework governing compensation for executives, typically presented for shareholder approval every three years.	510
4	CEO compensation terms	Proposals detailing the specific salary, bonus, equity, or other compensation components granted to the CEO.	407
5	Terms of service and compensation for a relative of the controlling shareholder	Proposals addressing employment terms or compensation for a family member of the controlling shareholder.	363
6	Indemnification, exemption, and/or directors and officers (D&O) insurance	Proposals relating to the legal and financial protections afforded to directors and officers, including indemnity clauses and insurance coverage.	355
7	Merger, charter amendment, or rearrangement	Proposals involving structural changes to the company such as mergers, amendments to the corporate charter, or internal organizational changes.	107
8	Director compensation terms	Proposals outlining remuneration and benefits for members of the board of directors, often covering fixed fees, equity awards, or meeting attendance compensation.	106
9	Private issuance of shares	Proposals to issue new shares to specific investors, often involving dilution concerns or questions of fairness to existing shareholders.	101
10	Compensation terms deviating from the approved compensation policy	Proposals that request approval for compensation arrangements inconsistent with the previously approved compensation policy.	98
11	Dual service as CEO and Chairperson	Proposals requesting approval for one individual to serve simultaneously as both CEO and Chairperson of the board, a practice sometimes viewed as reducing board independence.	43
12	Not specified	This group includes all proposals that either addressed topics outside the defined categories or included multiple subjects within a single voting item.	374
		TOTAL	4,161

Table 2 - Classification of Vote Types and Frequency

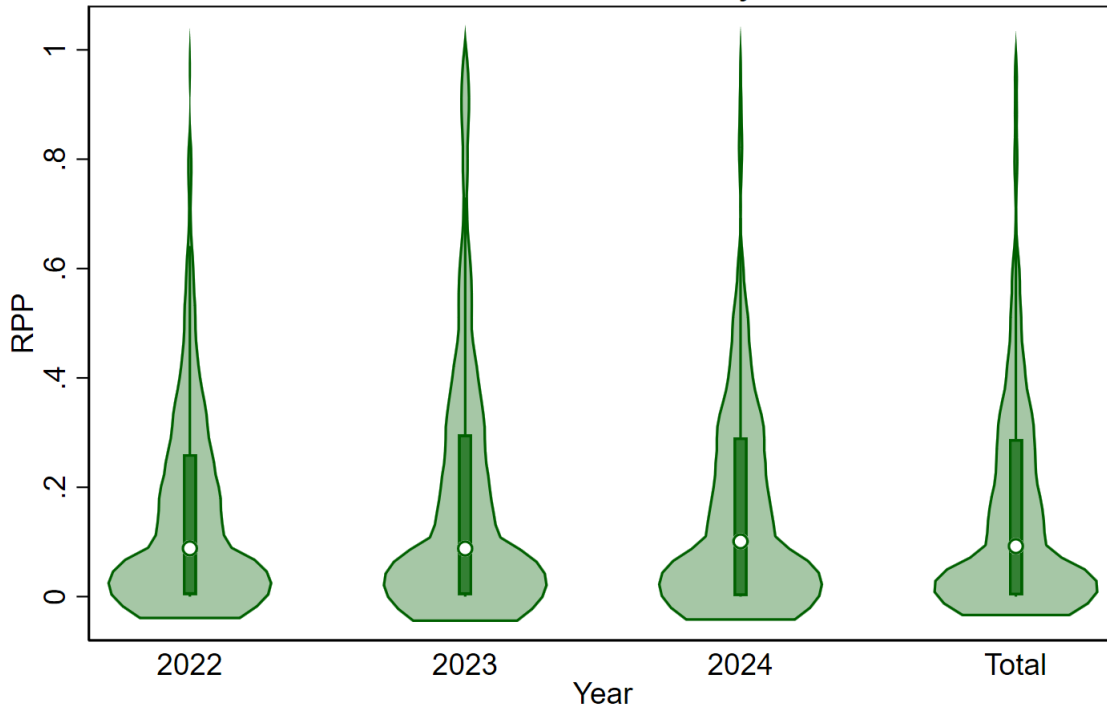
4. Analysis & Results

To better understand public participation under regulations aimed at strengthening minority shareholder power in markets with concentrated ownership, we examine the consistency and impact of retail investor engagement (voting) in shareholder meetings that require enhanced approval procedures. We also analyze the role of institutional investors, looking at how their participation and voting direction affect both retail involvement and the final voting outcomes. This dual focus allows us to assess whether institutional participation complements or crowds out retail influence, and to what extent public participation remains meaningful in shaping governance decisions within such regulatory frameworks.

4.1. Realized public participation

Realized public participation (“RPP”) measures the extent to which retail investors actually take part in shareholder voting. It is calculated as the proportion of votes cast by the public out of the total shares eligible for public participation. The eligible public holding is defined as the total outstanding shares excluding those held by (i) controlling shareholders, (ii) insiders, (iii) institutional investors, (iv) any shareholder holding more than 5% of the company’s shares, and (v) treasury shares held by the company itself, which are not eligible to vote. This metric provides a focused assessment of how actively independent, unaffiliated shareholders participate in governance decisions.

The following violin plot together with Table 3 present descriptive statistics for the RPP parameter, both for the overall study population and separately for each year included in the study.



White dot = Median

Year	N	Mean	Std. Dev.	25th Percentile	50th Percentile	75th Percentile	90th Percentile	95th Percentile	99th Percentile
2022	1,224	0.17	0.22	0.00	0.09	0.26	0.47	0.64	0.95
2023	1,330	0.19	0.25	0.00	0.09	0.30	0.57	0.77	0.94
2024	1,607	0.18	0.22	0.00	0.10	0.29	0.47	0.67	0.96
Total	4,161	0.18	0.23	0.00	0.09	0.29	0.50	0.71	0.95

Table 3 - Descriptive Statistics of Realized Public Participation (RPP) by Year

The data reveals that realized public participation (RPP) in shareholder voting is persistently low. Across all three years, the average RPP hovers between 17% and 19%, with a combined mean of 18% for the entire sample. This suggests that, on average, fewer than one-fifth of the shares eligible for public (retail) participation are actually voted, indicating that most retail investors remain disengaged from the voting process.

