

*Voting Power at Shareholder Meetings: Evidence from the Voting Behavior of  
Institutional Investors*

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*Abstract*

I investigate the role of voting power (ability to influence outcomes) in the behavior of institutional investors. Calculating two power indices commonly used in political science but rarely in the corporate governance literature, I examine the power distribution among institutional investors and their voting patterns. Using data from Israel, I obtain three main results: (1) Empowering minority shareholders by raising the required majority in a concentrated ownership environment is likely to make the distribution of voting power more unequal; (2) Institutional investors' voting power is positively related to their tendency to support management-sponsored proposals: the stronger the investor is, the higher is the probability s/he would vote in favor of the proposal; (3) The strongest group of institutional shareholders is insurance companies. This group supports management-sponsored proposals in highest percentages of all institutional investors. Those insurance companies suffer from potential conflicts of interest; and (4) institutional investors have two voting patterns: the first is "management friendliness": Institution's historical voting is significant in predicting its next vote, and the second is "peer voting": an institution is likely to vote like other institutional shareholders, especially like "similar" institutions that are present at the vote. The results have implications for policy makers in the design of voting rules as a tool in empowering minority shareholders.

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## ***1. Introduction***

How do institutional investors vote at shareholder meetings? How are their voting patterns affected by their ability to influence outcomes? To what extent do they tend to vote like their peers? Even though shareholder voting has become a popular mechanism of corporate governance throughout the world, these questions are relatively unexplored. In this paper, I address these issues using a novel, hand collected data set from Israel.

Institutional shareholders' role in corporate governance and their effect on firm value has been explored theoretically and empirically mainly in the context of dispersed ownership environments like the United States or the United Kingdom. In these common law countries institutional investors play an active role, initiating proposals of their own regarding compensation (see detailed review in Yermak, 2010), or the appointment of board members (Cai, Garner, and Walkling, 2010). In other countries, however, where corporate ownership is more concentrated and controlling shareholders are common, the role of institutional investors is different: they are expected to protect minority shareholders in their conflict with the controlling shareholders, for example by voting against unfair related party transactions. While some research suggests that certain voting processes could be an efficient form of activism in U.S firms (Cai, Garner, and Walkling, 2009, Fischer et al., 2009, and papers surveyed in Yermack 2010) as well as in non-American firms (Iliev et al., 2015), the ability of shareholders to oppose and prevent such unfair transactions in controlling shareholder environments is conditioned on the existence of regulation that gives the minority shareholders special power beyond their weight in the voting rights.

Measures of voting power essentially gauge the ability of a voter to influence outcomes by forming a coalition with other voters, or withdrawing from it. The *a-priori* voting power of a specific shareholder, at a specific vote, indicating the shareholders' ability to affect the final result, is measured here by two widely used measures: The

Shapley-Shubik power index (1954) and the Banzhaf power index (1965). These measures are a function of the number of players in a voting game, each player's weight in the total voting rights, and the majority rule for a winning coalition. This *a-priori* voting power of a shareholder under a given decision rule is regarded as the capacity of potential influence attributed to the shareholder by virtue of the rule<sup>1</sup>. The Shapley-Shubik and the Banzhaf power indices are commonly used in the political science literature, but are less common in the corporate governance literature. In the financial context, there are few papers that use these indices mainly for identifying control blocs in dispersed ownership environment (Leech 2001, 2003) or for identifying control relations at the corporate level in concentrated ownership environment (Kosenko et al. 2012) and in family firms (Massa and Zaldokas, 2016). Zingales (1995) evaluates voting rights using power indices.

The study is based on a new, hand-collected data set of voting records from Israel, starting in 2012. These data became available after Amendment 16 to the corporate law, which required majority of the minority approval on a variety of corporate decisions, including self-dealing transactions with the controlling shareholders. Institutional investors are required by law to vote on these issues and to publish their voting records.

The study attempts to address three main questions: what is the effect of an increase in the required majority on the distribution of voting power; what is the effect of voting power on voting patterns; and whether “management friendliness” and “peer pressure” affect the voting behavior of institutional investors.

Using the Shapley-Shubik and the Banzhaf relative power indices, I examine the distribution of voting power among shareholders under two regimes: one where the support of 33% of the minority shareholders is sufficient to approve self-related transactions proposed by management, and another where majority of the minority is required (50%). These percentages are based on a legal experiment that happened in Israel

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<sup>1</sup> Felsenthal & Machover, 2004

in 2011, where the regulator changed the majority rule in an effort to empower minority shareholders. The expectations were that small shareholders would become more influential, since coalitions would have to include more shareholders.

The results are surprising. First, under the actual distribution of voting rights among minority shareholders, an increase in the required majority to 50% results in an increase in the concentration of voting power - a more unequal distribution of voting power relative to the initial conditions (where the support of 33% of minority shareholders was required). That is, in most cases, raising the required majority appears to have allocated more voting power to larger shareholders. The reason is that, when voting rights are initially highly concentrated, relatively large minority shareholders become pivotal in more possible coalitions following the change in the required majority.

Second finding concerns the voting patterns of institutional investors, and the effect of voting power on their voting behavior. My hypothesis, following Hamdani and Yafeh (2013), is that the largest (and strongest) institutions tend to be management-friendly. I find that higher voting power is positively correlated with management friendliness: The strongest minority shareholders tend to vote with management-sponsored proposals.

This finding raises the question: why do large shareholders vote with management? One possibility is that they are motivated by conflicts of interest, for example, because they have some other business with the firm management, or because management "buys" their vote directly. I will refer to this possibility as "the bad story". It is also possible that large shareholders vote with management because these strong institutional investors negotiate the conditions of the transaction with management before the vote and use their power to achieve better conditions, in line with the minority shareholders' interest – the latter will be referred to as "the good story". Looking for a way to empirically distinguish between the two explanations, I examine a proxy for

negotiation between management and shareholders over the conditions of the transaction before the vote takes place. This proxy exists in a sub-sample of votes that were delayed suggesting the possibility of disagreements. For these votes, I examine whether smaller shareholders with no conflicts of interest vote in favor of those proposed transactions after the negotiation has ended. I find that, in these votes, small institutional shareholders are more likely to dissent, in comparison with the full sample of votes (over the same issues), whereas the largest shareholders vote with the management in higher percentages than in the full sample. This finding is consistent with the "bad story", whereby large minority shareholders vote with management even though the proposal is not necessarily value enhancing.

Third, I identify institutional shareholders with voting power, finding that the strongest group is insurance companies. Those companies conduct several business activities with companies, thus they have potential conflicts of interest. I also find that insurance companies are the most management friendly shareholders among institutions. An insurance company has on average a 17.6% lower probability of voting against a proposal comparing with employee owned fund.

Fourth, I find two different voting patterns: "management friendliness" and a "peer effect". In the first, an institutional shareholder's voting history is significant in predicting her next vote. A fund manager that tends to vote with management, is most likely to continue supporting management in her next proposal. In the second, a higher probability of other, similar shareholders to dissent in the vote, raises the probability of a shareholder to vote AGAINST and vice versa. Controlling for sample selection, I still find that a peer's expected vote, calculated as the average of the "management friendliness measure" of all other institutional shareholders, and of the most similar institutional shareholders to every fund manager, is significant in predicting that fund manager's next vote.

Overall, I conclude that raising the required majority, trying to empower minority shareholders in concentrated ownership environment, is likely to create an unequal distribution of voting power: it bestows even more power on shareholders which were powerful to begin with. The effectiveness of this change on improving corporate governance (for example by preventing minority shareholder expropriation by controlling shareholders) is not clear, since these empowered large institutions are found to be “management friendly” and vote mostly “for” management-sponsored proposals. The voting power is probably a good way of recognizing the institution with whom management negotiate the terms of transactions. Therefore, an efficient regulation should make sure these institutions are free from potential conflicts of interest.

## ***2. Related Literature***

The present study is related to the line of research on institutional investors' voting behavior. Recognizing the importance of institutional investors' vote in corporate governance<sup>2</sup>, this literature addresses the question: what motivates shareholders' votes, as well as which voting patterns can be recognized in institutional shareholders' votes? The present study adds to this literature the perspective of voting power as a factor in the voting behavior of shareholders, and the heterogeneity of institutional investors (not only mutual funds, but also insurance companies, pension and provident fund managers) and issues voted on. In a theoretical paper Maug and Rydqvist (2009) suggest that investors vote strategically, taking into account whether they are pivotal. Therefore, raising the required majority rule will affect some votes, but will not affect the outcomes, as shareholders understand that a proposal which is value creating, should be approved. The authors conclude that the investors' strategic voting behavior is creating value to the firm. Empirical papers on voting motivation and voting behavior include for example Davis

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<sup>2</sup> For example, in solving the collective action problem, see Edelman and Thomas (2015) in "The Research Handbook of Shareholder Power".

and Kim (2007), Ashraf et al. (2009), Hamdani & Yafeh (2013) and Cvijanovic, Dasgupta and Zachariadis (2016) who find that conflicts of interest - other business connections with portfolio firms - affect voting decisions, and Aggarwal, Erel and Starks (2014) who find that media coverage affect the voting behavior of institutional investors. Hamdani and Yafeh (2013) is very close to this project, as it deals with empowering the minority shareholders in a controlling shareholders' environment, the same institutional context as in the present study. Matvos and Ostrovsky (2010) look for voting patterns in elections for corporate boards and find that some shareholders vote in a more management friendly way than others and that these voting patterns are persistent. They also recognize a “peer effect” defined as the tendency of a shareholder to vote like her peers. Within the huge literature on "Say-On-Pay" votes, some papers<sup>3</sup> investigate voting patterns of shareholders.

