רשות ניירות ערך
Israel Securities Authority
سلطة الأوراق المالية

July 2023

ONLINE VOTING SYSTEM IN ISRAEL AND PARTICIPATION OF NON-INSTITUTIONAL INVESTORS

Dr. Israel Klein, Ariel University
Israel Securities Authority

TABLE OF CONTENTS

Graphic Design: Yael Shaulski

CHAPTER A

EXECUTIVE SUMMARY

The aim of this study is to examine the participation rate of public investors – i.e., investors who do not hold a controlling interest, who do not have any personal interests in concrete decisions and who are not institutional bodies – in the votes of Israeli public companies, particularly in the period following the introduction of the Capital-Vote system (2015) compared to previous periods.

The database used in the study consists of data from 1,022 votes from 50 companies between 2013 and 2020. Voting data was obtained from (public) T49 form reports. These reports include the results of meetings, including detailed information about the participation of voters who are "holders of securities and stakeholders, holders of senior positions, institutional bodies or fund managers." This information allowed us to derive the number of voters among the public.

The study found that the average participation rate of the public during the examined period ranged between 10.62% (in 2013) and 5.26% (in 2019). No significant difference was found in the participation rate between years nor compared to the period before the introduction of the Capital-Vote system. There may be a variety of reasons for this: from indifference among public investors who are not interested or don't believe in their ability to influence corporate decisions to the inaccessibility of the system or their lack of awareness of its existence.

It should be noted that the potential benefit of an online voting system lies not only in increasing the participation of non-institutional investors but also in possible reduced costs to public investors who wish to vote (even if such investors voted without the system in place), reduced costs to institutional investors who are required to participate in many meetings, reduced costs to companies that receive voting results in a clear and structured way and reduced risk of voting errors (such as ownership identification).

In addition, the study found a correlation between the industry in which a company is active and the influence of the Capital-Vote system. In the financial, trade and service industries, on the one hand, the system correlated positively with public participation; in the high-tech and bio-tech industries, on the other hand, the system correlated negatively with public participation.

CHAPTER B

INTRODUCTION

The participation of shareholders in general meetings is an essential component of successful and efficient corporate governance (Easterbrook & Fischel, 1983; Pound, 1991). Among other things, shareholder voting is one of the tools that allow shareholders to influence the management of a company. Regulation requirements for shareholder approval in various corporate issues, such as director appointments, reduces agency costs and improves the responsibility of directors (Fisch, 2017). However, without the proper participation of shareholders, voting becomes inefficient and assembling a quorum may become difficult for decisions that require the participation of a minimum number of existing shareholders (Hirst, 2017: 101).

Although participation by institutional investors may satisfy the participation requirements for a management audit or a quorum, researchers in the area of corporate law have raised several concerns related to the voting of institutional investors (for example, Larcker et al., 2015; Bebchuk et al., 2017; Posner, 2017; Morton & Hovenkamp, 2018; Bebchuk & Hirst, 2019; Coates, 2018; Fisch et al., 2019; Rock & Kahan, 2018; Cucari et al., 2020). In short, because of their extensive portfolio, when voting, institutional entities that professionally manage the funds of other investors ("planholders") may have conflicts of interest that could result in agency costs, similar to the costs between managers and shareholders.

Accordingly, regulators around the world (ESMA, 2020; SEC, 2019; SEC, 2015; ISA, 2015), including the Israel Securities Authority (ISA) and the US Securities and Exchange Commission (SEC), as well as various researchers (for example, Brav et al., 2019; Fisch et al., 2019; Kastiel & Nili, 2016; Solomon, 2016), have started to focus on non-institutional participation, i.e., public investors , in seeking better corporate governance.

While common opinion is that public shareholders are characterized by "rational indifference" – lack of sufficient incentives to justify the time and cost involved in monitoring companies and informed voting, current empirical studies indicate that the votes of public investors influence the behavior of companies and boards of directors (Lee & Southern, 2020). For example, a large sample of ownership and voting records in the USA found that, in spite of limited participation by public shareholders compared to other shareholders (i.e., institutional investors who are usually required to vote), public shareholders tended to vote when "monitoring is most needed, and their votes are informed by firm circumstances" (Brav et al., 2022). The study concluded that public investors "can provide significant feedback to companies during the voting process" (Brav et al., 2022:521).

While the participation of shareholders is beneficial to companies operating in all markets (Stulz, 1988; Pound, 1991; Easterbrook & Fischel, 1983), it is particularly essential to the success of regulation in capital markets characterized by concentrated ownership (a Porta et al., 1998).

The rules protecting investors in such markets tend to include rules that use the voting of non-controlling shareholders (shareholders with no personal interest in the decision) to protect the rights of minority shareholders. For example, requiring that every transaction where a controlling person has a vested interest be (also) approved by a majority of disinterested shareholders (the minority). For these regulations to be effective, the participation of shareholders is essential, especially institutional shareholders and public shareholders.

So, for example, in the fifth chapter of the sixth part of the Companies Law, 1999, dealing with the approval of transactions with interested parties, the approval of a transaction between a public company and a holder of a controlling interest is conditioned on a majority among the minority shareholders participating in the vote, or alternatively, the rate of objection is required to be lower than two percent.

In this spirit, the ISA introduced the Capital-Vote system in 2015 – an online voting system operated by the Authority that allows the shareholders of companies traded on the Tel Aviv stock exchange to vote online. Before the introduction of the system, shareholders who wished to vote in meetings had to provide proof of holding shares in the company and had to physically attend the meetings (in person or through a representative) or send a voting statement to the offices of the company prior to the meeting. Such barriers deterred public shareholders from voting. The Capital-Vote system eliminates these barriers to participation, as now shareholders only require a password to log into the system, and they can use the system to participate in the votes of any company of which they hold securities.

While studies of shareholder participation in markets characterized by distributed ownership document the increasing effectiveness of public shareholder voting as a monitoring mechanism, the effectiveness of such participation in markets characterized by concentrated ownership – even when online voting is available – is far from trivial. Investors in companies with distributed ownership have to vote in order to monitor management and make sure that the companies are properly managed by suitable directors. Conversely, when a company has a holder of a controlling interest, voting by other investors is not necessary in order to control the activity of managers, but to protect minority shareholders (from abuse by the holder of a controlling interest). The limited role of voting in concentrated environments may be the reason that making voting accessible is not enough to incentivize public shareholders to participate (they may be content with the current financial results of the company and the returns from their shares).