Moreover, the high standard deviation relative to the mean in each year (ranging from 0.22 to 0.25) signals considerable variation in participation levels across different proposals. While some proposals appear to attract meaningful public engagement, many others receive minimal or no attention at all. This heterogeneity points to a polarized distribution, where a few exceptional cases may distort the overall picture, giving the impression of broader engagement than actually exists.

Another finding is that at least 25% of all proposals receive zero public participation—as evidenced by the 25th percentile being 0.00 in all years. Even the median RPP remains around 9–10%, meaning that half of all proposals garner public participation from just one-tenth or less of the eligible shares. This underscores the extent to which low engagement is not merely occasional but systemic.

On the other hand, the upper percentiles indicate that a small subset of proposals does achieve relatively high levels of public participation. For example, the 90th percentile exceeds 47% in all years, and the 99th percentile approaches or surpasses 94%, indicating that, in rare instances, public turnout can be substantial. However, these appear to be exceptions rather than the norm. The following analysis will explore whether these instances of heightened retail participation—possibly driven by particularly salient or controversial proposals—share identifiable characteristics or common features.

4.1.1. RPP across Voting Subjects

The subjects of the proposals include a wide range of topics, from executive compensation and related-party transactions to structural changes such as mergers or amendments to corporate charters. The following table (Table 4) and histogram (Histogram 1) present the RPP metric, broken down by year and by the subject matter of the vote, including the number of proposals (frequency) by subject and year. The data also includes a category for votes with unspecified subjects (discussed below).

Subject	2022	2023	2024	Total
<i>RPP (no. of proposal in subject/year)</i>				
Appointment of external (independent) director	0.16 (315)	0.17 (339)	0.16 (521)	0.16 (1,175)
Related-party transaction with controlling shareholder	0.20 (150)	0.18 (179)	0.19 (193)	0.19 (522)
Executive compensation policy	0.18 (162)	0.19 (197)	0.18 (151)	0.18 (510)
CEO compensation terms	0.18 (143)	0.20 (123)	0.21 (141)	0.20 (407)
Terms of service and compensation for a relative of the controlling shareholder	0.16 (101)	0.20 (124)	0.20 (138)	0.19 (363)
Indemnification, exemption, and/or D&O insurance	0.14 (90)	0.22 (127)	0.16 (138)	0.17 (355)
Merger, charter amendment, or rearrangement	0.29 (33)	0.18 (50)	0.15 (24)	0.21 (107)
Director compensation terms	0.13 (35)	0.24 (23)	0.14 (48)	0.16 (106)
Private issuance of shares	0.17 (24)	0.20 (37)	0.13 (40)	0.16 (101)
Compensation terms deviating from approved policy	0.21 (40)	0.24 (20)	0.20 (38)	0.21 (98)
Dual service as CEO and Chairperson	0.18 (14)	0.30 (10)	0.22 (19)	0.22 (43)
Not specified	0.18 (117)	0.21 (101)	0.21 (156)	0.20 (374)
Total	0.17 (1,224)	0.19 (1,330)	0.18 (1,607)	0.18 (4,161)

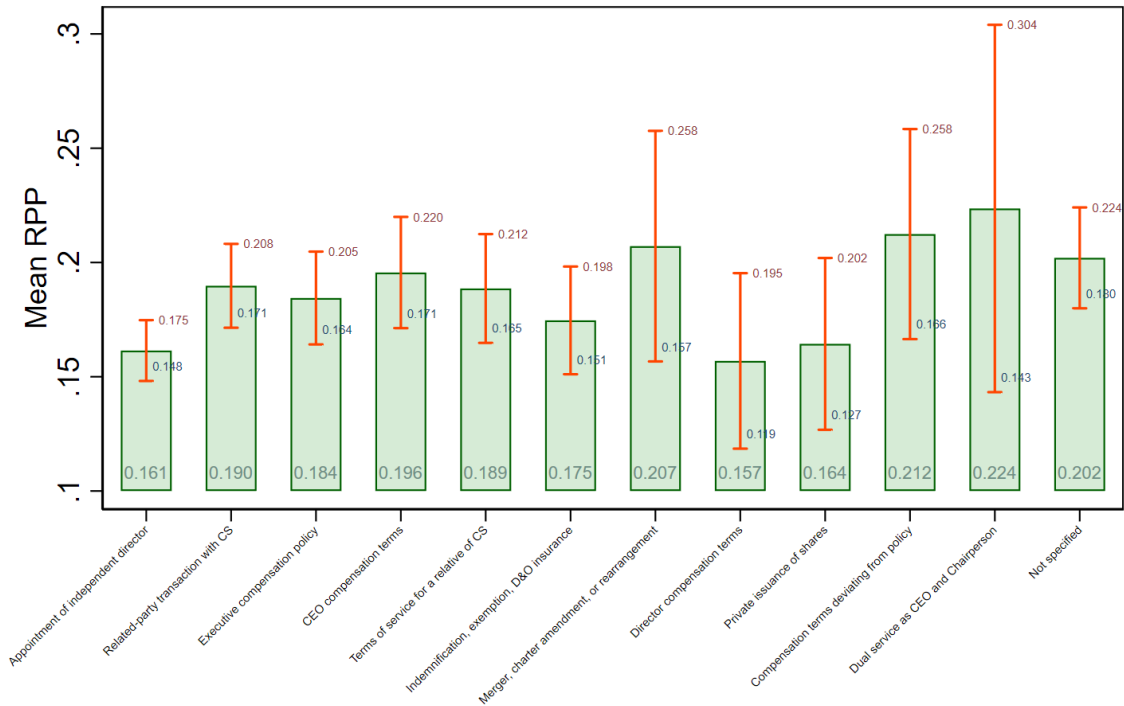
Table 4 - Retail Participation Rate and Proposal Frequency by Subject and Year