Second line of research, under the line of investor's protection in concentrated ownership, initiated by La Porta et al (1998), is the literature on blockholders activism (see detailed survey in Edmans and Holderness 2016), and more specifically, behind-the-scene activism, which studies the effect of large shareholders on corporate governance changes (Carleton, Nelson and Weisbach 1998) or some other objectives such as replacing the CEO or increasing cash payout to investors, creating abnormal returns to the firm's share once published (Becht, Franks, Mayer and Rossi 2010). These achievements were all carried out by engagements with executives occurring behind the scenes. I add to this literature by providing evidence on negotiation between management and large shareholders over self-dealing transactions occurring before voting at shareholders meeting, and indications for the use of voting power in such a negotiation. This literature also recently evolved to addresses the implications (and find significant

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<sup>3</sup> For example, Iliev, Lins, Miller and Roth (2015), and Schwartz-Ziv and Wermers (2016).

effect) of voting requirement on firm key variables like value<sup>4</sup>, compensation level<sup>5</sup>, board accountability<sup>6</sup> or acquisitions<sup>7</sup>. I add to this literature first examination of the implications of changing the voting rule on the concentration of voting power among minority shareholders.

### ***3. Data description and Methodology***

#### *3.1 Database construction*

Israeli law requires institutional investors to cast a vote on several issues<sup>8</sup>, and also requires public companies to report the results of every proposal approval or denial on these issues, including the identity of the institutional shareholders present at the vote, the number of shares they hold, and the actual vote cast by each shareholder on each proposal. This information is reported<sup>9</sup> to the Israeli Securities Authority (ISA) and the Tel Aviv Stock Exchange (TASE). This requirement, implemented at the beginning of 2012, allows me to manually collect data on every vote on management-sponsored proposals<sup>10</sup> on one of the issues that require approval by a majority of the minority. I collect all reported votes between January 2012 and August 2013 from the Maya reports system<sup>11</sup>. As the power indices I use to measure voting power can only be meaningfully evaluated by including all the participants in a voting game<sup>12</sup>, I exclude the proposals

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<sup>4</sup> Chen et al. (2013) use a regulatory change that empowered minority shareholders in China in order to find out the effect of such a reform on the firm value.

<sup>5</sup> Fried, Kamar and Yafeh (2016) use an amendment in Israel's corporate law in order to find the effect of empowering minority shareholders on the compensation to controlling shareholders. Many more SOP papers on U.S. data were written after the Dodd-Frank regulation of 2010.

<sup>6</sup> Choi et al. (2016).

<sup>7</sup> Becht, Polo and Rossi (2015) study the effect of mandatory voting on quantity and price of acquisitions.

<sup>8</sup> For exact details on the different obligations concerning different types of fund managers see Hamdani and Yafeh (2013).

<sup>9</sup> Filings no. 48n and 49n.

<sup>10</sup> All the votes in the sample are management-sponsored proposals, since other kind of proposals are very rare to non-exist in Israel

<sup>11</sup> Available for free at [maya.tase.co.il](http://maya.tase.co.il). The ending date has no particular importance apart from the fact that it is the time when I started collecting the data.

<sup>12</sup> The power indices are a relative score for each participant, see details on the measures in part 3.2.



when the sum of stocks reported in the vote summary is bigger than the total number of stocks in the hands of all reported participants.

The raw database includes 83,381 shareholders' votes on 1,253 proposals in 267 firms. This indicates a large average number of shareholders per vote. The reason for that is the detailed reports by companies that include the vote of each fund under the same institutional investor separately (e.g. provident funds, pension funds, mutual funds, or life insurance accounts). A close examination of votes finds out that (not surprisingly) all funds under the same manager, including different kinds of funds, cast the same vote. I therefore sum up all stocks held by the same institutional investor into one observation. In order to do that, I use the information in the Ministry of Finance website<sup>13</sup>. Table 1 summarizes the final numbers of proposals and votes in the data.

[Table 1]

### *3.2 Variables description*

#### *Power Indices*

Table 2 shows the average Shapley-Shubik index and the average normalized Banzhaf index for every shareholder category. Both indices are relative scores for each player in the voting game, and the scores are similar. The Shapley-Shubik index depends on the order in which the players join the coalition. A pivotal shareholder is a player whose vote turns a possible group of players to a winning coalition. The derivation of this index is based on the ratio of the number of coalitions in which the particular player is pivotal, out of  $n!$  possible (ordered) coalitions, where  $n$  is the number of players in the voting game. The sum of all the indices for all players in a vote is always 1, since the Shapley-Shubik index is actually the probability of a specific player being the pivotal one.

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<sup>13</sup> "gemel-net", "pensia-net" and "bituach-net".

The Shapley-Shubik index is appropriate when communication between players takes place before the vote and before coalitions are formed.

[Table 2]

The Banzhaf index can be interpreted as the probability of a player to change the result of the vote by changing her/his own vote from "for" to "against" ("a swing"). This index does not depend on the order of joining coalitions. This index is calculated by counting all the possible swings for a given player (that is, the number of winning coalitions that include the specific player whose change of vote will turn the coalition to a losing coalition) and to divide it by the number of possible coalitions that exclude the player<sup>14</sup>. Since the Banzhaf indices of all players in a specific vote do not necessarily add up to one<sup>15</sup>, it is also common to use a normalized Banzhaf index<sup>16</sup> which can be interpreted as a relative measure of players' voting power (Leech 2003).

The power index of each shareholder in every vote is calculated using the Shapley-Shubik (1954) and the Banzhaf (1965) direct (exact) formulas, only for proposals with no more than 25 shareholder's votes. The calculations become extremely complex as the number of players in the voting game rise because computation time grows super-polynomially with that number<sup>17</sup>. When a voting game includes more than 25 shareholders, I use an approximation by Denis Leech, which is based on the direct method and on Owen's approximation<sup>18</sup>. This method allows the user to tradeoff between accuracy and computational efforts<sup>19</sup>. It divides the players into two groups: "major" players with

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<sup>14</sup> $Bz = \sum_{T_i} 1/2^{n-1} T_i$  is a swing of player  $i$ .

<sup>15</sup>Since the order of entering the coalition isn't relevant, in any voting there could be either few or no players with a swing.

<sup>16</sup>A player's normalized Banzhaf index equals her Banzhaf index divided by the sum of all players' indices.

<sup>17</sup> Koesenko (2012)

<sup>18</sup> Leech (2003), implemented in <http://homepages.warwick.ac.uk/~ecaae/index.html>.

<sup>19</sup>Professor Denis Leech has kindly given me his code for computing his approximations for the Shapley Shubik index and the Banzhaf index.

the largest weights and "minor" players – all other players in the voting game. The method computes the index for the major players as if they were the only players in the voting game. Under this assumption, the index computed is the direct, "real" index. For the minor players, the method uses all the coalitions already formed with major players. The larger the number of major players, the more accurate the index is, but the longer it takes to compute all players' indices. In my calculation I consider a player to be major if accumulated voting rights of all bigger players (not including himself) does not reach a total of 90% of voting rights in every voting game.

For each player in the voting game<sup>20</sup> I compute the Shapley-Shubik power index and the Banzhaf power index twice: using first the 33.3% majority rule and again, using the 50% majority rule. Since I only observe voting records from the period when majority of the minority support was required<sup>21</sup>, I derive each player's hypothetical voting power had the required majority been 33.3%, assuming that holdings (voting rights) are unchanged.

### *Shareholder's category*

I categorize the institutional shareholders into four groups according to the financial services they supply: Insurance companies (which also manage retirement savings schemes), investment houses (managing mutual funds as well as retirement savings schemes), employee- or employer-owned funds, and foreign investors<sup>22</sup>. Overall, these four groups are different in their average size (assets under management) and the services they provide. Therefore, I expect differences in the potential conflicts of interest in their activity as institutional investors.

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<sup>20</sup> In the majority of minority requirement issues only, that is excluding the supermajority issues.