In addition, endogenous characteristics of controlled companies and the influence of the holder of a controlling interest on management may create a negative incentive for public participation in votes. Studies indicate that a company's ownership structure affects the

tendency of shareholders to participate in voting. Processing the protocols of the general annual meetings of public companies traded in Belgium, France, Germany, the Netherlands and the UK, showed that voting rates differ greatly under different ownership structures:various types of shareholders reveal different voting patterns depending on ownership concentration and ownership structure (Van der Elst, 2011). Furthermore, studies show that the access of shareholders to information related to the subject of votes and available voting methods – two components indirectly controlled by the holder of controlling interest in concentrated markets – influence the participation rate of public shareholders (Lee & Southern, 2020), and that managements (and, indirectly, also holders of controlling interest) sometimes attempt to manipulate the results of votes by means such as postponing meetings and selective campaigning (Babenko et al, 2019).

Furthermore, the way that voting is made accessible can also affect participation: online voting reduces costs for participants; however, investors need to be informed about meetings and their ability to vote online, and also to obtain login permissions (access codes). In principle, informing investors and providing access codes can be done by both the company holding the meeting through a mediating agent such as the member of the stock exchange through which shares are held, who also holds its investors' contact information, or the voting system directly (provided that it has investor contact information, for example due to early registration of investors with the system).

In some sense, the Capital-Vote system was created based on informing investors through a mediator – a member of the stock exchange notifies shareholders about a meeting and provides them with an access code to vote in the specific meeting using the system. At the same time, "starting in 2017, voting is possible using a mobile phone. In addition, logging into the system is also possible using a smart ID. In this case, there is no need to obtain an access code from the member of the stock exchange. Starting in 2020, it is possible to register to the "personal vote" application. This application lets users set rules for receiving notifications regarding meetings, updates and the opening and closing of voting ballots".[1]

By informing shareholders through a mediator or directly through the voting system, the Capital-Vote system eliminates the ability of companies (and, indirectly, of holders of controlling interests) to influence the information of investors and their online participation (for example, by delaying the delivery of access codes; see also, Lee & Southern, 2020). However, this system design requires investors to be active in registering to the application or accessing the system

1 https://www.isa.gov.il/ABOUT/OrganizationalStructure/About_/About%20voting%20system/Pages/default.aspx

using a smart ID (including a device to link their identity card to their personal computer), or for the mediator to be active in informing investors. Both requirements are not necessarily satisfied. Accordingly, it is possible that eliminating the influence of companies and holders of a controlling interest over investor notifications in concentrated markets has a negative effect on informing investors about the option to vote online.

It should be noted that the potential benefit of an online voting system lies not only in increasing the participation of non-institutional investors but also in possible reduced costs to public investors who wish to vote (even if such investors also voted without the system in place), reduced costs to institutional investors who are required to participate in many meetings, reduced costs to companies that receive voting results in a clear and structured way, and reduced risk of voting errors (such as ownership identification).

Studies of voting patterns in concentrated markets have focused mostly on institutional investors (for example, Dressler, 2020; Hamdani & Yafeh, 2013). Public investors, although different (Varotil, 2020), have attracted little attention in research, providing, as specified below, no conclusive indication regarding participation rates and the effect of online voting on participation rates. This study aims to contribute to the knowledge regarding such participation and effect.

CHAPTER C

SURVEY OF PREVIOUS STUDIES

Previous studies of the effect of online voting on shareholder participation show mixed results. The current "research map" strongly indicates that public shareholders have great potential to assert control over companies without depending on corporate governance provisions to empower them beyond the barrier of "rational indifference". At the same time, there is some indication that companies and holders of a controlling interest manipulate participation in order to benefit themselves.

Among the first studies to examine the effect of online voting on the participation of public shareholders and how companies operate was the study by Ergincan & Karaağaçli (2015), that looked at Turkey after the introduction of an online voting platform (e-GEM). The study reported an increase of 146% in the total number of participants in general meetings after the introduction of e-GEM (ibid, p. 110). Accordingly, the researchers argued that "a dramatic change in the participation of shareholders in such a short time justifies the regulatory reforms aimed at increasing the level of democracy among shareholders in Turkey by establishing a legal framework for the e-GEM electronic platform".

However, the researchers also reported that, while the participation of institutional investors (mostly foreign) increased by 342%, the participation of private investors decreased by 45% between 2011 and 2014 (ibid, p. 112). Furthermore, when participation was analyzed by capital share, the results were mixed: in one of the years examined there was a net increase in participation, while in another there was a decrease (ibid).

Another study worthy of mention is the study by Gao et al. (2020). This study showed that online annual meetings of shareholders can significantly increase shareholder participation, especially minority shareholders (defined in this study as "shareholders with less than 5% ownership in the company"). The study used data from all companies registered on the Shanghai and Shenzhen stock exchanges between 2005 and 2017 to examine the difference in shareholder participation between companies that implemented online annual general meetings (AMGs) and companies that did not. However, the main results of this study may have been influenced by selection bias in the research group. To address this concern, the writers further examined the change that occurred in 2014 in the policies of the Shanghai and Shenzhen stock exchanges which required all companies to implement online meetings. Based on a difference-in-differences (DiD) analysis that includes companies that elected to

implement online meetings only in 2014, the study reports a slight (but statistically significant) increase in the participation of shareholders in meetings.

Abdennadher & Cheffi (2020), conducted a qualitative study of how online systems for shareholder voting are used by French companies. They reported that French corporations' adoption of online voting mechanisms was concurrent with opportunistic behavior of managers in these companies. Among other things, the writers argued that the adoption of online voting was done for rhetorical inducement and not to increase shareholder involvement. In addition, online voting was used by managers to attempt to manipulate- turning the new tool into a means for controlling the power of shareholders.

Fent et al. (2021), examined the relation between online voting by minority shareholders and the corporate social responsibility (CSR) of public companies. Their study, like the study by Gao et al. (2019), was based on the change that took place in 2014 in the Shenzhen stock exchange and a DiD analysis to examine the CSR score of companies before and after the implementation of online voting. The study found that online voting by minority shareholders had a significant positive effect on the social responsibility of companies.

However, the study assumed that the implementation of online voting influenced shareholder participation. This means that, if online voting does not affect participation rate, then the findings of the study, indicating an increased social correlation with the introduction of online voting, do not reflect increased monitoring by minority shareholders. It should be mentioned that, when Feng et al. (2021) conducted robust tests, they estimated the levels of minority shareholders participation by comparing the number of shareholders who actually participated in meetings and the number of shareholders who participated online. However, such exclusive use of online voting particularly by minority shareholders (and not institutional investors, for example) is far from trivial.

Klein (2023)[2] examined the effect of the Capital-Vote system on the participation of public shareholders by comparing participation in four years – two years before the introduction of the system and two years after its introduction (2013,2014,2017,2019). The findings of this study regarding public voter participation were not conclusive. The comparison of only a few years showed a non-significant increase. The comparison of all observations indicated a small statistically significant increase.