The data on frequencies included in Table 4 reveal several notable patterns in the distribution of vote subjects over the study period. The most frequently voted topic was the *Appointment of external (independent) directors*, accounting for 1,175 out of 4,161 total votes—over 28% of all voting events—indicating the centrality of board composition in corporate governance practices. *Executive compensation policy* (510 votes) and *Related-party transactions with controlling shareholders* (522 votes) were also common, reflecting ongoing shareholder scrutiny of managerial incentives and potential conflicts of interest. Subjects such as *Dual service as CEO and Chairperson* (43 votes) and *Director compensation terms* (106 votes) appeared far less frequently, suggesting that these issues are less commonly brought to a vote. The significant number of cases categorized as *Not specified* (374 votes) highlights a degree of opacity or inconsistency in the classification of vote subjects, which may warrant further attention regarding disclosure practices.

When reporting voting results, companies are required to classify each vote twice—once according to a predefined list of subjects and once according to relevant sections of the Companies Act. *Not specified* cases refer to instances where, upon reporting the results, the vote was classified under both systems as not corresponding to any of the predefined subject categories.

Overall, the distribution reflects a regulatory emphasis on promoting board independence, enhancing accountability, and overseeing related-party transactions. At the multi-year level, there is no significant difference in the participation of the public in the different subjects.

The following histogram presents the mean retail participation rate (RPP) across different proposal subjects, together with 95% confidence intervals.:



The variation across subjects appears modest, with mean values generally ranging between 0.16 and 0.22. For example, proposals concerning the dual service of a CEO and chairperson or compensation-related issues exhibit slightly higher participation, while matters such as director compensation terms or related-party transactions with the controlling shareholder (“CS”) tend to attract somewhat lower averages.

The latter finding is particularly surprising, as related-party transactions were one of the main targets of the regulatory reforms intended to enhance retail shareholder participation.

Importantly, the overlapping confidence intervals indicate that the differences across subjects are not statistically sharp; the uncertainty bands largely intersect, suggesting that observed variations may not reflect substantive differences in participation behavior. Overall, the figure highlights that although some subjects elicit marginally higher or lower engagement, retail participation remains consistently low across proposal categories.

An ANOVA analysis indicates that RPP scores differ significantly across proposal subjects ($p = 0.0334$); however, the explanatory power is negligible, with an R-squared of only 0.5%. A secondary robustness check using pairwise mean comparisons with Bonferroni-adjusted p-values fails to detect any statistically significant differences between specific subject categories.

Consistently, Table 5 presents results from a regression model examining the effect of subject type on RPP (with the “Not specified” group as the baseline).⁴ The regression—controlling for company and year fixed effects and clustering standard errors at the assembly level—shows that none of the individual subject categories exhibit statistically significant effects, as indicated by non-significant t-tests on the subject coefficients..

Number of observations	4139	Root MSE	0.156	
Number of clusters	2025	F statistic	0.95	
Fixed effects	Company, Year	F statistic p-value	0.493	
R-squared	0.598			
Adjusted R-squared	0.536			
Within R-squared	0.003			
Variable	Coefficient	Std. Err.	T	P> t
Private issuance of shares	-0.003	0.020	-0.150	0.882
Dual service as CEO and Chairperson	-0.002	0.028	-0.050	0.958
Executive compensation policy	-0.006	0.013	-0.460	0.647
Merger, charter amendment, or rearrangement	0.020	0.034	0.600	0.551
Appointment of independent director	-0.018	0.013	-1.420	0.155
Related-party transaction with CS	-0.001	0.012	-0.090	0.927
Indemnification, exemption, D&O insurance	-0.010	0.014	-0.710	0.475
Compensation terms deviating from policy	0.011	0.026	0.410	0.681
Director compensation terms	0.014	0.015	0.940	0.347
CEO compensation terms	-0.002	0.014	-0.120	0.907
Terms of service for a relative of CS	-0.017	0.015	-1.090	0.274
cons	0.189	0.011	17.770	0.000

Table 5 - Fixed-effects regression of retail participation (RPP) on proposal subjects

It is worth mentioning that unlike Hafeez et al. (2022:425)—who find that in the dispersed U.S. market retail investor participation increases significantly in response to high-salience proposals that motivate retail investors to engage in shareholder activism—our evidence from the condensed TASE market shows no such substantive effect. Furthermore, when examining the interaction between year and subject (under the alternative assumption that in certain years some subjects may have received greater attention from retail investors due to media coverage or similar factors), the only subject found to be associated with significantly higher participation rates was dual service as CEO and Chairperson. with positive and statistically significant effects observed in 2023 (Dual service as CEO and Chairperson#2023’s Coef. = 0.175, $p = 0.027$) and 2024 (Dual service

⁴ $RPP_{i,c,t} = \alpha + \sum_{s=1}^{S-1} \beta_s \text{Subject}_{i,s} + \gamma_c + \delta_t + \varepsilon_{i,c,t}$

as CEO and Chairperson#2024's Coef. = 0.109, $p = 0.044$; relative to the Not specified & year 2022).

Overall, these findings suggest that although some variation in participation exists, it is not strongly or consistently driven by the type of resolution voted on.

4.1.1. RPP and Agenda Item Count

While the specific subject matter of the vote does not appear to significantly influence participation rates, a different picture emerges when considering the number of items on the assembly's agenda.