<sup>21</sup> Proposals from 2011 and earlier are not reported by the firms, making it impossible to collect data of all participants and their voting rights in every proposal at this period.

<sup>22</sup> a complete list of funds under each fund manager and the list of fund managers in every category is available on request.

### *Category 1: Insurance Companies*

These companies are the largest players in terms of assets under management since the reform of 2006 (Bachar reform), which forced banks to divest their money management activity. Insurance companies provide insurance products (including life insurance policies as well as other insurance devices), pension funds, mutual funds and provident funds. There are eight big insurance companies in Israel and few small ones. These companies suffer from possible conflicts of interest in their activities: On one hand, they manage money on behalf of savers, and should be looking out for their best interest. On the other hand, they sell insurance policies to corporations. Hamdani & Yafeh (2013)<sup>23</sup> found conflicts of interest affect voting behavior of institutional shareholders<sup>24</sup>. I would expect to see this effect in the data.

### *Category 2: Investment Houses*

This group includes companies that manage all kinds of funds, but without selling insurance. There are seven or eight big investment houses that manage pension and provident funds in addition to mutual funds, and approximately twelve more small managers that only manage mutual funds. This group partially has a potential for conflicts of interest, since some of the investment houses provide also underwriting services for companies that might be part of their portfolio.

### *Category 3: Employee-owned and Employer-owned Funds*

All savers in these funds are employees of the same organization and their families. These funds' sole interest is their members. In most of the cases these funds are

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<sup>23</sup> As well as others, see related literature.

<sup>24</sup> All kinds of institutional investors, not only for insurance companies. My categorization is not following their's.

not large enough to retain experts who will invest the money or analysts who will decide how to vote on every management proposal. Therefore, these funds usually buy the proxy advisor's recommendations on proposals and vote exactly as recommended, or use money management services of an investment house, which also advise them on how to vote. Therefore, these small privately owned funds are considered conflict-free.

#### *Category 4: Foreign Investors*

This group of investors is not necessarily a homogeneous group in many respects, but their voting behavior is similar: Israel is a small market for them, their share of investments in Israeli companies is apparently too small to analyze every vote. They do not suffer from any obvious conflicts of interest.<sup>25</sup>

#### *Opposition Index*

A fund "opposition index", the tendency to vote "against", is calculated for every institutional shareholder using the methodology of Matvos and Ostrovsky (2010)<sup>26</sup>: An opposition index is the average of all historical votes cast by fund manager over all previous proposals to every shareholder meeting the fund participated in. a high (close to one) index indicates history of many AGAINST votes, and a low (close to zero) index indicates history of management friendliness by the fund.

#### *Proposal Issue*

The categorization of issues of the proposals is done using the categories in Hamdani and Yafeh (2013) with some additional categories arising from amendments 16 and 20 to the Israeli companies' law. Details appear in Table 3 and Table 4. All issues that

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<sup>25</sup> The foreign investors vote "against" in only 16% of their votes, less than the average (22%).

<sup>26</sup>Matvos and Ostrovsky calculate a "management friendliness index", since they use the probability to vote "for" as the dependent variable, while I use the code 1 for voting "against" so I call it "an opposition index". The higher the index is, the more "against" votes a fund manager has cast in his voting history.

concern self-dealing with the controlling shareholders require majority of the minority rule. Some issues are voted on with management almost automatically (for example, external directors elections) whereas mergers and acquisitions or compensation issues usually arise a disagreement. I will refer to this point below, in the results section.

[Table 3]

[Table 4]

### *3.3 Methodology*

I calculate the concentration of voting power for every shareholder meeting, using the "Herfindahl-Hirschman Index" (HHI). Comparing the concentration under the two different majority rules sheds light on the reallocation of voting power caused by the increase in the required majority.

For the purpose of examining the presence of “peer effects” (influence by other voters) in institutional investors' votes, I calculate for each shareholder  $i$  the average opposition index of all present shareholders in every meeting excluding itself. There are few challenges in identifying the impact of peer voting (Manski 1993, Mugerma et al, 2014): first, a reflection problem: the realized effect might represent not only the effect of shareholder  $i$  on shareholder  $j$ , but also the possible effect of  $j$  on  $i$ . Second, the relationship between  $i$ 's behavior and her/his peers' behavior may be due to common unobserved characteristics that have led both shareholders to make the same choice of investment. Thus, an observed similarity in votes may be due to selection effects. Third, a correlation in choices within shareholder meeting may be due to exposition to the same facts and possibly also to the same recommendation provided by the proxy advisor. I address each of these challenges using a separate technique: The reflection problem is solved by calculating a different opposition index for every shareholder  $i$  and meeting

date  $t$  using only the historical data (already known by the date  $t$ ) of each shareholder's votes. This way, I can measure the effect of the presence of more or less management friendly peer voters, without actually using their present vote. The selection effect is taken care of by using institution-specific fixed effects in the regressions, in order to make sure that the peer effect does not evolve from unobservable similarities of fund managers. The correlated effect is solved by calculating another peer index (a sub-peer), including only the additional shareholders who belong to shareholder  $i$ 's fund category. If the effect of peers on voting is only due to exposure to similar information, then there should not be a special impact for peers of a specific fund category.

#### **4. Results**

##### *4.1 Power distribution*

Amendment No. 16 to the Companies Law<sup>27</sup>, enforced in Israel in May 2011, implemented the conclusions of the Goshen and the Hamdani committees, which were concerned about value extraction by the controlling shareholders. They aimed to strengthen the position of minority shareholders, in particular institutional investors, by giving them the power to preclude controlling shareholders from carrying out transactions involving a conflict of interest, which therefore are not in the company's best interest. For those transactions, the amendment changed the majority rule: instead of requiring the votes of 1/3 of shareholders who do not personally benefit from the transaction, the proportion was changed to 1/2. I begin the analysis by examining the distribution of voting power among minority shareholders under the two voting rules. First, note that even after the exclusion of control holders from the voting game, the minority's voting rights are hardly dispersed: in 68% of the votes that require a special majority in my sample, there is a shareholder holding 33% of minority's voting rights or more. In 37.1%,

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<sup>27</sup>Companies Law 5759-1999

the largest shareholder holds 50% of the minority's voting rights or more. I find that, under such circumstances and given the actual distribution of equity stakes held by Israeli institutional investors, raising the required majority for a winning coalition strengthens the largest shareholder. Figure 1 illustrates this with an example: a vote with 17 non self-interested shareholders, of which 10 hold less than 1% of the voting rights. The largest 7 hold rights as follows: 37%, 17%, 14%, 10%, 9%, 8%, 3%.

[Figure 1]

As can be seen in Figure 1, the strongest player becomes even stronger under the new majority rule, while all other, smaller, players, are weakened. In order to examine how general this result is, I simulate the effect of the increase in the required level of support from 33% to 50% using different initial distributions of voting rights (Figure 2). I find that in 73% (57%) of the initial, simulated, distributions, voting power, calculated using either the Banzhaf or the Shapley-Shubik indices will become more concentrated. The exceptions are distributions in which the initial concentration of voting power is low, but these are not common in the case of Israel.

[Figure 2]

Moving to actual data, the amendment has made the power more concentrated among institutional investors (minority shareholders) in Israel. The average HHI of shareholder power indices has increased from 42% (40%) to 49% (53%) using the Shapley-Shubik (Banzhaf) index when the required level of support was raised from 33 to 50%<sup>28</sup>. The

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<sup>28</sup> That raise is for the sample of firms and not proposals, in order not to deviate the average. The raise is significant in the 1% level also for the sample of proposals.



difference is statistically significant in the 1% level. The concentration of power under the two required levels of support is illustrated in Figure 3.

[Figure 3]

The main implication of the finding that the increased level of required support bestows even more power on shareholders which were powerful to begin with is that the effect of this change on corporate governance depends on the extent to which the empowered large minority shareholders (institutions) are “management friendly”. To the extent that the empowered institutions mostly vote “for” management-sponsored proposals, it is not clear whether an increased required level of support would be effective in preventing minority shareholder expropriation by controlling shareholders.

#### *4.2 Voting power and voting behavior*

Understanding the new distribution of power among institutional shareholders, I turn to the estimation of the determinants of institutions' voting behavior. Table 5 presents logit estimates of the probability of voting against management. Explanatory variables include institution-specific, vote-specific and firm-specific characteristics, as well as other control variables (year dummies).

[Table 5]

I begin with shareholder voting power. Table 5 (panels A and B) shows that shareholder's power index is negative and significant in explaining against vote, across all specifications: stronger shareholders vote "for" more often. This is not a surprising result if we remember that the data might suffer from selection problem: I only see the votes on proposals that management has brought to a vote at the general shareholder

meeting. It is likely to assume that before calling the vote, management would try to find out whether the proposal is going to pass the shareholder's vote<sup>29</sup>. I will refer to this point later on, after analyzing some more shareholder's characteristics, vote's characteristics and firm's characteristics that influence shareholder's vote.