Another interesting finding indicated by Klein (2023) is the relation between high public participation rates in votes and the subject matter of these votes. The study found that during the period of online voting, but not prior to it, there was a positive correlation between a high

2 "Institutional analysis of shareholders' meeting in the age of online voting", I. Klein, Regulation Research (due to be published in 2023).

rate of public participation and voting in support of the subject matter. It argued that this finding supported the use of online voting as an additional tool by holders of a controlling interest to enlist supporting votes (in agreement with Abdennadher & Cheffi (2020) and the finding of Lee & Southern (2020) (see below)).

Two additional relevant studies, although not directly related to the use of shareholder voting in online systems, are the studies of Brav et al. (2022) and Lee & Southern (2020). Brav et al. (2022) used a unique database that included the way public shareholders voted as reflected in the systems of an investment manager. For the purpose of their study, the writers were given access to the systems of Broadridge Financial Solutions. The main findings of the study indicated that public shareholders participated in voting even in cases where they could not influence the decision, because of the benefit of voting itself:

"Even shareholders with a negligible likelihood of affecting the outcome have non-zero turnout, consistent with consumption benefits from voting".

This kind of participation undermines the classical idea about the "rational indifference" of public investors and indicates that public voting power (separately from institutional investors) is used to supervise companies and creates "controlling communication" with managers.

A study by Lee & Southern (2020) examined the relation between how materials related to a vote are provided to shareholders (proxy materials) and participation. The study was conducted in a regulatory environment that allowed companies to choose how proxy materials were distributed and it showed that the method of distribution affects the rate of participation among public shareholders (a full distribution of printed materials encourages participation, as compared with referring shareholders to online materials). The study found that managers also tended to prefer the full distribution of printed materials when disputed items were on the agenda and required additional support in votes. Indeed, the resulting support increases the likelihood that the results of a vote would match the recommendations of management.

CHAPTER D

DESCRIPTION OF THE STUDY

To examine the participation of the public in voting using the online system comparatively over the years, including in periods when physical participation in meetings was difficult due to the COVID-19 pandemic, we designed the study to measure the rate of participation of public voters among a set group of companies ("the Sample Companies") over eight years, between 2013 and 2020 ("the Sample Period").

Public participation was measured in meetings that required a special majority to approve a decision. A special majority, in this study, means a majority of shareholders who have no vested interest in the decision that is required to approve the decision. So, for example, section 275 of the Companies Law, 1999 ("the Companies Law"), specifies that "(a) A transaction to which the provisions of section 270(4) apply shall require the approval of (...) the general assembly, provided that one of the following conditions is met: (a) the majority votes in the general meeting shall include a majority of the shareholders who do not have a vested interest in the approval of the transaction and participate in the vote; the votes of such shareholders shall not include abstentions; (b) the total number of opposing votes among the shareholders aforementioned in sub-section (a) shall not be greater than two percent of the total voting rights in the company".

In meetings where special majority is required (as aforementioned, when holding a voting on an issue "that requires ascertaining whether a voter has a personal interest or examining another characteristic of a voter"[3]), the Securities Regulations specify that a company is required to report the results of meetings, specifying "how holders of securities who are interested parties, holders of senior positions, institutional bodies or fund managers voted".[4]

Companies report the results using Form T49. Accordingly, the study focused on these reports. Analyzing the reports, we learned that during the Sample Period, the Sample Companies held 543 meetings in which 1,122 votes took place, as reported in T49 forms (the "Sample Voting").

The list of Sample Companies and the years in which each company held (at least) one relevant meeting that it reported in a T49 form, as aforementioned, is provided in appendix 1.

3 Securities Regulations (Periodic and Immediate Reports), 1970, regulation 36d(b).

4 Ibid, regulation 36d(c).

CHAPTER E

METHODOLOGY

Data from 2018 was used to construct the sample of companies: out of 339 companies that conducted shareholder meetings in 2018, 50 companies were sampled. All the meeting reports (T49) of the Sample Companies for 2013 – 2020 (Excluding 2015, the year the system was introduced) were analyzed. All the aforementioned meetings provided 1,022 relevant meetings (observations).

In analyzing the reports, the detailed information regarding each report was used to calculate the number of voting public shares. This calculation was made by summing the number of shares voting on behalf of interested investors (including holders of controlling interest, holders of more than five percent and others specified in the report as having a vested interest in the decision), x; summing the number of shares voting on behalf of institutional investors, y; and deducting both sums (x + y) from the total shares reported to have participated in the vote.

To assign the shares voting on behalf of the public a relative value, the sum was divided by the total number of shares issued by the company prior to the date of the meeting, minus the shares voting on behalf of interested parties and institutional investors. The result was a parameter that represented the rate of public participation out of the total potential participation in any concrete vote – the non-Institutional investors (Retail) Rate of Participation (RRP).

Other major parameters used in the study were the year of the vote (Year) – whether the vote took place before the introduction of the online system (2013 and 2014) or after it (2016 – 2020); the subject of the vote (Subject); and the industry in which the company operated (Industry).

In addition, to deal with endogenous variance between companies (some companies have no participation while other have high participation), another parameter was calculated – RRP centered – a normalized transformation of the RRP. The RRP centered of each company was calculated as the distance of the RRP from the average of the company. Accordingly, the total RRP centered of a company's votes was compared to zero. This analysis was used to overcome the endogenous variance between companies.

The analyses were conducted under the assumption that different votes are co-dependent at the meeting level – when a vote was held in a meeting, chances increase that voters would also participate in other votes at the same meeting.

CHAPTER F

FINDINGS

Retail Rate of Participation – RRP

As aforementioned, RRP represents the percentage of public shares out of the total potential public voting in a concrete vote.

RRP by year

An examination of RRP for the eight years investigated shows the average rate of participation that ranges between a maximum of 10.62% (2013) and a minimum of 5.26% (2019).

