

## DISCUSSION PAPER SERIES

No. 7934

**INSTITUTIONAL INVESTORS AS  
MINORITY SHAREHOLDERS:  
DO THEY MATTER WHEN  
OWNERSHIP IS CONCENTRATED?**

Assaf Hamdani and Yishay Yafeh

*FINANCIAL ECONOMICS*



**Centre for Economic Policy Research**

[www.cepr.org](http://www.cepr.org)

Available online at:

[www.cepr.org/pubs/dps/DP7934.asp](http://www.cepr.org/pubs/dps/DP7934.asp)

# **INSTITUTIONAL INVESTORS AS MINORITY SHAREHOLDERS: DO THEY MATTER WHEN OWNERSHIP IS CONCENTRATED?**

**Assaf Hamdani, Hebrew University of Jerusalem  
Yishay Yafeh, Hebrew University of Jerusalem and CEPR**

Discussion Paper No. 7934  
July 2010

Centre for Economic Policy Research  
53–56 Gt Sutton St, London EC1V 0DG, UK  
Tel: (44 20) 7183 8801, Fax: (44 20) 7183 8820  
Email: [cepr@cepr.org](mailto:cepr@cepr.org), Website: [www.cepr.org](http://www.cepr.org)

This Discussion Paper is issued under the auspices of the Centre's research programme in **FINANCIAL ECONOMICS**. Any opinions expressed here are those of the author(s) and not those of the Centre for Economic Policy Research. Research disseminated by CEPR may include views on policy, but the Centre itself takes no institutional policy positions.

The Centre for Economic Policy Research was established in 1983 as an educational charity, to promote independent analysis and public discussion of open economies and the relations among them. It is pluralist and non-partisan, bringing economic research to bear on the analysis of medium- and long-run policy questions.

These Discussion Papers often represent preliminary or incomplete work, circulated to encourage discussion and comment. Citation and use of such a paper should take account of its provisional character.

Copyright: Assaf Hamdani and Yishay Yafeh

July 2010

## **ABSTRACT**

### **Institutional Investors as Minority Shareholders: Do They Matter When Ownership Is Concentrated?\***

We shed new light on the corporate governance role of institutional investors in markets where concentrated ownership and business groups are prevalent. When companies have controlling shareholders, institutional investors, as minority shareholders, can play only a limited role in corporate governance. Moreover, the presence of powerful families who control many public companies through business groups creates new potential sources of conflicts of interests for institutional investors. Using hand-collected data on voting patterns of institutional investors in Israel, we establish four main stylized facts: (1) Legal intervention plays an important role in shaping voting behavior; (2) Voting against company proposals is more likely in compensation-related proposals, even when institutional investors are unlikely to influence outcomes; (3) Institutional investors with certain other business activities (e.g. underwriting) and those affiliated with a public company or business group are more likely to support insider-sponsored proposals than "pure-play," stand-alone investors; and (4) Large firms tend to enjoy a more favorable treatment from institutional investors, whereas firm performance has virtually no impact on voting. One possible implication of these results is that, in order for institutions to play a role in corporate governance, what matters most is not the legal power granted to minority shareholders but rather the absence of conflicts of interest.

JEL Classification: G20, G30, K20 and K22

Keywords: business groups, corporate governance, corporate law, emerging markets, institutional investors, minority shareholders, mutual funds and shareholder activism

Assaf Hamdani  
School of Law  
The Hebrew University  
Mount Scopus  
91905 Jerusalem  
ISRAEL

Email: [ahamdani@mscc.huji.ac.il](mailto:ahamdani@mscc.huji.ac.il)

For further Discussion Papers by this author see:  
[www.cepr.org/pubs/new-dps/dplist.asp?authorid=156824](http://www.cepr.org/pubs/new-dps/dplist.asp?authorid=156824)

Yishay Yafeh  
School of Business Administration  
The Hebrew University  
Mount Scopus  
91905 Jerusalem  
ISRAEL