Table 5 shows that insurance companies are the most management friendly institutional (minority) shareholders (the omitted category is foreign investors), whereas investment houses and employee owned funds dummy variables are positive and significant in explaining against votes. An insurance company has on average a 17.6% lower probability of voting against proposal comparing with employee owned fund, and a 12.6% lower probability comparing with an investment house. Within shareholder's category, over and above the direct influence of voting power, the power index is related with FOR votes only in the employee fund category (columns 3, 4,5).

Looking at firm specific variables effect: firm size (reflected in the variable "Log(capital) DEC2012") reduces opposition: larger firms have a negative effect on the probability to vote against management-sponsored proposals. This result is consistent with two contradicting explanations: either large firms are better managed and less subject to minority shareholders' expropriation by controlling shareholders, or larger firms have a greater potential conflicts of interest with institutional investors (higher probability for underwriting services, or larger number of employees and management members to provide with insurance or pension funds). This question remains open within the framework of the present paper. Firm's profitability is expected to reduce opposition to management's proposals among shareholders, though the effect is not statistically significant in some of the specifications.

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<sup>29</sup> Listokin (2008) suggests management control the timing of proposals and withdraw proposals that are likely to fail on the vote. Becht, Polo and Rossi (2015) and Fos and Tsoutsoura (2014) mention career considerations of firm managers as the reason for them to avoid "NO votes".

Examination of the issues voted on (Table 5 panel B) shows that issues institutional investors vote against (over and above the effects of management friendliness, voting power, shareholder category and firm's characteristics as discussed above) are compensation related: whether it is the controlling shareholder compensation (issue 1A), or the compensation of hired executives. This is consistent with the finding in Hamdani and Yafeh (2013), who discuss whether the reason for that voting behavior is the heavy media coverage<sup>30</sup> or whether it is an issue of concern for minority shareholders, since compensation is a mechanism for expropriation by controlling shareholders. The fact that not only issues of compensation to controlling shareholders are positive and significant in explaining AGAINST votes, but also the compensation to hired executives might indicate the media coverage explanation over the expropriation explanation.

Going back to the negative correlation of voting power with voting against proposals: there could be two explanations consistent with this finding. Either the institutions are acting management friendly because of conflicts of interest, or the terms of transactions were previously negotiated with them. In that case, if a negotiation took place, it could end in two different ways, both are consistent with a support of the largest and strongest shareholder: the first is a negotiation in which the strongest was "bribed" by the management (for example by promising the fund managers some other businesses). This possibility is referred to as "the bad story". The second, better, possibility is that the stronger institutional shareholder uses her power to negotiate and improve the transaction conditions in favor of all shareholders (and more specifically, minority shareholders). This will be referred to as "the good story".

Trying to differ between the two possible explanations, I look at a subsample of the data, where I have an indication for negotiation between management and institutional shareholders: for this subsample of 54 Meetings (with 83 proposals), after the first call

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<sup>30</sup> Also see Aggarwal, Erel and Starks (2014) and Kaniel, Starks and Vasudevan (2007) who find causal relations between media coverage and fundnet inflows.

for a meeting and before the actual meeting date, there is an announcement to the stock exchange on a delay in the meeting. The reason for the delay, when mentioned, is negotiations, or a request from the institutional shareholders. Assuming that the management negotiates primarily with the largest and strongest shareholders, this negotiation on the deal could have two contradicting implications, as mentioned above: If the good story is the more common explanation, then the negotiation is expected to end with a good deal for the firm and for the shareholders. In this case, I would expect the smaller (and weaker) shareholders to vote with the strong shareholders in favor of these management proposals. On the other hand, if large shareholders are “bribed” by management, the proposed deal is likely to be favorable to the controlling shareholder. In that case, I would expect small shareholders to vote "against" those proposals.

[Table 6]

Table 6 shows the percentage of votes "for" and "against" for every quartile of voting power, in the full sample data of proposals in the issues of 1A: compensation related self-dealing and 1B: related party transactions, excluding delayed meetings<sup>31</sup> (Panel A), and in the subsample of delayed meetings (Panel B), presumably due to negotiations<sup>32</sup>. In the delayed meetings, probably after a negotiation took place, the weakest shareholders vote against the management-sponsored proposals in higher percentages in comparison with their level of opposition in the full sample, despite the support of the strongest shareholders. The difference between the two distributions is

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<sup>31</sup> 74 out of 83 delayed proposal's issues are 1A and 1B. For robustness check I repeat the same analysis with the full sample of non-delayed proposals, the results are of higher difference in the first and fourth quartiles.

<sup>32</sup> Some announcement specifically mentioned a negotiation or a request from the institutional shareholders as the reason for the delay in the shareholder meeting date, where some delays did not mention any reason. The data on the delayed meetings is taken from firms' announcements to the TASE available in the MAYA information system. I thank Oded Cohen from the Bank of Israel and the Hebrew University for sharing me his data on delayed proposals.

statistically significant. This suggests that the strongest shareholders further their own interests in negotiating with controlling shareholders, which are not necessarily the interests of all minority shareholders.

The data also provides us with (very few) examples for the better result of the negotiation: some deals are voted on twice, since the management failed to approve them on the first time. a comparison of the two proposals (the one that denied and the one approved) can teach us a lesson on the benefit that shareholders earned using their voting power in the negotiation<sup>33</sup>.

Those examples are rare but they provide us with an evidence for behind-the-scenes activism by institutional investors and their use of voting power to achieve governance. Another finding consistent with "the good story" explanation is a result of an experimental study<sup>34</sup>, in which people who answered questionnaires used their voting power in favor with firm's best interest, even when confronting with self-conflicts of interest.

#### 4.2.2. *Who is the strongest shareholder?*

It is now interesting to find out which group of shareholders is the most powerful one and how does it use its voting power? Table 2 above shows that insurance companies are the largest minority institutional shareholders in my sample. In 42% of the “majority of the minority” votes, one of the eight insurance companies is the largest shareholder. In

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<sup>33</sup> First example is "Gamatronics Electronic Industries LTD": on October 11<sup>th</sup>. 2012 there was a vote on the proposal for waivers of duty of care and a liability insurance for directors related to the controlling shareholder. The proposal failed, when all institutional investors vote against it. On January 16<sup>th</sup>, two months later, the proposal came to vote on shareholders meeting again, this time it passed with the support of a 100% of the shareholders. The difference on terms was the removal of the waivers of duty of care for the directors among the controlling shareholders and their relatives. Second example is "Bloimegrin Capital" proposal for responsibilities transfer from CEO to the (controlling shareholder) chairman on August 12<sup>th</sup> 2012: the proposal failed with 88% of minority shareholders (all 6 institutional investors) vote against. A month later, on September 20<sup>th</sup>. The proposal was approved with exactly the 67% (supermajority) required for this issue. The difference between the two proposals was the time length of the responsibilities transfer: a year instead of three years initially proposed.

<sup>34</sup> Taken in an unpublished work with Shoham Choshen-Hillel from the Jerusalem Business School, as a part of my dissertation.

37% of the votes, an insurance company holds a veto power (i.e. holds over 50% of the minority's votes). This makes insurance companies the most powerful group among institutional investors. Their average voting power is between 8.83% (Shapley-Shubik index) and 8.98% (Normalized Banzhaf index), around ten times stronger than the average employee-owned fund. As shown in Table 2 and Table 5 above, insurance companies tend to be "management friendly" and vote "for" management-sponsored proposals.

#### *4.3 Voting patterns: management friendliness and peer voting*

A management friendliness (or an opposition) voting pattern is referred to the history of a fund manager voting behavior being significant in explaining the fund's next vote: one could guess the fund's next vote by looking at its voting history. Table 7 shows that fund's voting history represented by the "opposition index" (the proportion of votes "against" in all previous votes), is positive and significant suggesting that funds have a tendency to vote according to a positive or a negative voting pattern, which predicts their vote controlling for the subject of the vote and their voting power.

A "peer voting behavior" (the tendency to vote like your peers) is part of a phenomenon psychologists call "conformity" (the tendency to act in a similar way to others), but it also could be due to common information. In addition to being an interesting phenomenon, peer voting behavior has a practical importance: it might lower, or even cancel the effect of the regulatory change on the effort that management (or a controlling shareholder) must invest in building a winning coalition to approve any self-related transaction. The requirement for a stronger support among minority shareholders is effective only if it forces the management (or controlling shareholder) to negotiate the terms of transaction with a larger number of shareholders. If a peer effect is significant in

predicting a shareholder's vote – it might be enough for management to assure the supporting vote of the opinion leader of shareholders.