The following chart and table describe the full participation data by year:

Chart 1 – Average rate of participation by year

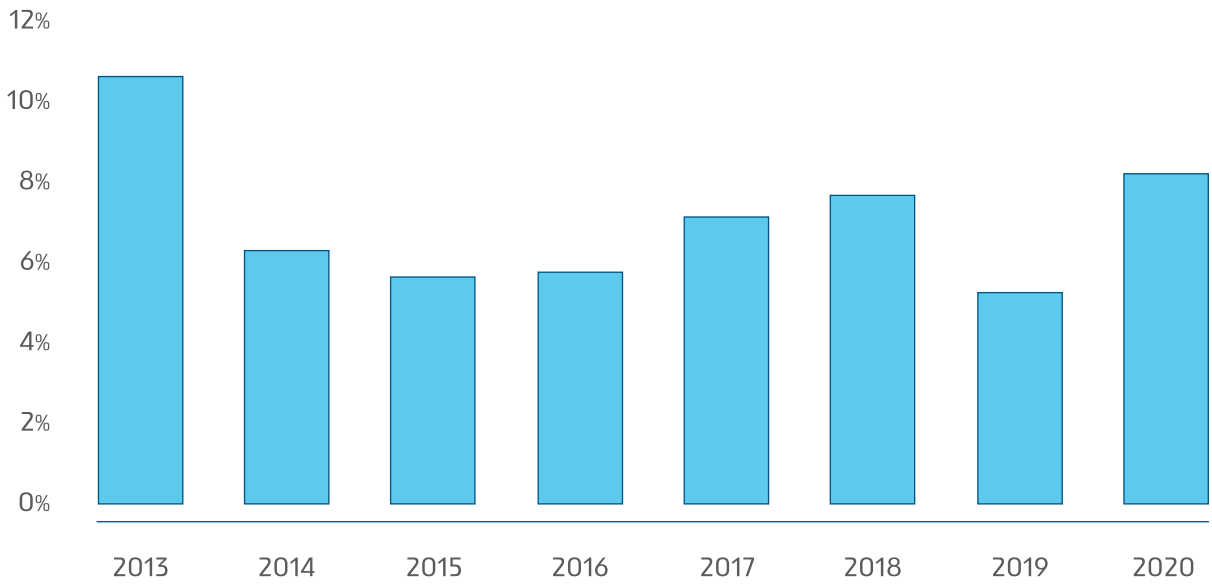

Table 1 – Rate of participation by year

Year	Mean	Std. Dev.	Observations
2013	10.62%	17.41%	136
2014	6.31%	10.12%	156
2015	5.64%	10.64%	140
2016	5.75%	13.77%	118
2017	7.14%	9.79%	125
2018	7.66%	13.05%	148
2019	5.26%	11.59%	159
2020	8.20%	11.77%	140
Total	**7.05%**		

RRP by subject

An examination of RRP by vote subject shows the average rate of participation that ranges between a maximum of 22.24% (approving the appointment of a chairperson who is a relative of the CEO) and a minimum of 4.96% (approving double directorship of chairperson and CEO). However, as specified below, the sample showed no significant relation between the subject of a vote and public participation in it.

The following chart and table describe the participation data by subject:

Chart 2 – Average participation rate by subject

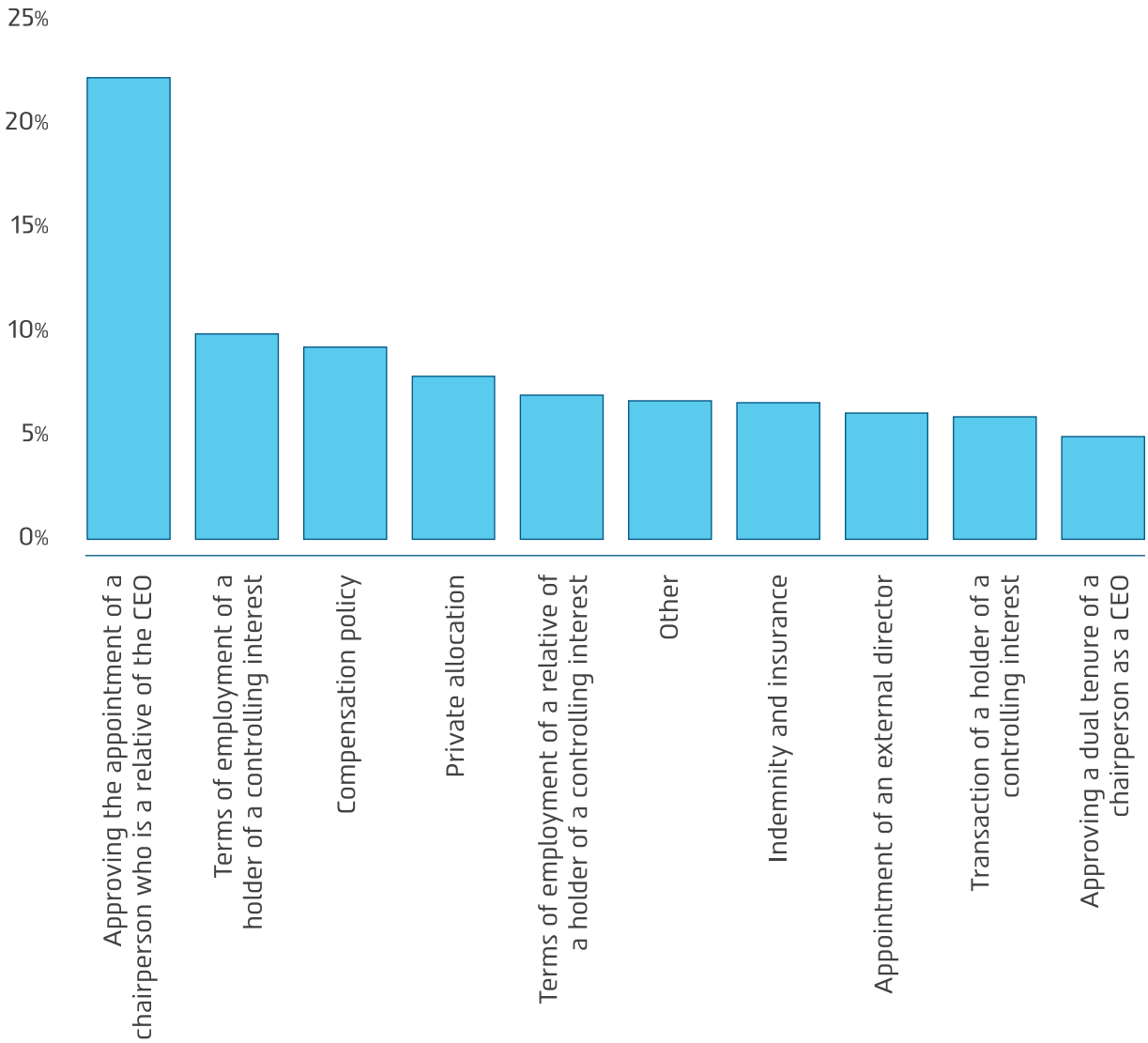

Table 2 – Rate of participation by subject

Subject	Mean	Std. Dev.	Obs
Approving the appointment of a chairperson who is a relative of the CEO	22.24%	18.60%	7
Terms of employment of a holder of a controlling interest	9.87%	14.69%	129
Compensation policy	9.25%	13.76%	26
Private allocation	7.83%	15.34%	36
Terms of employment of a relative of a holder of a controlling interest	6.96%	9.95%	67
Other	6.65%	11.00%	392
Indemnity and insurance	6.56%	12.25%	165
Appointment of an external director	6.06%	13.55%	272
Transaction of a holder of a controlling interest	5.90%	5.61%	11
Approving a dual tenure of a chairperson as a CEO	4.96%	7.04%	17