The variable *max_subject_n* captures the number of items on the assembly's agenda. It is calculated for every observation and represents the total number of votes included in the corresponding assembly. The average number of agenda items (including those that do not require majority-of-the-minority approval) is 5.88, with a standard deviation of 4.69, indicating considerable variation across assemblies. The number of items ranges from a minimum of 1 to a maximum of 27.

As shown in Table 6 below, a statistically significant positive association exists between the number of agenda items and RPP. The model, based on 4,139⁵ observations and accounting for fixed effects at the company and year levels, yields a coefficient of 0.0033 ($p = 0.007$) for the number of agenda items (*max_subject_n*), suggesting that assemblies with more items on the agenda tend to exhibit slightly higher levels of public participation. Specifically, each additional item on the agenda is associated with an increase of approximately 0.33 percentage points in public participation, holding all else constant. For example, if public participation in an assembly with three agenda items stands at 17%, adding a sixth item would be associated with an expected rise to approximately 17.33% participation.

Number of observations	4139	Root MSE	0.156	
Number of clusters	2025	F statistic	7.27	
Fixed effects	Company, Year	F statistic p-value	0.007	
R-squared	0.598			
Adjusted R-squared	0.538			
Within R-squared	0.006			
Variable	Coefficient	Std. Err.	T	P> t
max_subject_n	0.0033	0.001	2.70	0.007
cons	0.16	0.008	19.79	0

Table 6 - RPP and Agenda Item Count

⁵ dropped 22 singleton observations, following Sérgio Correia, *Singletons and Fixed Effects in Regression Analysis*, <https://scorreia.com/research/singletons.pdf> (last visited June 8, 2025) (maintaining singleton groups in linear regressions where fixed effects are nested within clusters can overstate statistical significance and lead to incorrect inference).

4.1.2. RPP and Institutional Presence

We turn to examine the relationship between institutional participation and that of the public. Table 7 below presents five fixed-effects regression models that explore the relationship between RPP and varying measures of institutional investor presence. All models include company and year fixed effects and cluster standard errors at the assembly level.

Variable	(1)	(2)	(3)	(4)	(5)
instPercent	-0.873***				
instPercentOfPubHoldings		-0.732***			
INST dummy (1 vs 0)			-0.301***		
perInstAgnst				-0.810***	
perInstFor				-0.893***	
perInstAbs				-2.272***	
institutional_against					-0.963***
institutional_for					-1.054***
institutional_abstain					-2.732***
Constant	0.323***	0.431***	0.441***	0.324***	4.41e+07***
Within R-sq.	0.084	0.214	0.134	0.086	0.348
R-squared	0.629	0.682	0.649	0.631	0.680
Adj. R-squared	0.573	0.634	0.597	0.575	0.632
Root MSE	0.150	0.139	0.146	0.149	3.63e+07
N	4,139	4,139	4,139	4,139	4,139
Clusters	2,025	2,025	2,025	2,025	2,025
Fixed Effects	Company, Year	Company, Year	Company, Year	Company, Year	Company, Year

***p < 0.001, **p < 0.01, *p < 0.05

Table 7 - RPP and Institutional Presence

We start with a model (Model 1) that uses *instPercent*, defined as the proportion of total shares held and voted by institutional investors to the overall number of outstanding shares—i.e., institutional investors' holding percentage in the company. The results indicate a statistically significant negative relationship between institutional holdings and retail participation (coefficient = -0.873, p < 0.001), suggesting that greater institutional ownership is associated with substantially lower public engagement in voting (remember, RPP is defined as realized retail participation, calculated as the number of shares voted by retail investors divided by the total number of shares held by retail investors).

Model 2 replaces institutional investors' holding percentage with a refined measure, *instPercentOfPubHoldings*, which adjusts the denominator by excluding shares held by the controlling shareholder or insiders (including shareholder holding more than 5%)—thus capturing institutional dominance over the public float. Importantly, this model also aligns more closely with how the dependent variable RPP is constructed. Again, the RPP is

calculated as the number of shares voted by retail investors divided by the total number of shares held by retail investors (i.e., the float not held by insiders or controlling shareholders, minus institutional holdings). From an endogeneity perspective, an increase in *instPercentOfPubHoldings* implies a decrease in the total shares held by retail investors—i.e., a reduction in the denominator of RPP—which would, all else equal, be expected to increase RPP. Therefore, the observed statistically significant negative coefficient (-0.732, $p < 0.001$) runs counter to this mechanical expectation, suggesting that the negative association between institutional presence and retail participation is not simply a byproduct of denominator shrinkage but may reflect deeper behavioral or structural dynamics. In other words, if retail investors participated irrespective of institutional holding size, the numerator of the RPP would remain unaffected by an increase in *instPercentOfPubHoldings*, while the mechanical decrease in the RPP's denominator should, all else equal, yield a positive coefficient—which we do not observe. This model also exhibits the highest within R-squared (0.214) among the models testing RPP (Models 1–4), indicating improved explanatory power.

Model 3 adopts a more discrete specification using the binary variable INST dummy, coded as 1 if institutional investors hold shares and 0 otherwise. While less granular, the model indicates that even the mere presence of institutional holders is associated with a drop in retail participation (coefficient = -0.301, $p < 0.001$).

Model 4 introduces a more behaviorally nuanced measure of institutional participation. Rather than counting total shares held or voted, it incorporates vote-directional institutional participation—votes cast against, for, or abstain—each scaled by the total number of voting-eligible shares. This operationalization captures not just institutional sentiment, but also the relative magnitude of their participation within the voting pool. The results again reveal significant negative relationships across all three directions: -0.810 for votes against, -0.893 for votes in favor, and -2.272 for abstentions (all $p < 0.001$). These findings suggest that higher institutional participation—regardless of direction—crowds out retail engagement, even when controlling for the overall voting power in the assembly.