[Table 7]

Table 7 shows that, in all regression specifications, the proxy for the peer expected vote variable, calculated as the average opposition index of all other institutional shareholders present in every meeting is positive and significant in predicting a shareholder's vote. Controlling for external influence (by calculating also close peer expected vote using the average opposition index of institutional investors in the same shareholder category for every institutional shareholder – column 3), and for sample selection (by using fund-specific fixed effects- columns 4 and 5) the peer effect is statistically significant. It can also be said that among all peers present in a vote, the peers that are most similar to the shareholder (close peer as explained above) have the greatest influence over their vote. The peer's influence is greatest in compensation votes, where the peer effect raises the likelihood of voting against the proposal.

## ***5. Conclusions***

This paper provides evidence on the voting behavior of institutional investors in a concentrated ownership environment, and the relation of that voting behavior to voting power. A voting power is shown to be a better measure for the ability of shareholder to affect the result of a vote, than the simple holding percentage of equity. I show that increasing the required majority leads to larger inequality in power distribution among groups of institutional shareholders. Voting power is found negative and significant in predicting shareholder's AGAINST vote, regardless of other proposal characteristics, firm

characteristics or institutional shareholder's characteristics, though without indicating causality relations. I also show that stronger shareholders vote with management on self-related transactions when a negotiation probably occur, whereas weak shareholders vote against it and conclude that the negotiation do not necessarily serve the minority shareholders' interest. Along with that, I provide a (small) evidence for negotiations that end up with management compromise with minority shareholders. I conclude that the design of voting mechanisms is much more complicated than simply setting up a certain level of required support.

Institutional investors have management friendliness pattern in their vote: their voting history is significant in predicting their next vote. Institutional investors also vote like their peers, and most significantly, like their most similar peers, those that belong to the same institutional category. Insurance companies, in particular, tend to be management friendly and employee- and employer-owned funds tend to oppose management more often. Since the first group is more likely to suffer from conflicts of interest, strengthening minority shareholders is a necessary but not sufficient act in improving corporate governance: it should be taken along with reducing or weakening conflicts of interest of the major players.



## **References**

- Aggarwal, R., Erel, I., & Starks, L. (2015). *Influence of Public Opinion on Investor Voting and Proxy Advisors* (Fisher College of Business Working Paper Series; Dice Center WP).
- Aggarwal, R., Saffi, P. A. C., & Sturgess, J. (2015). The Role of Institutional Investors in Voting : Evidence from the Securities Lending Market. *The Journal of Finance*, *LXX*(5), 2309–2346.
- Aminadav, G., Bachrach, Y., Konstantin, K., Rosenschein, J. S., & Wilf, Y. (2011). *Rebuilding the Great Pyramids: A method for identifying control relations in complex ownership structures*.
- Armstrong, C., Gow, I., & Larcker, D. (2013). The efficacy of shareholder voting: evidence from equity compensation plans. *Journal of Accounting Research*, *51*(5), 909–950.
- Ashraf, R., Jayaramen, N., & Ryan, H. E. jr. (2009). *Conflicts of interest and mutual fund proxy voting : Evidence from shareholder proposals on executive compensation*.
- Bachrach, Y., Markakis, E., Resnick, E., Procaccia, A. D., Rosenschein, J. S., & Saberi, A. (2010). Approximating power indices: theoretical and empirical analysis. *Autonomous Agents and Multi-Agent Systems*, *20*(2), 105–122.
- Becht, M., Franks, J., Mayer, C., & Rossi, S. (2010). Returns to Shareholder Activism : Evidence from a Clinical Study of the Hermes U.K. Focus Fund. *The Review of Financial Studies*, *23*(3), 3093–3129.
- Becht, M., Polo, A., & Rossi, S. (2016). Does Mandatory Shareholder Voting Prevent Bad Acquisitions? *Review of Financial Studies*, *29*(11), 3035–3067.
- Belcredi, M., & Enriques, L. (2014). *Institutional Investor Activism in a Context of Concentrated Ownership and High Private Benefits of Control : the Case of Italy* (an Corporate Governance Institute (ECGI) - Law Working Paper No. 225/2013).
- Bethel, J., & Gillan, S. (2002). The impact of the institutional and regulatory environment on shareholder voting. *Financial Management*, *31*(4), 29–54.

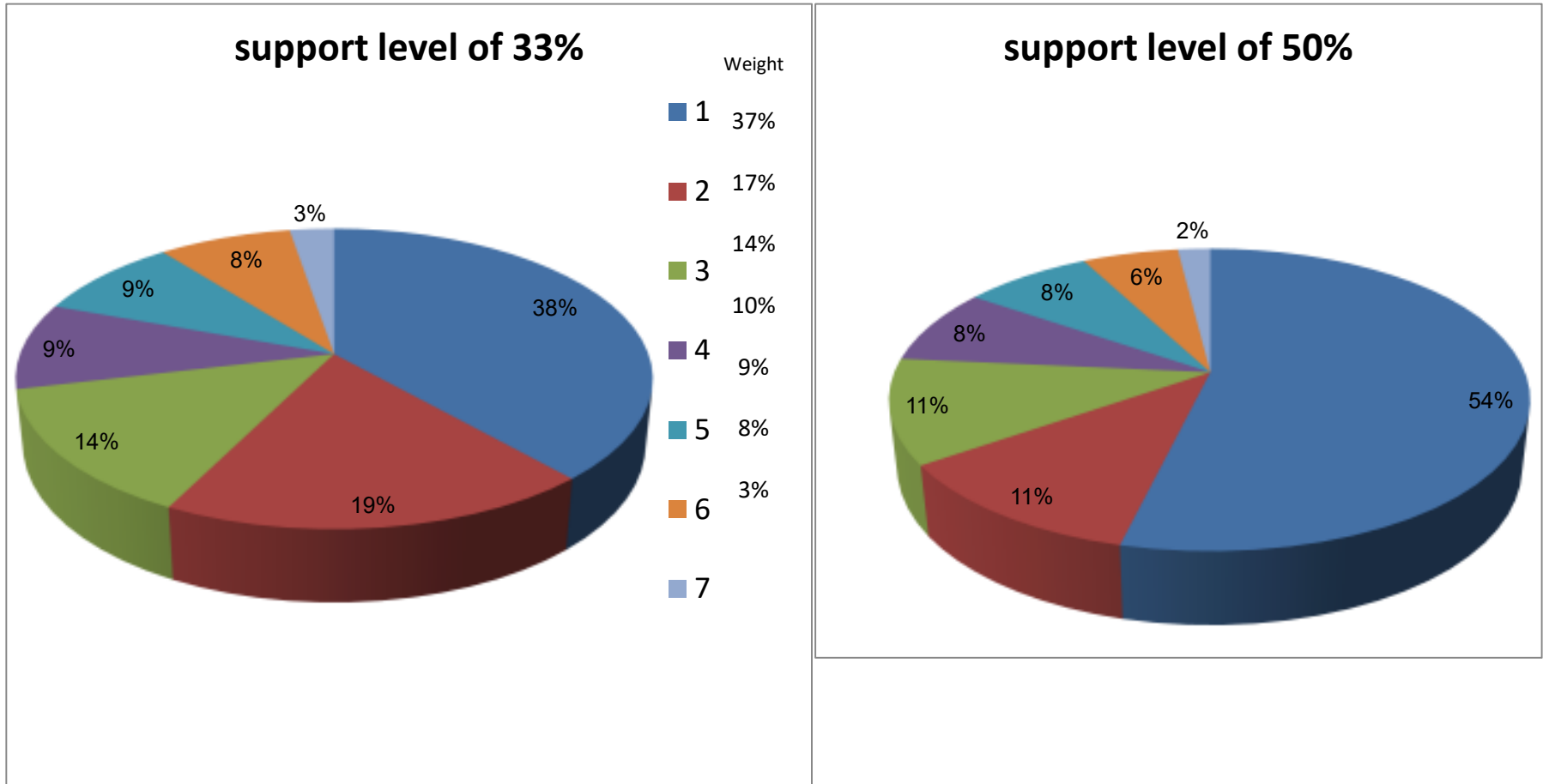
- Cai, J., Garner, J., & Walkling, R. (2009). Electing Directors. *The Journal of Finance*, 64(5), 2389–2421.
- Cai, J., Garner, J., & Walkling, R. (2010). Shareholder Access to the Boardroom : A Survey of Recent Evidence. *Journal of Applied Finance*, 20(2), 15–26.
- Cai, J., & Walkling, R. A. (2011). Shareholders ' Say on Pay : Does It Create Value ? *Journal of Financial and Quantitative Analysis*, 46(2), 299–339.
- Carleton, W. T., Nelson, J. M., & Weisbach, M. S. (1998). The Influence of Institutions on Corporate Governance through Private Negotiations : Evidence from TIAA-CREF. *The Journal of Finance*, 53(4), 1335–1362.
- Chen, Z., & Ke, B. (2013). Minority Shareholders' Control Rights and the Quality of Corporate Decisions in Weak Investor Protection Countries: A Natural Experiment from China. *The Accounting Review*, 88(4), 1211–1238.
- Choi, S. J., Fisch, J. E., Kahan, M., & Rock, E. B. (n.d.). Does Majority Voting Improve Board Accountability ? *The University of Chicago Law Review*, 83(3), 1119–1180.
- Cvijanovi, D., Dasgupta, A., & Zachariadis, K. E. (2016). Ties that Bind : How business connections affect mutual fund activism. *Journal of Finance*, 71(6), 2933–2966.
- Edelman, P. H., & Thomas, R. S. (2015). The Theory and Practice of Corporate Voting at U.S. Public Companies. In J. Hill & Thomas Randall (Eds.), *The Research Handbook of Shareholder power*. Edgar Elgar.
- Edmans, A., & Holderness, C. G. (2017). *Blockholders : A Survey of Theory and Evidence* (European Corporate Governance Institute (ECGI) - Finance Working Paper No. 475/2016).
- Felsenthal, D. S., & Machover, M. (2004). A priori voting power : what is it all about ? *Political Studies Review*, 2(1), 1–23.
- Fischer, P. E., Gramlich, J. D., Miller, B. P., & White, H. D. (2009). Investor perceptions of board performance : Evidence from uncontested director elections. *Journal of Accounting and Economics*, 48(2–3), 172–189.
- Fried, J., Kamar, E., & Yafeh, Y. (2016). Empowering Minority Shareholders and Executive Compensation : Evidence from a Natural Experiment.