RRP by period

The data regarding the participation rate of the public in votes may also be divided into the period prior to the introduction of the online voting system (2013 and 2014) and the period afterwards (2016 – 2020). The following chart and table describe the participation data by period:

Chart 3 – Average participation rate by period

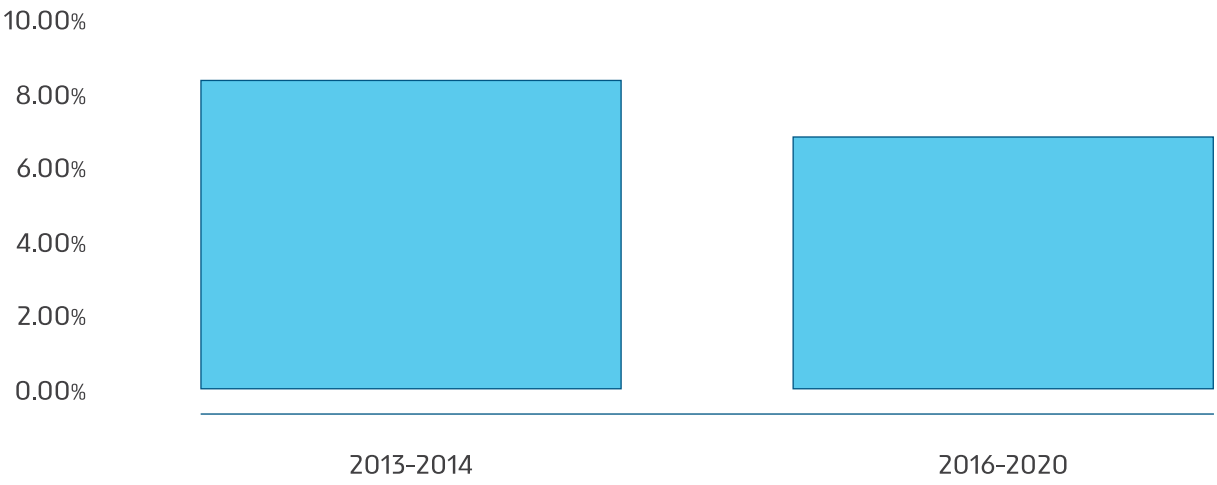

Table 3 – Participation rate by period

Period	Mean	Std. Dev.	Obs.
2013-2014	8.32%	14.14%	292
2016-2020	6.79%	12.08%	690
Total	**7.25%**		**982**

Observations from 2015 (the year of the system's introduction) were omitted.

RRP by industry

An examination of RRP by vote industry shows the average rate of participation that ranges between a maximum of 10.06% (the real-estate and construction industry) and a minimum of 0.2% (the banking industry). However, as specified below, the sample showed a significant relation only between concrete industries and the possibility of online voting.

The following chart and table describe the participation data by industry in accordance with the operations of the company holding the vote, regardless of the year or period:

Chart 4 – Average rate of participation by industry of the company holding the meeting

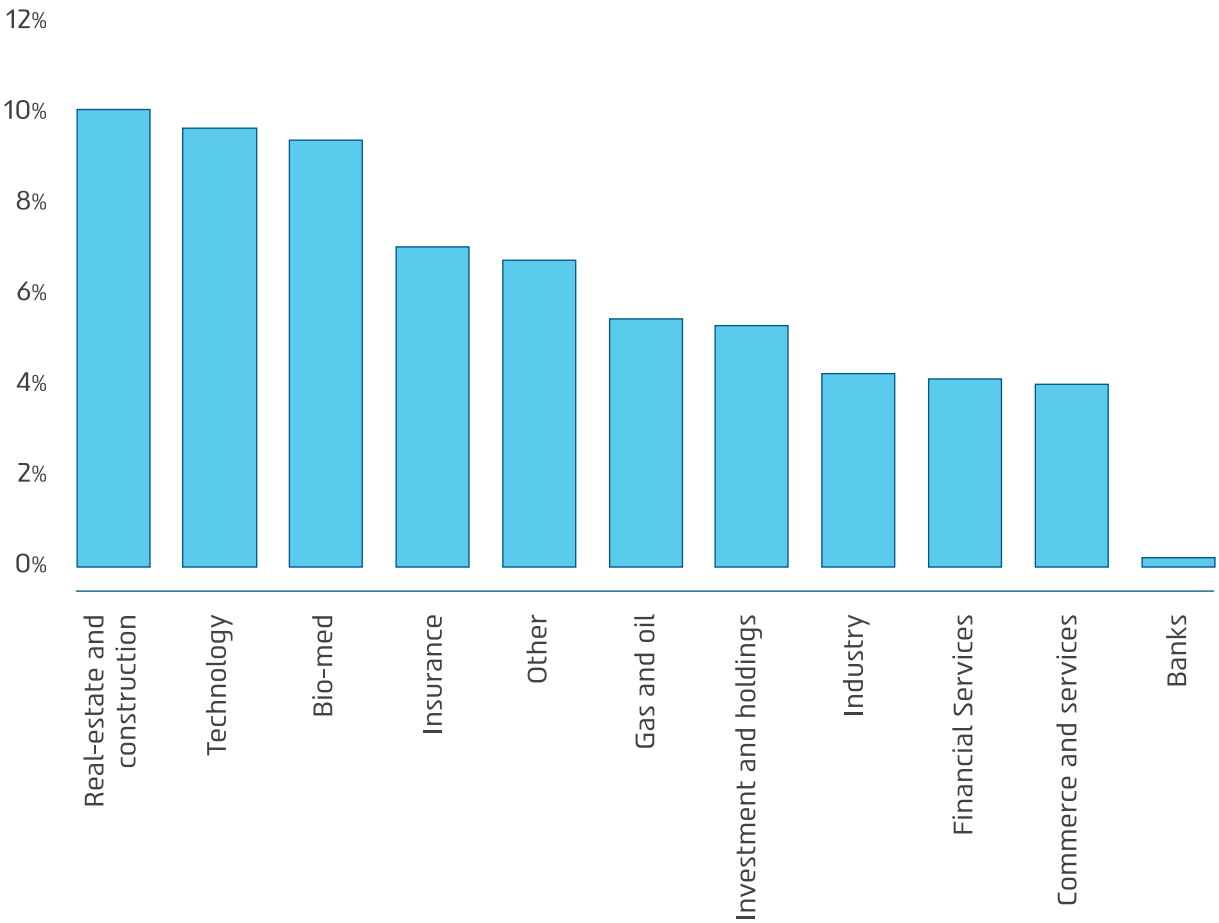

Table 4 – Rate of participation by industry of the company holding the meeting

Observations	Mean	Std. Dev.	Industry
Real-estate and construction	10.06%	15.37%	280
Technology	9.65%	13.77%	120
Bio-med	9.39%	11.79%	150
Insurance	7.05%	8.12%	31
Other	6.75%	10.94%	7
Gas and oil	5.46%	10.56%	82
Investment and holdings	5.32%	12.40%	87
Industry	4.26%	9.11%	64
Financial Services	4.12%	8.38%	24
Commerce and services	4.01%	10.13%	252
Banks	0.20%	0.53%	25

Analysis of the level of public participation in votes

The rate of public participation in votes was compared between two periods: 2013 and 2014 (prior to the introduction of the Capital-Vote system) and 2016 – 2020 (after the introduction of the system).