Model 5 shifts the analytical focus from proportions to absolute volumes by modeling the number of shares voted by institutional investors, again broken down by vote direction: *institutional_against*, *institutional_for*, and *institutional_abstain*. Each variable represents the absolute number of shares cast in that stance by institutions. All three directions are significantly and negatively associated with retail voting volumes. Notably, institutional abstentions exhibit the strongest crowd-out effect (-2.732, $p < 0.001$), followed by votes in favor (-1.054) and against (-0.963). These results reinforce the notion that greater institutional activity—regardless of vote direction—is associated with lower engagement from retail investors on the same issues, potentially reflecting a displacement effect, reduced perceived influence, or information-based free-riding.

Together, the five models consistently demonstrate that institutional investor presence and engagement—across both proportional and directional dimensions—is inversely related to retail shareholder participation, highlighting a structural tension between institutional and retail engagement in corporate governance. It is worth mention that this finding, regarding the condensed TASE market, differs from Hafeez et al. (2022:426), who report that in the dispersed U.S. market, retail investor participation is significantly higher in firms with greater institutional ownership when shareholder proposals are received.

4.2. When Institutions Disagree: Retail Still Stands Aside

A central question in evaluating shareholder dynamics is whether retail investors step in when institutional investors are divided. One might expect that while retail participation generally declines in the presence of strong institutional ownership—reflecting a tendency to defer to professional investors—this pattern would reverse when institutional consensus breaks down. In moments of disagreement, when “the driver is confused,” so to speak, retail shareholders might be expected to “grab the wheel” and assert their voice to tip the balance.

We measure institutional consensus by defining *instDif* as the absolute difference between the proportion of institutional shares voted against and the proportion voted in favor of a given proposal. The proportion voted against is calculated as the number of institutional shares voted against divided by the total number of institutional shares voted, and likewise for the proportion voted in favor.

Accordingly, we would expect that when the difference between institutional support and opposition is small (i.e., *instDif* is close to zero), the retail vote becomes pivotal—quantitatively and/or qualitatively. This means that RPP would increase (quantitative contribution) and/or the voting mix of retail investors would differ from that observed in cases of institutional consensus (qualitative contribution).

4.2.1. *instDif*, retailMix and RPP

In regards to the quantitatively contribution of retail investors to cases when institutions disagree, the empirical analysis reveals that retail participation (RPP) does not increase in such cases. In fact, when we examine scenarios where institutional disagreement exists ($instDif > 0$) but is limited ($instDif < 0.2$), thus implying a close split among institutional investors which can potentially be decided by the retail voice, we find that RPP is actually lower than in more unified institutional settings. The left column of Table 8 below presents RPP and *instDif* (the right column is discussed below).

instDif	RPP			<i>retailMix</i>		
	Mean	Standard deviation	n	<i>Mean</i>	Standard deviation	n
0	0.000	0.000	2	0.682	0.000	2
0–0.2	0.149	0.179	112	0.765	0.349	95
0.2–0.4	0.199	0.214	143	0.750	0.365	126
0.4–0.6	0.214	0.229	190	0.733	0.359	167
0.6–0.8	0.165	0.171	285	0.693	0.382	256
0.8–0.999	0.172	0.210	992	0.807	0.337	862
1	0.148	0.207	1,863	0.810	0.343	1,471
Total	0.162	0.207	3,587 ⁶	0.791	0.348	2,979 ⁷

Table 8 - RPP and Retail Voting Mix by Institutional Differential (instDif)

There is no consistent evidence of a significant difference in public participation across varying levels of institutional disagreement (*instDif*). While ANOVA analysis indicates that RPP scores differs across *instDif* categories ($p = 0.000$), the overall explanatory power is minimal with an R-squared of just 0.8%. Moreover, a secondary analysis using pairwise mean comparisons with Bonferroni-adjusted p-values reveals that the only difference observed with high statistical significance is between unanimous institutional votes ($instDif = 1$) and the 0.4–0.6 disagreement range (contrast = -0.0657 , $p = 0.001$). This range reflects cases where the number of institutional votes in one direction was between twice to four times the number in the opposing direction (e.g., 70% against vs. 30% for, or 80% vs. 20%).

It is worth noting that two additional differences—both involving unanimous institutional votes—are also observed: between 1 and the 0.8–0.999 range (contrast = -0.0239 , $p = 0.067$), and between 1 and the 0.2–0.4 range (contrast = -0.0510 , $p = 0.091$). However, these differences are only marginally significant. All other pairwise comparisons—including, most notably, the comparison between 1 and the 0–0.2 range (contrast = -0.0005 , $p = 1.000$)—fail to reach statistical significance at conventional levels, reinforcing the limited practical impact of institutional disagreement on retail participation.

Regarding the qualitative contribution of retail investors in cases of institutional disagreement, the data presented on the right-hand side of Table 7 provide limited evidence that such disagreement meaningfully affects the voting behavior of retail shareholders, as

⁶ The sample includes observations in which institutional investors participated ($INST = 1$). Out of 4,161 total observations, 574 in which no institutional investors participated were omitted, resulting in 3,587 relevant observations.

⁷ The sample includes observations in which both institutional ($INST = 1$) and retail investors participated ($RRP > 0$). After excluding cases with errors in the reported number of shares voted for and/or against, the final dataset consists of 2,979 valid observations.

reflected in the proportion of retail votes cast “for” among all retail votes: *RetailMix*. The variable *retailMix* is defined as the proportion of retail votes cast in favor out of total retail votes cast ($retail_for / (retail_for + retail_against)$).