- Hamdani, A., & Yafeh, Y. (2013). Institutional Investors as Minority Shareholders. *Review of Finance*, 17(2), 691–725.
- Iliev, P., Lins, K. V., Miller, D. P., & Roth, L. (2015). Shareholder Voting and Corporate Governance Around the World. *Review of Financial Studies*, 28(8), 1–59.
- Iliev, P., & Lowry, M. (2015). Are Mutual Funds Active Voters ? *The Review of Financial Studies*, 28(2), 446–485.
- Iliev, P., & Vitanova, S. (2015). *The Effect of the Say-on-Pay Vote in the U.S.*
- La Porta, R., Florencio, L.-S., Shleifer, A., & Vishny, R. W. (1998). Law and Finance. *Journal of Political Economy*, 106(6), 1113–1155.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. (2000). Investor protection and corporate governance. *Journal of Financial Economics*, 58(1–2), 3–27.
- Leech, D. (2001). Shareholder Voting Power and Corporate Governance : A Study of Large British Companies. *Nordic Journal If Political Economy*, 27(1), 33–54.
- Leech, D. (2003). Computing Power Indices for Large Voting Games. *Management Science*, 49(6), 831–837.
- Listokin, Y. (2008). Management Always Wins the Close Ones. *American Law and Economics Review*, 10(2), 159–184.
- Massa, M., & Zaldokas, A. (2016). *Bankrupt Family Firms*.
- Matvos, G., & Ostrovsky, M. (2010). Heterogeneity and peer effects in mutual fund proxy voting. *Journal of Financial Economics*, 98(1), 90–112.
- Maug, E., & Rydqvist, K. (2009). Do Shareholders Vote Strategically? Voting Behavior, Proposal Screening, and Majority Rules. *Review of Finance*, 13(1), 47–79.
- McCahery, J. A., & Sautner, Z. (2011). *Institutional Investor Preferences and Executive Compensation* (European Banking Center Discussion Paper No. 2012–2).

- Mugerman, Y., Sade, O., & Shayo, M. (2014). Long term savings decisions : Financial reform , peer effects and ethnicity. *Journal of Economic Behavior and Organization*, 106, 235–253.
- Schwartz-Ziv, M., & Wermers, R. (2016). *Do Small Institutional Shareholders Use Low-Cost Monitoring Opportunities ? Evidence from the Say on Pay Vote.*
- Varshevsky, D., & Gur Greshgorn, G. (2011). *corporate shareholders' meeting votes: voting patterns of institutional shareholders and proxy recomendations (Hebrew).*
- Winter, E. (2002). Chapter 53: “The Shapley Value.” In R. J. Aumann & S. Hart (Eds.), *Handbook of Game Theory with Economic Applications* (Vol. 3, pp. 2025–2054). Elsevier.
- Yermack, D. (2010). Shareholder Voting and Corporate Governance. *Annual Review of Financial Economics*, 2(1), 2.1-2.23.
- Zingales, L. (1995). What determines the value of corporate votes? *The Quarterly Journal of Economics*, 110(4), pp. 1047–1073

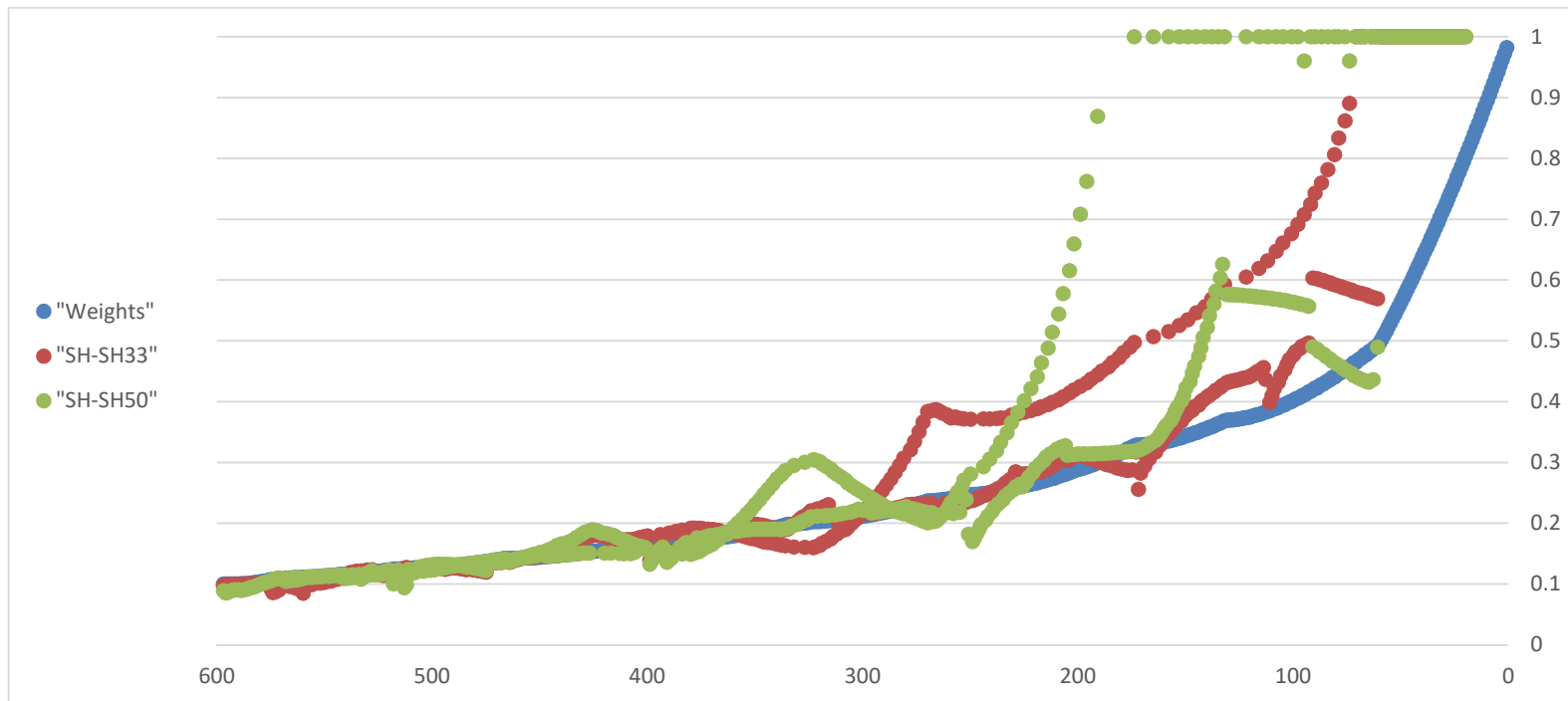
**Figure 1: Weights in voting rights and Power indices under the required support levels of 33% and 50%**

Both pies refer to players in the same voting game. Player's voting rights are indicated in the legend, whereas the pies indicate player's voting power as calculated by Banzhaf index using 33% requires support level versus 50% support level.