First, we examined the change in public participation using a mixed analysis of variance model (Mixed ANOVA). This model included the centered values of RRP (RRP centered) as a dependent variable and the following independent variables: Period (2013 and 2014 compared to 2016 – 2020); Industry; Subject;[5] company size in terms of average market value; and interactions between the time variable and the three other variables (Industry, Subject and Market Value).

The table below shows the results of the statistical test (F) for each of the factors of the models (N=917).

Table 5 – Results of the statistical test (F) in a mixed analysis of variance model

Variable	Statistical test (F)	Degrees of freedom	P value
Time (2013-2014 compared to 2016-2020)	2.13	1,860	0.1449
Company's industry	1.31	5,860	0.2559
Vote subject	2.08	3,860	0.1016
Company market value	0	1,860	0.9922
Interaction: Period x Industry	9.21	5,860	<.0001
Interaction: Period x Subject	2.32	3,860	0.0744
Interaction: Period x Value	0.78	1,860	0.3776

5 In the preliminary analysis, the Subjects of votes were defined by four main subject categories: (1) transactions of holders of controlling interest, wages and tenures of holders of controlling interest, and wages and tenures of relatives of holders of controlling interest; (2) Approving a dual tenure of a chairperson as a CEO, and family relation between chairperson and CEO; (3) appointments of external directors; and (4) other issues.

The only significant factor identified was the interaction between the Period variable and Industry of the company (P < 0.0001, F(5,860) = 9.21). This means that the gaps in the level of public participation before and after the introduction of the voting system are not consistent between industries.

Accordingly, and following the preliminary analysis, the following table shows the results of the statistical test (F) for the period of public participation by industry.

Table 6 – Results of the statistical test (F) in a mixed analysis of variance model regarding the effect of the period by industry

Industry	Direction of change	Average change	Statistical test (F)	Degrees of freedom	P value
Real estate and construction	↓	- 2.80%	2.29	1,860	0.1307
Bio-med and technology	↓	- 5.90%	8.4	1,860	0.0039
Commerce and services	↑	5.60%	7.53	1,860	0.0062
Industry + investment and holdings	↑	4.40%	2.77	1,860	0.0967
Financial sector	↑	6.10%	4.3	1,860	0.0384
Energy and gas and oil search	↑	5.90%	2.16	1,860	0.1424

As reflected in the above table, a significant effect was found for the following three industries: bio-med and technology, the financial sector and commerce and services (it should be noted that the effect of "Industry" as a separate group was found to be significant after further analysis, see below).

As can be seen, the level of participation decreased in two industries (bio-med + technology and real-estate + construction), however, a significant change was found only in the bio-med + technology industry (P = 0.0039, F(1,860) = 8.40).

In the rest of the industries there was some increase in participation. In two of them, the change was significant: the financial industry (P = 0.0383, F(1,860) = 4.30) and commerce + services (P = 0.0062, F(1,860) = 7.53).

The effect of online voting on various industries and further examination

In a separate stage, in order to examine the relation between various industries and each industry independently with participation in the different periods, and to examine the relation between the subject of the vote and public participation, including in the different periods, we conducted an additional analysis (with a slightly different mix of subjects),[6] using a linear regression model.

The effect of industries on participation in the different periods was, as aforementioned, significant (F tests above).

A detailed examination of the difference in participation between the periods in various industries in light of the findings of the preliminary analysis, and using a regression model, showed the following findings:[7]

Table 7 – Results of the regression model regarding the effect of the period by industry

Industry	Obs.	Coefficient	Robust Std. Err.	t value	P value
Energy	59	0.0432	0.0249	1.73	0.093
Industry	58	0.0658	0.0361	1.82	0.08
Commerce and services	226	0.0428	0.0173	2.47	0.016
High-tech	103	- 0.0605	0.0293	- 2.07	0.044
Bio-med	129	- 0.0799	0.0353	- 2.26	0.027

6 In the additional analysis, the subjects of votes were defined by five major subject categories: (1) approving appointment of a chairperson who is a relative of the CEO, Approving a dual tenure of a chairperson as a CEO, and private allocation; (2) compensation policy and indemnity and insurance; (3) terms of employment of a holder of a controlling interest, terms of employment of a relative of a holder of a controlling interest, transaction of a holder of a controlling interest; (4) appointment of external director; (5) other subjects.

7 It should be noted that an effect was identifies in the insurance industry, however, the sample contained only one insurance company.

Regarding the industries of energy, industry, and commerce and services, and each industry independently, an increase was found in participation for the period of 2016 – 2020 (compared to 2013 and 2014). Regarding the bio-med and high-tech industries, and each of them independently, a decrease was found in participation for the period of 2016 – 2020 (compared to 2013 and 2014).

The examination was conducted for both the RRP centered parameter and the RRP parameter, with Fixed Effect in an absorb model for the company, with clustering at the level of the meeting (because, as aforementioned, we assumed that when a vote was held in a meeting, chances increase that voters would also participate in other votes at the same meeting).

In addition, we examined once more the relation between various subjects and public participation (in general, regardless of the period) and found no significant difference between subjects regarding the sample population. The effect of the years on participation, similarly, was not significant. We also found that the different periods had no significant effect on participation: not by division into market value groups, not in the interaction between years and subjects, and not in the interaction of periods with subjects.

The above analysis indicates an increase in participation between the periods in the industries of energy, industry, commerce and services (and possibly insurance)[8],a total of 19 companies.

8 See n. 6 above.

The analysis of this group (energy, industry and commerce and services) of the sample:

Industry	Obs.	Coefficient	Robust Std. Err.	t value	P value
Energy, industry, and commerce and services	343	0.0444	0.0145	3.06	0.003

In the high-tech and bio-med industries, a decrease was found. The sample included 6 and 7 companies, respectively (a total of 13 companies). A decrease in participation was found between the periods.