While the ANOVA analysis indicates that the mean *retailMix* differs significantly across levels of institutional disagreement (*instDif*) ($p = 0.006$), the model explains only a small fraction of the variance (R-squared = 0.63%). Pairwise comparisons with Bonferroni-adjusted p-values reveal that, out of 21 contrasts, only two differences reach statistical significance: retail shareholders are more likely to vote in favor when institutional votes are unanimous ($instDif = 1$) compared to moderate institutional disagreement in the 0.6–0.8 range (contrast = 0.0995, $p = 0.002$), and similarly more favorable in 0.8–0.999 range than the 0.6–0.8 range (contrast = 0.0901, $p = 0.014$). All other pairwise differences—including comparisons between unanimous institutional votes and high levels of disagreement (e.g., 0–0.2, 0.2–0.4)—fail to reach statistical significance. These findings suggest that while retail shareholders may align slightly more positively with institutional unanimity, the overall influence of institutional disagreement on the retail voting mix remains weak and inconsistent. As such, the results do not provide evidence of a meaningful qualitative contribution by retail investors in cases where institutional views diverge.

All-in-all findings run counter to the intuitive expectation that retail investors would respond strategically to institutional division. Instead, it suggests that retail investors either remain unaware of the institutional split or remain disengaged regardless, highlighting persistent passivity even when their voice could theoretically prove decisive.

4.3. Retail Investors’ Voting Power

As shown, retail investors’ participation is negatively associated with institutional investor participation. The relationship between realized retail voting power, and as such the absolute power of the public in voting, and institutional participation can be described by the following model:

$$AbsPerRetail_{ijt} = \beta_1 \cdot AbsPerIns_{ijt} + \alpha_i + \gamma_t + \varepsilon_{ijt}$$

In this specification, *AbsPerRetail* is defined as the number of shares voted by retail investors divided by the total shares voted in the assembly, thus capturing the realized voting power of retail investors in absolute terms. Similarly, *AbsPerIns* represents the absolute voting power of institutional investors, calculated as the proportion of institutional votes out of total votes cast. The model includes company fixed effects (α_i) and fiscal year fixed effects (γ_t).

Estimating this model using the study sample yields a coefficient on *AbsPerIns* of –1.048 ($p < 0.001$; standard errors are clustered at the assembly level to adjust for potential

intra-assembly correlation in the residuals), indicating that a one-percentage-point increase in the institutional share of votes is associated with a 1.048 percentage-point decrease in the retail share of votes. This negative relationship is both economically meaningful and statistically robust.

Based on these estimates (with the constant term estimated at 0.261, $p < 0.001$), when institutional investors account for approximately 12.75% of the total votes cast, their voting power equals that of retail investors.⁸ Beyond this baseline, retail participation becomes increasingly crowded out by institutional participation, such that institutional voting power prevails. This provides a statistically grounded threshold beyond which institutional dominance over public shareholders becomes evident.

4.4. Voting Inclinations: Institutional vs. Retail Investors

To assess the directional tendencies of retail and institutional shareholders, we construct two proportional measures: *RetailMIX* (mentioned above) and *InsMix*, defined analogously for institutional investors (*institutional_for* / (*institutional_for* + *institutional_against*)). These variables capture the extent to which each investor group tends to vote in support of proposals rather than against them.

The analysis reveals that both retail and institutional investors exhibit a general preference for voting in favor. However, institutional investors show a stronger inclination to support proposals. On average, institutional support stands at 83.2%, while retail support is slightly lower at 79.4%. A paired *t*-test comparing the two proportions across the same observations ($n = 3,055$) reveals a statistically significant mean difference of 3.79 percentage points ($t = 4.62$, $p < 0.001$), indicating that institutional investors are more consistently aligned in favor of management proposals than retail investors.

These results suggest that while both groups tend to favor approval, institutional investors are distinctly more supportive. This pattern aligns with the broader tendency of institutions to side with management, whereas retail investors—though generally cooperative—exhibit somewhat greater skepticism or selectivity in their support. Similar findings are reported by Brav et al. (2022), who show that retail shareholders in the dispersed U.S. market are less supportive of management proposals than their institutional counterparts (Brav et al., 2022:502).

⁸ To determine the point at which institutional and retail voting powers are equal, we solve the estimated regression equation under the condition that $\text{AbsPerRetail} = \text{AbsPerIns}$. Substituting into the model— $\text{AbsPerRetail} = -1.048 \times \text{AbsPerIns} + 0.261$ (based on the regression results from the study's sample)—and setting the left-hand side equal to AbsPerIns yields: $\text{AbsPerIns} = -1.048 \times \text{AbsPerIns} + 0.261$. Solving this equation gives $\text{AbsPerIns} \approx 0.1275$, indicating that parity in absolute voting power between institutional and retail investors is predicted to occur when institutional investors account for approximately 12.75% of the total votes cast.

4.5. Effect on Voting Outcome

Of the 4,161 votes included in the study, 3,954 resulted in the management proposal being accepted, while only 207 proposals were denied. Within this full sample, a distinct subgroup of 3,057⁹ votes involved assemblies in which both institutional and retail investors participated; of these, 2,910 proposals were approved and 147 were disapproved. This subsection focuses on this subgroup to test the influence of institutional investors and retail investors, as reflected in their respective effects on the vote outcome.

Although the relatively small number of rejections may introduce biases into the analysis, these outcomes remain meaningful and warrant discussion. Even with their limited frequency, rejections provide important variation that helps illuminate the dynamics between institutional and retail investors and the extent to which voting mechanisms influence final outcomes. In particular, the findings regarding the seemingly stronger effect of retail rejection on proposal outcomes—when compared to that of institutional investors—deserve careful consideration despite the constraints imposed by sample size.