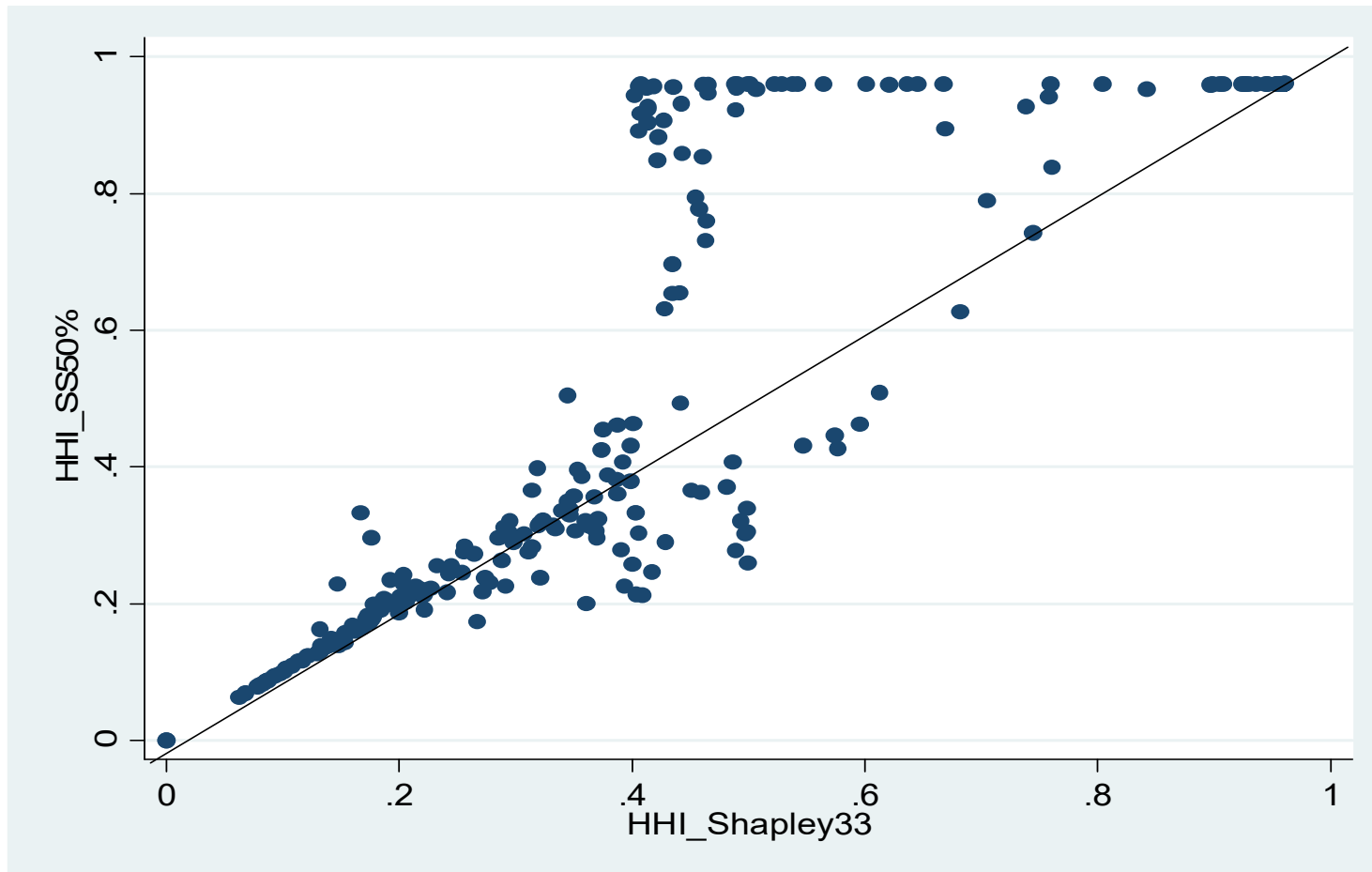
**Figure 2: Voting rights distributions simulation and voting power concentration**

Vertical axis shows the HHI score of voting rights (in blue), voting power calculated using the voting rights and the required support level of 33% (in red) and the voting power calculated using the voting rights and a required support level of 50% (in green). The 600 different distributions of voting rights were simulated using 10 shareholders in a voting game. The observations are sorted from the most concentrated distribution of voting rights (observation number 1 on the horizontal axis) to the most dispersed distribution. Wherever the green dot is higher than the respective red dot, the voting power becomes more concentrated by the higher level of required support.



**Figure 3: voting power distribution in special majority votes, under the required support levels of 33% and 50%**

For every spot in the figure, the horizontal axis indicates the HHI concentration score of shareholder's voting power under the required support level of 33% and the vertical axis indicates the HHI concentration score of shareholder's voting power under the required support level of 50%. Voting power is Shapley-Shubik index. Above the diagonal are firm's minority shareholder's power distributions that became more unequal. Sample includes one observation per firm.



**Table 1: Summary statistics**

	Special majority requirement
<b>Votes: For</b>	13,773 (76.8%)
Against	3,722 (20.8%)
Abstain	436 (2.4%)
<b>Total</b>	<b>17,931</b>
<b>proposals: passed</b>	850 (93.6%)
failed	58 (6.4%)
<b>Total</b>	<b>908</b>



**Table 2: voting power and votes cast by shareholders, by shareholder category**

Institutional investors are categorized into four categories according to the financial services they supply. The fifth category – private investors – includes votes cast by private persons, that were count as minority shareholders according to their own declaration regarding their self-interest in the issue voted on.

Institutional investor's category	Average of Shapley-Shubik Index	Average of Normalized Banzhaf Index	% of votes in which one of the institutional investors of this category is the largest	% votes AGAINST	Average opposition index	Number of votes in sample
(1) Insurance companies	0.0883	0.0898	42.0%	11.8%	0.136	3,542
(2) Investment houses	0.0634	0.0636	39.9%	23.1%	0.257	5,463
(3) Employees-owned funds	0.0089	0.0092	4.9%	28.9%	0.282	5,546
(4) Foreign investors	0.0177	0.0172	2.1%	14.3%	0.145	1,929
(5) Private investors	0.0949	0.0966	14.5%	11.2%		1,470

**Table 3: List of all issues in the database, and the required support level, before and after amendment 16.**

Issue	Required support level before amendment 16	Required support level after amendment 16
(1A) Direct or indirect self-dealing by controlling shareholders or their relatives – compensation related	1/3 of disinterested (minority) shareholders	1/2 instead of 1/3
(1B) Direct or indirect self-dealing by controlling shareholders or their relatives – related party transactions		
(2) Waivers of the duty of care, liability insurance, and indemnification when the beneficiaries include controlling shareholders or their relatives		
(3) electing outside directors	1/3 of disinterested (minority) shareholders, not including control holders	1/2 instead of 1/3
(4A) CEO/Chairperson unification+ (4B) relatives CEO and Chairperson	2/3 of disinterested (minority) shareholders	2/3 of disinterested (minority) shareholders, not including self-related
(5) charter and bylaws amendments	Supermajority (75%)	Supermajority (75%) & majority of the minority

(6) mergers approval or acquisition proposal	Supermajority (75%)	Supermajority (75%) & majority of the minority
(7) Executive compensation for professional managers or directors	Regular majority	Majority of minority and say on pay (amendment 20 <sup>35</sup> )
(7A) private assignment of shares or options	Regular majority	Majority of minority and say on pay (amendment 20 <sup>35</sup> )
(8) Compensation plans for board members	Regular majority	Majority of minority and say on pay (amendment 20)
(9) Electing directors and auditors	Regular majority	Regular majority
(10) Liability waivers, liability insurance, and indemnification for directors or officers who are not related to the controlling shareholders	Regular majority	Regular majority
(0) All other proposals: increasing the firm's authorized capital, ratifying dividends, etc.	Regular majority	Regular majority

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<sup>35</sup> Amendment 20 to the company's law passed on Dec. 12 2012 and related to all executive compensation and the compensation policy of the company.

**Table 4: votes for and against a management-sponsored proposal, by proposal issue**

<b>Proposed Issue</b>	<b>For</b>	<b>Against</b>
<b>Total Special majority</b>	<b>13,773 (78.7%)</b>	<b>3,722 (21.3%)</b>
Controlling Shareholders Compensation (1A)	2,037 (66.4%)	1,033 (33.6%)
Related Party Transaction (1B)	2,250 (76.7%)	682 (23.3%)
Waivers of duty (2)	2,842 (80.8%)	677 (19.2%)
External director elections (3)	4,820 (92.7%)	377 (7.3%)
Unification of CEO & Chairman (4A+4B)	110 (66.7%)	55 (33.3%)
Charter and bylaws amendments (5)	590 (69.2%)	263 (30.8%)
Mergers & Acquisitions (6)	58 (55.8%)	46 (44.2%)
Executive (including board members) compensation (7,8)	1,066 (64.4%)	589 (35.6%)

**Table 5, panel A:****Voting power and shareholder's characteristics relation to the probability to vote "against"**

Logistic regressions. Dependent variable is "vote against". Power index is Shapley-Shubik index. Same regressions with Normalized Banzhaf indices show very similar results. Shareholder categories are dummy variables for the 3 categories: insurance companies, investment houses and employee owned funds, respectively. Omitted category is foreign investors. Standard errors are in parenthesis. Firm's size (capital in December 2012) and profitability (ROE for 2012) data is taken from the SuperAnalyst information system. \*\*\*, \*\* and \* denote statistical significance at the 1, 5 and 10% levels, respectively.