Email: [msyafeh@mscc.huji.ac.il](mailto:msyafeh@mscc.huji.ac.il)

For further Discussion Papers by this author see:  
[www.cepr.org/pubs/new-dps/dplist.asp?authorid=126342](http://www.cepr.org/pubs/new-dps/dplist.asp?authorid=126342)

\* We thank Konstantin (Kosta) Kosenko for sharing with us his data on pyramidal groups in Israel, and Or Alcon, Yonatan Cwikel, Galit Deli, Erez Gadi, Ziv Giladi, Nitzan Haklai, Ayal Hacoheh, Yael Hollander, Roie Hauser Assaf Naveh, and Tamar Neshet for outstanding research assistance. For helpful comments and suggestions, we thank Sharon Hannes, Eugene Kandel, Amir Licht, Stas Sokolinsky, and seminar participants at Bar Ilan University, the College of Management, IDC, the Hebrew University, the Israel Securities Authority and the Spanish Law and Economics Association. Financial support from the Israel Science Foundation (Grant No. 1187/08) and from the Krueger Center at the Hebrew University is gratefully acknowledged. All remaining errors are our own.

Submitted 09 July 2010

## **I. Introduction**

The growth of institutional investors' stock ownership has sparked extensive research on their potential role in corporate governance (e.g. Black, 1992; 1998, Gillan & Stark, 2007). But while concentrated ownership and business groups are prevalent around the world, existing research on institutional investors typically focuses on widely-held firms in the United States and the United Kingdom. This paper uses hand-collected data from Israel to explore the role of institutional investors as minority shareholders in an environment where ownership is concentrated and business groups are prevalent. Our study sheds new light on the effect of legal measures of minority protection, conflicts of interests and regulatory intervention on the voting of institutional investors.

The presence of a dominant shareholder alters the corporate governance role of institutional investors along three dimensions: First, it limits institutional investors' voting influence. In companies with dispersed ownership, outside investors can collectively obtain the necessary majority for vetoing management's proposals. Moreover, shareholders often have the right to submit proposals that could win majority support notwithstanding management's objection. This, in turn, facilitates various forms of shareholder activism, such as shareholder (binding or nonbinding) proposals or contested elections to the company's board. By contrast, when the dominant shareholder often holds as much as two thirds of the firm's voting rights, the extent to which institutional shareholders can use their votes as a mechanism for disciplining corporate insiders is limited.

Second, whereas investors in dispersedly-owned firms are primarily concerned with disciplining managers and preventing them from getting excessive pay or perks, minority investors in firms with a controlling shareholder are primarily concerned with self-dealing, "tunneling," and other forms of minority expropriation (Gilson and Gordon, 2003; Djankov et al., 2008). A key mechanism for protecting minority shareholders under

such circumstances is subjecting self-dealing transactions to a so-called majority-of-minority vote (Goshen, 2003). This requirement empowers minority shareholders — especially institutional investors — to take an active role in monitoring controlling shareholders.

Third, the prevalence of family-controlled business groups may create novel conflicts of interest problems. Pyramidal ownership grants dominant families considerable economic power (see Morck et al., 2005, and Khanna and Yafeh, 2007) thereby amplifying the concern that institutional shareholders' business ties will affect their voting. Moreover, dominant families in some countries also own institutional investors that, in turn, purchase securities of (affiliated and other) firms. These cross ownership patterns subject institutional investors to a variety of potential conflict when they are required to cast a vote.

Israel's regulatory and business environment provides a unique opportunity for studying the role of institutional investors under concentrated ownership. Israeli regulators have attempted to harness institutional investors to prevent minority expropriation. Israeli law subjects certain self-dealing transactions to a mandatory vote by "disinterested" shareholders, thereby empowering minority shareholders to affect vote outcomes. Moreover, Israel has adopted laws that require institutional investors to cast a vote on certain proposals (but not on others). Given the recent proposals to adopt such a regime in other countries with concentrated ownership (see, for example, Fry, 2009) our hand-collected data on institutional investors' voting provide a rare opportunity to explore the effectiveness of regulatory intervention to enhance institutional investor activism. Specifically, we can examine whether institutional investors indeed become more active when the law provides them (as minority shareholders) with more voting power (see also Listokin 2009).<sup>1</sup>

---

<sup>1</sup> On this issue in the United States, see Cremers and Romano (2009).