We first define the variable *accepted* to equal 1 if the vote was accepted and 0 otherwise. The following table presents descriptive information about this variable for both the full sample and the subgroup:

Group	Obs	Mean	Std. Dev.	# Approved Votes	# Disapproved Votes
All assemblies	4,161	0.9503	0.2174	3,954	207
Assemblies with both retail and institutional participation	3,057	0.9519	0.2140	2,910	147

Table 9 - Descriptive Overview of Vote Acceptance (Accepted = 1)

We then examine the influence of public and institutional investors on voting outcomes. To do so, we estimate a series of models comparing the relative impact of retail and institutional support on the likelihood of proposal acceptance. Specifically, we analyze the relationship between the share of retail votes cast *in favor*—calculated as the number of retail shares voted in favor divided by the company’s total shares (denoted *perRetlFor*)—and the corresponding share for institutional investors (*perInstFor*). Similarly, we examine the share of retail votes cast *against* (*perRetlAgnst*) and institutional votes cast *against*

⁹ The full number of assemblies in which both institutional and retail investors participated is 3,120; however, in 63 observations, company disclosures contained errors or missing information that prevented determining the number of retail investors who voted for and against, as required for the analysis in this subsection.

(*perInstAgnst*), both defined as the number of respective shares voted against divided by the company's total shares.

We estimate three probit models under different specifications and incorporate two types of fixed effects. The first fixed-effects specification controls for company-level effects, capturing unobserved, time-invariant characteristics unique to each firm. The second specification applies assembly-level fixed effects, which account for both the specific characteristics of each company and the timing of the assembly, thereby controlling for temporal factors. The results of all nine models, including the marginal effects derived from the probit estimates,¹⁰ are presented in Table 10.

¹⁰ dy/dx , calculations are made at the observational level and are then averaged.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
perInstFor Coef.	6.10***		6.61***	23.96***		12.87***	61.14***		37.06***
perInstFor Marg. Ef.	0.527***		0.365***	0.783***		0.359***	0.473***		0.358***
perRetlFor Coef.	1.17**		1.40**	1.40		1.58	8.01**		6.64*
perRetlFor Marg. Ef.	0.101**		0.077**	0.046		0.044	0.062**		0.064*
perInstAgnt Coef.		-9.93***	-11.19***		-30.29***	-23.61***		-73.98***	-69.72***
perInstAgnt Marg. Ef.		-0.654***	-0.617***		-0.773***	-0.659***		-0.983***	-0.673***
perRetlAgnt Coef.		-16.66***	-15.55***		-41.01***	-30.88***		-97.83***	-83.02***
perRetlAgnt Marg. Ef.		-1.098***	-0.858***		-1.047***	-0.861***		-1.300***	-0.801***
Log Likelihood	-495.27	-391.82	-320.87	-370.39	-289.94	-248.14	-356.72	-273.33	-226.10
Pseudo R ²	0.160	0.335	0.456	0.452	0.571	0.633	0.469	0.593	0.663
N	3057	3057	3057	3057	3057	3057	3057	3057	3057
Fixed effect				company level	company level	company level	assembly level	assembly level	assembly level

***p < 0.001, **p < 0.01, *p < 0.05

Table 10 - Probit Models Estimating the Impact of Retail and Institutional Votes on Proposal Acceptance

The probit regression models presented in table 10 assess how variations in retail and institutional investor support influence the likelihood that a proposal is accepted. To interpret the practical importance of these effects, dy/dx marginal effects are calculated, indicating how a one-unit change in a given variable translates into a change in the predicted probability of proposal approval.

On approvals, institutional support matters the most: across all model specifications, the share of institutional votes cast in favor ($perInstFor$) consistently shows a strong and statistically significant positive association with proposal approval. For example, in Model (1), the marginal effect for $perInstFor$ is 0.527. This implies that a one-percentage-point increase in institutional support (i.e., the share of votes cast in favor by institutions, calculated as the number of institutional shares voted in favor divided by the company's total shares) raises the probability of proposal acceptance by approximately 53 percentage points—a substantial effect. Conversely, the effect of retail support is much weaker. In the same Model (1), the marginal effect for $perRetlFor$ is only 0.101.

On rejections, retail opposition becomes more significant: across all model specifications, the share of retail votes cast against ($perRetlAgnst$) consistently shows a strong and statistically significant association with proposal rejection, often stronger than that of institutions. For example, in Model (2), the marginal effect of $perRetlAgnst$ is -1.098, while that of $perInstAgnst$ is “only” -0.654.

5. Discussion

Grounded in the rational-choice framework of Riker and Ordeshook (1968), this study expected retail shareholder participation to be systematically high in the setting examined. Under this model, the utility from voting depends on the expected benefit of casting a decisive vote ($B \times P$), the cost of voting (C), and the intrinsic or strategic benefit from participation itself (D). In concentrated ownership environments that empower minority shareholders—particularly through majority-of-the-minority rules—the probability of being pivotal (P) is relatively high, even for small holders, making the expected benefit of voting meaningful. At the same time, regulatory reforms such as the introduction of online voting mechanisms were designed to reduce the costs (C) that typically deter retail investors, thereby removing a key barrier to engagement. Moreover, agency-cost theory suggests that empowering shareholders to exercise control directly should encourage participation, as voting becomes a primary tool for monitoring management and limiting opportunistic behavior by controlling shareholders. Finally, the intrinsic or strategic benefit of voting (D) was expected to be especially salient in this environment: retail shareholders may gain satisfaction from exercising voice, or even material benefits in cases where controlling shareholders lobby for their support or reward participation. Taken together, these factors created strong theoretical reasons to expect consistently high rates of retail turnout, particularly in contexts where both institutional arrangements (majority-of-the-

minority requirements, online voting) and proposal content (transactions involving potential private benefits) increased the expected value of participation.