Logistic regression :Vote (1=against)	(1)	(2)	(3)	(4)	(5)
Power Index	-1.644*** (0.191)	-1.074*** (0.182)	-1.764*** (0.567)	-2.297*** (0.653)	-2.310*** (0.650)
Shareholder Category 1: Insurance company		-0.142* (0.075)	-0.207*** (0.081)	-0.225*** (0.084)	-0.218*** (0.084)
Shareholder Category 2: Investment house		0.660*** (0.062)	0.632*** (0.066)	0.570*** (0.068)	0.570*** (0.068)
Shareholder Category 3: Employee owned fund		0.893*** (0.061)	0.905*** (0.064)	0.911*** (0.066)	0.913*** (0.066)
Power Index x Insurance company			1.289** (0.648)	1.337* (0.751)	1.343* (0.748)
Power Index x Investment houses			0.793 (0.615)	0.973 (0.711)	1.001 (0.708)
Power Index x Employee owned fund			-4.781*** (1.716)	-5.074*** (1.938)	-4.965*** (1.932)
Log(Capital) DEC2012				-0.047*** (0.012)	-0.046*** (0.012)
ROE 2012				-0.059 (0.168)	-0.093 (0.168)
2013 year dummy					0.121*** (0.041)
Constant	-1.254*** (0.020)	-1.786*** (0.053)	-1.76*** (0.055)	-1.082*** (0.178)	-1.137*** (0.179)
Observations	16,943	16,943	16,943	15,566	15,566
Pseudo R <sup>2</sup>	0.0058	0.0313	0.0326	0.0342	0.0348

**Table 5, Panel B:****Voting power and vote characteristics relation to the probability to vote "against"**

Logistic regressions. Dependent variable is "vote against". Power index is Shapley-Shubik index. Same regressions with Normalized Banzhaf indices show very similar results. Shareholder categories are dummy variables for the 3 categories: insurance companies, investment houses and employee owned funds, respectively. Omitted category is foreign investors. Issues are dummy variables referring to the proposal voted on. Omitted issue is 5: charter and bylaws amendments. Compensation issues is a dummy variable including issues 1A, 7, 7A and 8. Standard errors are in parenthesis. Firm's size (capital in December 2012) and profitability (ROE for 2012) data is taken from the SuperAnalyst information system. \*\*\*, \*\* and \* denote statistical significance at the 1, 5 and 10% levels, respectively.

Logistic regression :Vote (1=against)	(1)	(2)
Power Index	-1.840*** (0.103)	-1.832*** (0.254)
Shareholder Category 1: Insurance company	-0.365*** (0.094)	-0.361*** (0.094)
Shareholder Category 2: Investment house	0.045 (0.084)	0.038 (0.084)
Shareholder Category 3: Employee's owned fund	0.295*** (0.083)	0.288*** (0.083)
Issue1A: self-dealing – compensation	0.278*** (0.103)	0.229** (0.104)
Issue1B: Self-dealing – related party transaction	-0.512*** (0.106)	-0.563*** (0.107)
Issue2: Waivers of duty of care: controlling shareholder	-0.714*** (0.106)	-0.767*** (0.108)
Issue3: electing external directors	-1.973*** (0.111)	-2.039*** (0.113)
Issue4A: CEO and Chairman	0.311 (0.717)	0.311 (0.717)
Issue6: mergers approval or acquisition proposal	0.477** (0.236)	0.417* (0.237)
Issue7:Executive compensation for professional managers or directors	0.515*** (0.127)	0.359*** (0.136)
Issue7A:private assignment of shares or options	1.285*** (0.244)	1.181*** (0.246)
Issue8:Compensation plans for board members	-0.065 (0.126)	-0.193 (0.132)
Log(Capital) DEC2012	-0.011 (0.015)	-0.013 (0.015)
ROE 2012	-0.399** (0.207)	-0.434** (0.207)
2013 dummy		0.165*** (0.050)
Constant	-1.371*** (0.244)	-1.359*** (0.244)
Observations	14,467	14,467
Pseudo R <sup>2</sup>	0.1539	0.1546

**Table 6: votes FOR and AGAINST distribution comparison-negotiation effect.**

Panel A include all proposals in the issues 1A: compensation related self-dealing and 1B: related party transactions, that were not delayed. Panel B includes 74 proposals, voted on shareholder meetings, that were delayed by an announcement to the TASE a short period before the original meeting date. I use the delay as a proxy for negotiation between management and shareholders. \*\*\*, \*\* and \* denote statistical significance at the 1, 5 and 10% levels, respectively at the two-sample mean comparison test.

Panel A: proposals without indication for negotiation

Power Quartiles	"FOR" votes	"AGAINST" votes
(1) – strongest	81.0%***	19.0%***
(2)	73.1%	26.9%
(3)	69.6%*	30.4%*
(4) – weakest	73.4%***	26.6%***

Panel B: proposals with indication for negotiation

(1) – strongest	90.0%***	10.0%***
(2)	71.9%	28.1%
(3)	66.1%*	33.9%*
(4) – weakest	65.4%***	34.6%***

**Table 7: Management Friendliness and Peer Effect Regressions**

Logistic regressions. Dependent variable is "vote against". Power index is Normalized Banzhaf index. Same regressions with Shapley-Shubik indices show very similar results. Fund's Opposition Index is the average of historical votes by every fund manager, Peers Opposition Index is the average of Fund's Opposition Indices of all other institutional investors present at the vote. Close peer OI is the same as Peer Opposition Index, but includes only other institutional investors from the same shareholder category as the fund manager who votes. Compensation issues is a dummy variable including issues 1A, 7, 7A and 8. Peer OI and Close Peer OI in compensation issues are the interactions of the respective Opposition index with compensation issues dummy. Standard errors are in parenthesis. \*\*\*, \*\* and \* denote statistical significance at the 1, 5 and 10% levels, respectively.

Logistic regression :Vote (1=against)	(1)	(2)	(3)	(4)	(5)
Fund's Opposition Index (OI)	3.244*** (0.126)	3.832*** (0.146)	3.439*** (0.173)		
Peers Opposition Index		2.163*** (0.611)	1.278** (0.648)	3.511*** (0.728)	3.408*** (0.860)
Close peer OI			1.444*** (0.353)	-0.999* (0.536)	-1.739*** (0.583)
Power Index		-1.818*** (0.228)	-1.771*** (0.227)	-1.550*** (0.244)	-1.567*** (0.245)
Issue1A: self-dealing – compensation		0.259*** (0.100)	0.227*** (0.100)	0.209** (0.102)	-0.540 (0.346)
Issue1B: Self-dealing – related party transaction		-0.554*** (0.102)	-0.553*** (0.102)	-0.654*** (0.105)	-0.657*** (0.104)
Issue2: Waivers of duty of care: controlling shareholder		-0.737*** (0.103)	0.737*** (0.103)	-0.801*** (0.105)	-0.803*** (0.105)
Issue3: electing external directors		-1.975*** (0.108)	-1.971*** (0.108)	-2.143*** (0.111)	-2.138*** (0.110)
Issue4A: CEO and Chairman		0.524 (0.733)	0.510 (0.742)	0.433 (0.731)	0.361 (0.732)
Issue6: mergers approval or acquisition proposal		0.451* (0.2333)	0.454* (0.233)	0.429* (0.240)	0.421* (0.239)
Issue7:Executive compensation for professional managers or directors		0.491*** (0.125)	0.496*** (0.125)	0.397*** (0.129)	-0.329 (0.346)
Issue7A:private assignment of shares or options		1.662*** (0.229)	1.672*** (0.229)	1.643*** (0.233)	1.597*** (0.233)
Issue8:Compensation plans for board members		-0.058 (0.122)	-0.057 (0.122)	-0.247** (0.126)	-1.01*** (0.359)
Peers OI in compensation issues					0.858 (1.459)
Close peer OI in compensation issues					2.298*** (0.639)
ROE 2012		0.389*** (0.136)	0.391*** (0.136)	0.268** (0.135)	0.248* (0.136)
Constant	-2.063*** (0.038)	-2.097*** (0.175)	-2.144*** (0.175)		
Fund Fixed effects	No	No	No	Yes	Yes



Observations	16,044	14,669	14,669	14,602	14,584
Pseudo R <sup>2</sup>	0.0404	0.1493	0.1504	0.1192	0.12