Israel provides an interesting test case not only because of its legal environment but also because of the structure of its financial industry. First, institutional investors vary in their ownership structure. Some institutional investors are government-owned, others are employee-owned, and yet others are owned by for-profit entities. Moreover, some institutional investors are wholly-owned subsidiaries of publicly-traded entities or entities that are owned in turn by business groups. Second, the potential for business ties also varies across institutional investors. Some investors have no other businesses and thus have no interests other than those of the individuals whose money they manage. By contrast, many profit-oriented institutional investors are business entities that provide a variety of financial services (asset management, banking, insurance or underwriting). These variations allow us to examine the impact of institutional investor ownership and potential business ties on voting behavior.

Our empirical analysis establishes a set of (not very encouraging) stylized observations on the limited extent to which institutional investors play a role in corporate governance when ownership is concentrated. First, we examine the issues on which investors choose to cast an active (FOR/AGAINST) vote (rather than abstain or avoid voting at all). Our hypothesis is that institutional investors in firms with a controlling shareholder become more active when the law grants minority shareholders an effective voting power. Yet, we find that it is legal intervention — rather than minority shareholders' voting power — that drives institutional investors to cast a vote. Most notably, institutional investors simply do not vote on director elections, even though director elections are a key channel for shareholder activism in a dispersed-ownership environment (Cai et al., 2009). This result is not driven by the fact that controlling shareholders hold sufficient voting power to elect directors at their will; institutional investors do not vote on director elections even when Israeli law grants minority shareholders the power to influence board composition.

Our second set of results focuses on factors affecting the decision of an institutional investor to support insider-sponsored proposals.<sup>2</sup> Our hypothesis is that the tendency of institutional investors to support insiders varies across issues. Given the potential for minority expropriation through “tunneling,” we expect proposals to ratify controllers’ self-dealing transactions to be the most objectionable. More generally, we expect proposals concerning which minority shareholders have effective voting power to be associated with higher levels of votes AGAINST by institutional investors.

Our findings present a more nuanced picture. Institutions tend to vote in favor of the vast majority of proposals. Their level of support for company proposals does vary across issues, but is not affected by the required majority. Rather, institutional investors are most likely to vote AGAINST proposals to approve compensation for executives and other company officers. Although executive compensation proposals are brought to a vote under three different legal clauses (described below) with very different levels of minority shareholder influence, institutions are consistently less likely to support these proposals (support rates range between 40-60%) than other proposals such as self-dealing transactions (78% support, on average), chairman/CEO unification (75%), and other issues. One explanation for the tendency to oppose executive compensation proposals is that such proposals tend to be visible and controversial, and therefore attract media attention (see Norden and Strand, 2008). A more benign interpretation is that controlling shareholders use generous compensation arrangements as the major mechanism of minority shareholder expropriation.<sup>3</sup>

In line with the hypothesis that potential business ties affect voting, we find that institutional investors conducting certain other business activities (such as underwriting) are, on average, more likely to support company proposals than government or employee-

---

<sup>2</sup> In an environment where ownership is highly concentrated, managers normally represent the interests of controlling shareholders. We therefore treat management and controllers’ proposals alike.

<sup>3</sup> At present, we are unable to evaluate the total monetary value involved in compensation-related and other proposals, so that it is impossible to test the extent to which compensation-related votes involve more substantial costs than other issues brought to a vote at shareholder meetings.



owned funds (which we label “pure-play investors”). In addition we find that institutional investors owned by public companies or (in most tests) by a business group are more likely to support company proposals than privately owned or stand-alone entities. Naturally, conflicts of interest of this nature (business group ownership of institutional investors) could not have been documented in US-based studies. Again, we find that conflicts seem to affect voting even when institutional investors' vote does not matter.