The findings, however, suggest otherwise. Before evaluating this outcome, it is necessary to clarify what is meant by “high participation.” For instance, is a rate of 9%—that is, 9 out of every 100 shares held by the public being voted—a high or low level of participation? This article adopts the view that the magnitude of retail participation must be assessed through a power-based lens: if decisions for 100 shares are determined by only 9, participation is low; when participation rises substantially, approaching 50, it can be considered meaningful or robust.

Viewed through this prism, the findings clearly indicate that retail participation is low. Across the dataset, the average retail turnout is about 18% of public shares, with median participation at only 9–10%. While a small minority of cases reach much higher levels—around 50% at the 90th percentile and over 70% at the 95th percentile—these remain exceptional cases. For the vast majority of assemblies, retail participation is far below the threshold that could be considered meaningful in terms of shareholder power.

However, these findings in themselves do not necessarily indicate a problem. One possible interpretation is that retail investors choose to conserve their limited time and attention, becoming actively engaged only when issues of real significance are on the agenda. From this perspective, low turnout in routine or procedural matters may simply reflect a rational allocation of effort, whereby shareholders reserve their energy for decisions that they perceive as having greater financial or governance consequences (see e.g., Goshen & Squire, 2017).

That may be true, but such an explanation raises an important question about the justification for the regulatory reforms designed to increase retail participation. If retail investors already act rationally—participating only when it matters—then there is little need to expend regulatory resources on reforming the system or creating costly mechanisms to incentivize broader participation. In that case, low overall turnout would not necessarily be problematic but would rather reflect efficient behavior (Goshen & Squire, 2017).

A second difficulty with this interpretation, however, is that it is not borne out by the evidence. If retail investors were in fact selectively engaged, we would expect participation levels to vary systematically across different types of proposals: higher turnout in matters of substantive importance or in situations where intervention is needed in the face of institutional disagreement (further discussed below), and lower turnout in routine issues. Yet the data show otherwise: retail participation remains consistently low across subjects, with no clear pattern linking turnout to the importance of the decision at stake. This suggests that the low level of engagement is structural rather than strategic.

One possible explanation for the uniformly low levels of retail participation—even in the presence of a potential benefit from casting a decisive vote ($B \times P$), reduced voting costs (C), and the intrinsic or strategic benefit of participation itself (D)—is that retail investors place trust in institutional investors to do the “hard work” for them. Institutions are obliged to participate and vote, and retail investors may therefore rely on them to safeguard minority interests. At the same time, this reliance, combined with regulatory mechanisms designed to empower minority voting, may in practice further amplify the power and influence of institutional investors.

More so, another alternative explanation for the low level of participation, suggested in the literature (Hauser et al., 1999), is that institutional investors pre-negotiate the expected outcomes before the assembly, making the vote essentially predetermined. In this setting, retail investors may perceive no need to participate, as monitoring is already carried out by institutions during the pre-assembly negotiations. If this is the case, as mentioned above, one would expect retail investors to step in when disagreements arise among institutional investors. However, when retail participation is examined across scenarios of institutional agreement and disagreement ($0.2 > \text{instDif} > 0$), the data show that retail participation (RPP) does not increase.

The findings demonstrate a systematic connection between public participation and that of institutional investors. Across different settings, increased institutional participation is accompanied by reduced participation from retail investors. As a result, regulatory instruments intended to empower minority shareholders are effectively utilized only by institutions. The institutional voice, already strong and dominant, becomes even more so.

At the same time, this article does not address the broader question of whether institutional dominance is good or bad; rather, in this context, it examined the relationship between institutional and retail participation and whether a systematic influence exists between the two. Thus, sheds light on the effect of empowering minority shareholders through majority-of-the-minority rules, showing that such mechanisms ultimately strengthen the institutional vote, while retail participation remains low.

6. Conclusion

This article has assessed how minority-empowerment mechanisms—principally majority-of-the-minority rules alongside remote (online) voting—operate in practice within a concentrated-ownership market. Using detailed vote-level data, we document a persistent pattern: retail participation is generally low, does not systematically rise with proposal salience, and tends to recede where institutional investors are active. At the same time, institutional votes are strongly associated with outcomes. In effect, the regulatory design that amplifies the minority voice largely amplifies the institutional minority voice.

A critical limitation frames these findings. Our analysis does not measure retail participation in settings without minority-empowerment rules, nor does it provide a before-and-after comparison around the introduction of such reforms. The study is descriptive of the current regime only. Accordingly, we do not claim that these reforms reduced retail participation. Rather, we show that within a regime intended to empower minorities, realized public (retail) participation is low, while the decisive minority voice is typically institutional. This mismatch between regulatory intent and on-the-ground operation is the source of concern.

Two implications follow. First, legitimacy risks: if “empowered minority” effectively means “institutional minority,” retail inclusion may be more procedural than substantive. Second, design risks: empowerment rules may unintentionally entrench institutional primacy, especially where retail investors defer to, or are crowded out by, institutional actors.

These results call for careful recalibration, not abandonment, of minority-protection architecture. Potential directions—each warranting separate evaluation—include: (i) disclosure and outreach measures that specifically target retail comprehension and participation; (ii) design tweaks that ensure retail salience within minority counts (e.g., minimum retail-quorum components, retail-only tallies for certain conflicted items); and (iii) better monitoring of how online voting and meeting formats affect retail engagement dynamics. Future research (He et al., 2025) should test these ideas and, crucially, compare participation and outcomes across jurisdictions and time—both with and without empowerment rules—to isolate causal effects.

Within the limits of its scope, the article’s central takeaway is straightforward: under today’s empowerment regime, the minority voice that shapes outcomes is predominantly institutional. Whether this reality is normatively acceptable depends on one’s theory of shareholder representation; what is clear is that the promise of retail empowerment remains largely unfulfilled.

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