The analysis of this group (high-tech and bio-med) of the sample:

Industry	Obs.	Coefficient	Robust Std. Err.	t value	P value
High-tech and bio-med	232	- 0.0706	0.023	- 3.07	0.003

CHAPTER 6

CONCLUSION

The classic view considers public voters as "rationally indifferent". Contradictory to this, current studies in markets where ownership is diffused found that the public tends to vote and exercise supervisory communication with the management of companies. In markets where ownership is concentrated, there are, on the one hand, special incentives for public voting – regulation in such markets increases the power of voting and provides an incentive to participate; on the other hand, public participation is required mostly to protect the rights of minorities and not to supervise the management of the company.

At the same time, the direct voting costs for public investors can be reduced by voting systems that allow online voting, while making managerial requirements, that are a barrier to public participation, redundant. In 2015, the Capital-Vote system was introduced in Israel, allowing public investors to vote in the meetings of public companies that are traded on the Tel Aviv stock exchange in which they hold shares, without the need to provide ownership proof, send a voting statement, etc.

Previous studies of the effect of online voting on public participation were not conclusive. This study examined the effect of online voting, particularly of the Capital-Vote system, while focusing on a fixed group of companies over several years, which is a (relatively) long time.

The study shows a non-significant rate of participation by public investors: the average rate of public participation in the examined years ranged between a maximum of 10.62% (2013) and a minimum of 5.26% (2019). No significant difference was found in the participation rate between years nor compared to the period before the introduction of the Capital-Vote system.

However, the study found indication of a relation between the industry of companies and the effect of possible online voting: in the energy, industry, commerce and services, and in each industry independently, an increase in participation was found for 2016 – 2020 (compared to 2013 and 2014). In the bio-med and high-tech industries, and in each industry independently, a decrease in participation was found for 2016 – 2020 (compared to 2013 and 2014).

It should be noted that the potential benefit of an online voting system lies beyond increasing the participation of non-institutional investors. Additional benefits may be: reduced costs to public investors who wish to vote (even if such investors also voted without the system in place), reduced costs to institutional investors who are required to participate in many meetings, reduced costs to companies that receive voting results in a clear and structured way, and reduced risk of voting errors (such as ownership identification).

APPENDIX 1

The following table shows a list of the companies and years in which each company held (at least) one meeting:

No.	Company	2020	2019	2018	2017	2016	2015	2014	2013
1	A.M.T. Computing Ltd.	X		X	X		X	X	X
2	Orbit Technologies Ltd.	X	X	X	X	X	X	X	
3	Ezorim Development and Construction Investment Ltd.	X	X	X	X	X	X	X	X
4	Intelikana Ltd.	X	X	X	X	X	X	X	X
5	Elbit Medical Technologies Ltd.	X	X	X		X	X	X	X
6	Aloney-Hetz Properties and Investments Ltd.			X	X	X	X		X
7	Analyst E.M.S. Management and Investment Services Ltd.	X	X	X	X	X	X	X	X
8	Excellence Bioscience Ltd.	X		X			X		X
9	Arena Star Group Ltd.	X	X	X	X		X	X	X
10	Bio-Viv Ltd.		X	X	X		X	X	X
11	Israel Bank Igud Ltd.	X	X	X		X	X	X	X
12	Brainsway Ltd.		X	X	X	X	X	X	
13	Brand Industries Ltd.	X	X	X	X	X	X		X
14	Galileo Tech Ltd.	X	X	X		X		X	X
15	Holmes Place International Ltd.			X					
16	Israel Corporation Ltd.	X	X	X	X	X	X	X	X
17	Phoenix Holdings Ltd.	X	X	X	X	X	X	X	X
18	Van Software Technologies Ltd.	X	X	X	X	X		X	X
19	Tugdar Pharma Ltd.	X	X	X		X	X		X
20	Top Ramdor Systems and Computers (1990) Ltd.	X		X	X		X	X	X
21	Isramco Negev 2 Limited Partnership	X		X		X	X		X
22	Isrotel Ltd.	X	X	X		X		X	X
23	Isras – Investment Company Ltd.	X	X	X	X		X	X	X

No.	Company	2020	2019	2018	2017	2016	2015	2014	2013
24	Cohen Gas and Oil Development Ltd.	X	X	X	X		X	X	X
25	Kafrit Industries (1993) Ltd.	X	X	X	X	X	X		
26	Lapidot Capital Ltd.	X	X	X	X	X	X	X	X
27	M.T.I. Computers and Software Services (1982) Ltd.			X	X		X		X
28	Medtechnica Ltd.		X	X		X	X	X	X
29	Mobile Max Technologies Ltd.		X	X	X	X			X
30	Malisron Ltd.	X	X	X	X	X	X	X	X
31	Beit Shemesh Engines Holdings (1997) Ltd.	X	X	X	X	X	X	X	X
32	Merchavia Holdings and Investments Ltd.	X	X	X	X		X	X	X
33	Formayka Center Aberbuch Ltd.	X	X	X	X			X	
34	Neto Melinda Commerce Ltd.		X	X	X	X	X	X	X
35	Next Gen Biomed Ltd.	X	X	X	X	X	X	X	X
36	Netanel Group Ltd.	X	X	X	X	X	X	X	X
37	Satcom Systems Ltd.	X	X	X	X		X	X	X
38	Sapir Corp Ltd.	X	X	X	X	X	X	X	X
39	Fox – Wizel Ltd.	X	X	X	X	X	X	X	X
40	Paz Oil Company Ltd.	X	X	X	X	X	X	X	X
41	Pardes Industries Ltd.			X	X	X			
42	Cham Food Products (Israel) Ltd.	X	X	X	X	X	X	X	X
43	Tsmicha Investment House Ltd.		X	X	X	X		X	X
44	Oron Investment and Holdings Group Ltd.	X		X		X	X		
45	Hanan Mor Holdings Group Ltd.		X	X	X	X	X		X
46	Amos Luson Entrepreneurship and Energy Group Ltd.	X	X	X	X	X	X	X	X
47	Kaman Capital Ltd.	X	X	X	X		X		

No.	Company	2020	2019	2018	2017	2016	2015	2014	2013
48	Tomer Energy Royalties (2012) Ltd.	X		X					
49	Tigbur-Ma'agar Tempo-rary Professional Man-power Ltd.		X	X		X	X	X	X
50	Navitz Petrolium Limited Partership	X	X	X					

BIBLIOGRAPHY

Babenko I., Choi G., Sen R. (2019) Management (of) proposals. Working paper, Arizona State University, Tempe. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3155428

Bebchuk, L. A., & Hirst, S. (2019). Index funds and the future of corporate governance: Theory, evidence, and policy (No. w26543). National Bureau of Economic Research. DOI: 10.3386/w26543