Our last set of findings relates firm-level characteristics to institutional investors' voting behavior. Large firms tend to elicit relatively more FOR votes than other firms; we find no evidence, however, that firms affiliated with dominant families elicit more FOR votes. Firm performance (profitability, market-to-book ratios, or leverage) is not correlated with the likelihood of a supporting vote. The equity stake of the controlling shareholder is also not very strongly correlated with the probability of institutional support, even though the incentives to “tunnel” are reduced when the equity stakes of controlling shareholders are high.

The overall conclusion is, then, that in order to induce institutional investors to play an active role in corporate governance in the presence of strong corporate insiders, legislation that would empower minority shareholders or subject certain proposals to the approval of a special majority may not suffice. Instead, our results suggest that conflicts of interests should be avoided, possibly by forcing institutional investors to provide one service only (asset management) and by requiring them to be independently owned.

The findings of the present study are, however, subject to two qualifications. First, we cannot observe private pre-vote negotiations between the controlling shareholders (or management) and large institutional investors (discussed by Carrelton et al., 1998), nor can we acquire information about proposals that were given serious consideration within firms but taken off the table given the likelihood of overwhelming investor objections. Furthermore, we cannot identify proposals that were significantly modified at a

preliminary stage given the likely reaction of institutional investors. To the extent that negotiations with pivotal institutional investors precede actual votes, and assuming that large investors are more likely to be pivotal, we would expect these investors to be more supportive of management if, following preliminary negotiations, proposals reflect their preferences; in fact, we find that large institutions are less likely to vote FOR, so that pre-vote negotiations with the largest minority shareholders are not always successful, although this observation does not fully alleviate the concern about unobserved proposals.<sup>4</sup> The variation in support rates across proposals on different issues is also unlikely to be consistent with effective pre-vote negotiations.

Our second constraint is that we cannot analyze the potential impact of recommendations by voting advisory services.<sup>5</sup> The market share of these services has increased significantly in recent years. To the best of our knowledge, however, these services (which do not make their recommendations publicly available) did not have a broad client base in 2006. Furthermore, the considerable variation we observe in the voting behavior of small institutional investors (typical clients of voting advisory services) suggests that the influence of advisory services during our sample period must have been limited.

The rest of the paper is organized as follows. In the next section we survey the related literature. The regulatory background and an overview of the data set are presented in Section III. Section IV presents a large set of comparisons across various sub-samples, which establish most of the empirical regularities in the sample. Multivariate regression specifications, robustness tests and various extensions are presented in Section V, and Section VI concludes.

---

<sup>4</sup> Given the poor quality of the reports on the equity stakes of institutional investors (discussed below), we are unable to use these data to measure how pivotal each investor is likely to be.

<sup>5</sup> See Alexander et al. (2009) for a recent study of the role of advisory services in proxy voting.

## II. Related Literature

This study brings together two lines of research — on the corporate governance role of institutional investors, and on investor protection under concentrated ownership.

The main question in the first body of literature is whether the growth of institutional shareholdings can enhance investor protection. This question has important policy implications, as the success of reforms designed to provide shareholders with more power vis-à-vis management ultimately depends on the likely use of such powers by institutional investors (Listokin, 2009). Researchers have used a variety of strategies to assess the role of institutional investors in corporate governance;<sup>6</sup> our paper is especially close to studies focusing on voting behavior: Brickley et al. (1988; 1994) find that institutions that are less subject to management influence (e.g. foundations and public-employee pension funds) are more likely to oppose management than “pressure-sensitive” banks, insurance companies, and trusts, which may derive benefits from business activities under management control.<sup>7</sup> Davis and Kim (2007) directly link mutual funds’ voting records and data on business ties (pension management). They find no evidence that mutual funds’ votes at client firms differ from their votes at non-client firms. When they examine aggregate votes at the fund family level, however, they do find a positive relation between business ties and the propensity to vote with management. Ashraf et al. (2009), in contrast, report a negative correlation between firm-level business ties and votes by mutual funds on shareholder proposals concerning executive compensation. They also find that the magnitude of fees that mutual fund families receive for pension-related services are negatively correlated with their tendency to support shareholder

---

<sup>6</sup> See Gillan and Starks (2003) and (2007) for literature reviews. Some studies focus on the connection between institutional ownership and various proxies for managerial slack, such as the pay-for-performance sensitivity of executive compensation (e.g. Hartzell and Starks, 2003) and takeover bids (Chen, Hartford and Li, 2007). Other studies examine the various formal and informal measures that institutional shareholders can apply to engage management (Becht et. al., 2009).

<sup>7</sup> These studies neither examine the individual voting records of institutional investors (which were not available then) nor look at actual ties between investors and firms.

compensation proposals.<sup>8</sup> Rothberg and Lilien (2006), in contrast, find no significant differences between the votes of mutual funds with no business activities and those of funds with a non-mutual fund business. Our findings support the hypothesis that business ties may affect institutional investors' voting, although we also find that investors carrying other business activities are relatively more likely to vote FOR on certain company proposals even when insiders do not need their vote.

Other studies assess the extent to which firm-level and other considerations may affect institutional shareholders' votes. Cai et al. (2009) find that firm performance affects votes on director elections. Morgan et al. (2009) find that mutual funds are more likely to support shareholder proposals (that is, vote against management) on issues that are perceived to be value enhancing (board, governance and compensation proposals). They also find that mutual funds are more likely to support shareholder proposals in poorly-governed firms. Ashraf and Jayaraman (2007) find that mutual funds are more likely to support shareholder proposals in smaller firms, firms with better past performance and with entrenched management. They further find that mutual fund families are more likely to take management's side when they hold a large percentage of equity.<sup>9</sup> While we find no evidence that firm performance affects institutional investors' voting, we do find that investors are more likely to vote FOR on proposals submitted by larger firms.

Existing studies focus nearly exclusively on the voting behavior of mutual funds in the United States. Only a few very recent studies examine institutional investor activism in markets with concentrated ownership and business groups: Giannetti and Laeven (2009) examine the impact on firm value of Sweden's pension reform and provide some evidence on the difference between pension funds affiliated with business and

---

<sup>8</sup> See also Matvos and Ostrovsky (2008) who find that, in mergers, the equity stake of an institutional investor in the target company is likely to affect voting behavior in the bidder.

<sup>9</sup> For additional studies on institutional investor voting behavior and firm performance, see also Ng et al. (2009), and Taub (2009). Cremers and Romano (2009) study the impact of a regulatory change in voting disclosure on the behavior of institutional investors. A few recent papers focus on strategic voting, where institutions take into account the strategic behavior of other shareholders (Matvos and Ostrovsky, 2009; Maug and Rydkvist, 2009). We do not explore these issues here.

financial groups and other pension funds. Norden and Strand (2008) also use data from Sweden to study institutional shareholder activism as reflected in shareholder meetings.<sup>10</sup>

Our paper is also related to the growing literature, initiated by La Porta et al. (1998), on investor protection under concentrated ownership. This literature has recognized that the majority-minority conflict underlying firms with controlling shareholders differ from the manager-owner conflict underlying firms with dispersed ownership. Yet, only scant attention has been devoted so far to the specific legal mechanisms that lawmakers should adopt to protect outside investors from expropriation by controlling shareholders (for some exceptions, see Bebchuk and Hamdani, 2009; Gilson and Gordon, 2003). One of the key mechanisms for protecting minority shareholders is subjecting self-dealing transactions to a so-called majority-of-minority vote (Goshen, 2003; Djankov et al., 2008).