Bebchuk, L. A., Cohen, A., & Hirst, S. (2017). The agency problems of institutional investors. Journal of Economic Perspectives, 31(3), 89-102. DOI: 10.1257/jep.31.3.89

Brav, A., Cain, M. D., & Zytnick, J. (2022), Retail shareholder participation in the proxy process: Monitoring, engagement, and voting, Journal of Financial Economics 144 (2022) 492–522

Coates, I. V., & John, C. (2018). The Future of corporate governance Part I: The problem of twelve. Harvard Public Law Working Paper. 7-19.
https://dx.doi.org/10.2139/ssrn.3247337

Cucari, N., De Falco, S. E., Carbonara, S., Sergakis, K., & Sardanelli, D. (2020). Determinants of commitment and opportunism of institutional investors' behaviour: an empirical investigation on Robo-voting Phenomenon. Sinergie Italian Journal of Management, 38(3), 191-214.
https://doi.org/10.7433/s113.2020.11

Dressler, E. (2020), Voice and power: Do institutional shareholders make use of their voting power? Journal of Corporate Finance 65, 101716
https://doi.org/10.1016/j.jcorpfin.2020.101716

Easterbrook, F. H., & Fischel, D. R. (1983). Voting in corporate law. The Journal of Law and Economics, 26(2), 395-427.
https://doi.org/10.1086/467043

Ergincan, Y., & Karaagaçli, B. (2015). How Electronic General Meetings Affected Exercise of Shareholder Rights in Turkey: An Analysis of the Turkish Model in Light of International Market Standards and Regulations/Elektronik Genel Kurul Toplantilari Türkiye'de Hissedar Haklarinin Kullanimini Nasil Etkiledi?: Türk Modeli'nin Uluslararasi Standartlar ve Düzenlemeler Isiginda Analizi. Boğaziçi Journal, 29(1), 95.

European Securities and Markets Authority (ESMA) (2020), Steven Maijoor, Chair: Retail investors and asset management are the pillars of a successful Capital Markets Union (Oct. 15, 2020)
https://www.esma.europa.eu/sites/default/files/library/esma71-99-1421_steven_maijoor_speech_irish_fund_industry_association.pdf

Feng, Y., Pan, Y., Wang, L., & Sensoy, A. (2021). The voice of minority shareholders: Online voting and corporate social responsibility. Research in International Business and Finance, 57, 101408.
https://doi.org/10.1016/j.ribaf.2021.101408

Fisch, J. E. (2017). Standing voting instructions: Empowering the excluded retail investor. Minn. L. Rev., 102, 11.

Fisch, J., Hamdani, A., & Solomon, S. D. (2019). The new titans of wall street: A theoretical framework for passive investors. University of Pennsylvania Law Review, 168, 17.

Fried, JM., Kamar, E., & Yafeh Y. (2020) The effect of minority veto rights on controller pay tunneling. Journal of Financial Economics, 138, 777-788.

Gao, H., Huang, J., & Zhang, T. (2020). Can online annual general meetings increase shareholders' participation in corporate governance?. Financial Management, 49(4), 1029-1050.
https://doi.org/10.1111/fima.12301

Hamdani, A., & Yafeh, Y. (2013). Institutional investors as minority shareholders. Review of Finance, 17(2), 691-725.
https://doi.org/10.1093/rof/rfr039

Israel Securities Authority (ISA) (2015), The Securities Authority launches the "point-capital" electronic voting system, (June 29, 2015)
https://www.isa.gov.il/%D7%94%D7%95%D7%93%D7%A2%D7%95%D7%AA%20%D7%95%D7%A4%D7%A8%D7%A1%D7%95%D7%9E%D7%99%D7%9D/175/2015/Pages/votes.aspx

Kastiel, K., & Nili, Y. (2016). In Search of the Absent Shareholders: A New Solution to Retail Investors' Apathy. Delaware Journal of Corporate Law, 41, 55.

La Porta, R., Lopez de Silanes, F., Shleifer, A., and Vishny, R. (1998) Law and finance, Journal of Political Economy 106, 1113–1155.

Larcker, D. F., McCall, A. L., & Ormazabal, G. (2015). Outsourcing shareholder voting to proxy advisory firms. The Journal of Law and Economics, 58(1), 173-204.
https://doi.org/10.1086/682910

Lee, C., & Souther, M. E. (2020). Managerial reliance on the retail shareholder vote: Evidence from proxy delivery methods. Management Science, 66(4), 1717-1736.
https://doi.org/10.1287/mnsc.2018.3260

Posner, E. A., Scott Morgan, F. M., & Weyl, E. G. (2016). A proposal to limit the anticompetitive power of institutional investors. Antitrust LJ, 81, 669.

Pound, J. (1991). Proxy voting and the SEC: Investor protection versus market efficiency. Journal of Financial Economics, 29(2), 241-285. https://doi.org/10.1016/0304-405X(91)90003-3

Rock, E. B., & Kahan, M. (2019). Index funds and corporate governance: Let shareholders be shareholders. NYU Law and Economics Research Paper, 18-39. https://dx.doi.org/10.2139/ssrn.3295098

Scott Morton, F., & Hovenkamp, H. (2017). Horizontal shareholding and antitrust policy. Yale Law Journal, 127, 2026.

Solomon, D. (2016). Rational Apathy of Shareholders: How to Awaken Investors from Their Sleep. Tel Aviv University Law Review., 39, 317.

Stulz, R. (1988). Managerial control of voting rights: Financing policies and the market for corporate control. Journal of financial Economics, 20, 25-54.

U.S. Securities and Exchange Commission (SEC) (2015), Daniel M. Gallagher, Opening Statement at the Proxy Voting Roundtable, U.S. SEC. & Exch. Comm'n (Feb. 19, 2015) https://www.sec.gov/news/statement/opening-statement-proxy-voting-roundtable-gallagher.html

U.S. Securities and Exchange Commission (SEC) (2019), Recommendation of the SEC Investor Advisory Committee (IAC) Proxy Plumbing (Sep. 5, 2019. https://www.sec.gov/spotlight/investor-advisory-committee-2012/iac-recommendation-proxy-plumbing.pdf

Umakanth Varottil, Minority shareholders' rights, powers and duties: the market for corporate influence, Afra Afsharipour & Martin Gelter (eds.), Research Handbook on Comparative Corporate Governance (Edward Elgar, forthcoming) https://law.nus.edu.sg/ewbclb/wp-content/uploads/sites/6/2020/06/006_2020_Umakanth.pdf

Van der Elst, C., (2011). Revisiting shareholder activism at AGMs: voting determinant of large and small shareholders. ECGI - Finance Working Paper No. 311/2011.

רשות ניירות ערך
Israel Securities Authority
سلطة الأوراق المالية