We add to the existing literature along several dimensions: First, we provide evidence on institutional investors' voting on company proposals concerning self-dealing. More generally, we study institutional investors' use of legal measures to empower minority shareholders, thereby shedding new light on the effectiveness of such measures. Second, we test for institutional investors' conflicts of interest arising from concentrated and pyramidal ownership. Third, we provide evidence from outside the United States indicating that business ties might affect the tendency of institutional investors to support insiders. Finally, our hand-collected data include information on all types of institutional investors rather than focus on a specific type (e.g. mutual funds).

### **III. Institutional Investors, the Statutory Duty to Vote and Data Construction**

Israeli law expressly requires institutional investors to cast a vote. The statutory duty to vote, however, is not universal. Rather, it consists of two elements: first, an open-

---

<sup>10</sup> De Jong et al. (2006) study shareholder meetings in the Netherlands. Choi and Cho (2003) offer a case study of activism by a Korean NGO in the context of concentrated ownership and business groups. Amzaleg et al. (2009, 2007) offer a preliminary study of mutual fund votes from Israel.

ended “duty-of-care” standard under which institutional investors must vote on issues that could affect their own investors; second, an explicit duty to vote on self-dealing transactions with controlling shareholders, directors, and senior officers.

Institutional investors in Israel are subject to two distinct regulatory regimes. Mutual funds are regulated by the Israeli Securities Authority (ISA), and report voting on a fund-family level.<sup>11</sup> Pension funds, provident funds,<sup>12</sup> and life insurance accounts provide tax-subsidized long-term savings services and are subject to a single regulatory regime under the Ministry of Finance’s supervision. We refer to them throughout as pension funds. Pension funds post their voting records on their web sites, but are not required to file them electronically.

We therefore obtain data on all votes by mutual funds; with respect to pension funds, we collect data on the five largest insurance companies and for all pension and provident funds with at least half a billion NIS (about US \$125 million) assets under management. Overall, our data set includes over 26,000 votes from 2006.<sup>13</sup> This number, however, includes about 10,000 “No Votes:” Israeli law prohibits pension funds from abstaining, whereas mutual funds can abstain under very limited circumstances. However, Israeli law does not require pension funds to cast a vote on all issues. It turns out that many pension funds report their “No Votes,” whereas mutual funds simply do not report proposals on which they did not vote. In the empirical analysis we focus primarily on the active 15,500 For/Against votes FOR/AGAINST

We first identify proposals subject to supermajority requirements under Israeli law: Category 1 includes direct or indirect self-dealing by controlling shareholders. This category includes two sub-categories: compensation arrangements with controlling

---

<sup>11</sup> This means that, unlike some prior studies, we cannot compare votes of individual mutual funds within a family of mutual funds.

<sup>12</sup> Provident funds are a medium to long-term savings vehicle, which, for the purpose of this study, is treated as a pension fund.

<sup>13</sup> We cover a full calendar year to prevent omission of votes that might take place in any specific part of a calendar year. We cover only one year given the complexity of hand-collecting the data. The year 2006 is the calendar year closest to when we started this project; we are aware of no reason why 2006 would be different than any other year in terms of the issues on which investors vote.

shareholders or their family members (1A), and business transactions with controllers or their affiliated entities (1B, including transactions between members of business groups). Two requirements characterize this category. First, Israeli law requires companies to identify these transactions and (subject to certain materiality thresholds) submit them to a shareholder vote; and, second, these transactions must be approved not only by a majority of shareholders, but also by a third of the disinterested (minority) shareholders. Institutional investors are expressly required to cast a vote on proposals in these categories. As discussed in detail below, these two sub-categories differ dramatically in the extent of institutional support: compensation related proposals (Category 1A, about 1400 FOR/AGAINST votes) elicit only about half the support rate observed in related-party transactions that do not involve compensation (Category 1B, about 2400 FOR/AGAINST votes).

Category 2 (over 3000 FOR/AGAINST votes) includes votes on executive risk-shifting measures — waivers of the duty of care, liability insurance, and indemnification — but only when the beneficiaries of such measures include the controlling shareholder or her family members. Israeli law requires that at least a third of disinterested shareholders approve these measures and, again, institutional investors are explicitly required to vote on these issues.

Category 3 (with only 227 FOR/AGAINST votes), on which there is no explicit duty to vote, includes votes on electing “outside directors.” Each public company must appoint at least two outside directors, who must be independent from both the controlling shareholder and management and whose candidacy must be approved not only by a majority of shareholders, but also by a third of minority shareholders.

Category 4 (329 FOR/AGAINST votes) includes votes on CEO/Chairperson unification. Unlike in other countries, the default norm under Israeli law is that a public company CEO cannot serve as the board’s chairperson. Companies that insist on unifying the chairperson/CEO roles can do so only for a period of three years, and after submitting

a proposal to shareholder vote. This proposal must be approved by two thirds of minority shareholders. There is no explicit duty to vote on this issue, although the proportion of active votes cast is quite high (about 90%), presumably because, despite the ambiguity of the law, most institutional investors regarded voting in this category as compulsory.

The next two categories (together, consisting of about 980 FOR/AGAINST votes) cover issues that must be approved by a supermajority vote of 75%. These include charter amendments where a 75% majority is required (for historical reasons), and certain mergers or other reorganizations.<sup>14</sup> Although Israeli law does not directly provide minority shareholders with the power to affect the vote outcome on these issues, the supermajority requirement can provide the minority with some influence when the controller holds less than 75% of the votes. There is no explicit duty to vote on these issues, but attendance is quite high. It is noteworthy that support rates in Category 5 votes are much lower than in Category 6, despite the similar majority requirements.

The rest of the categories require a simple majority vote. Category 7 includes executive compensation for professional managers and board members (who are not related to the controlling shareholder). Israeli law requires a shareholder vote on directors' compensation arrangements. This requirement might apply under limited circumstances (for example, when a majority of the board is deemed to be conflicted) to officers' compensation as well. This category is one of the largest in our sample (over 2500 FOR/AGAINST votes). Category 8 includes votes on liability waivers, liability insurance, and indemnification for directors or officers who are not related to the controlling shareholders (over 1200 FOR/AGAINST votes). Category 9 includes votes on electing directors and auditors (nearly 350 FOR/AGAINST votes), and resembles Category 3 in exhibiting a very low proportion of active FOR/AGAINST votes (about

---

<sup>14</sup> The statute in effect prior to 2000 required a 75% majority vote in order to amend a firm's charter. This requirement continues to apply for firms that have not opted out of this provision. Category 6 includes transactions under Section 350 of the Israeli Companies Act of 1999. This open-ended provision allows firms to engage in a variety of transaction under a court's supervision.



6%). Category 10 includes votes on compensation plans for board members (approximately 720 FOR/AGAINST votes).

The remaining proposals in the sample (on various issues such various charter and bylaw amendments, increasing the firm's authorized capital, dividend ratifications, ratifying financial statements and employee stock options plans) are grouped together into a benchmark category, Category 0 (over 2000 FOR/AGAINST votes), with a relatively high — 83% — support rate and a relatively low — 43% — attendance rate.

#### **IV. Main Results Part I: Sample Statistics and Comparison across Sub-Samples**

Table 1 describes the voting categories in our sample and provides information by category on the proportion of active (FOR/AGAINST) votes out of all votes;<sup>15</sup> on the proportion of supporting (FOR) votes out of all active (FOR/AGAINST) votes; and on proportion of proposals adopted.

It is interesting to note that, in Table 1, the overwhelming majority of proposals are approved with little variation across categories. In other words, varying degrees of institutional support across categories do not correspond to different probabilities that a proposal would be adopted.

##### *When Do Investors Vote?*

We use the data on "No Votes" to examine when do investors choose to become active, i.e., choose to cast a vote. As explained earlier, Israeli law explicitly requires institutional investors to cast a vote on some proposals. But when no statutory duty to vote applies, we expect investors to become more active on issues that are significant for

---

<sup>15</sup> Statistics on "no votes" are available institutions other than mutual funds, for which data on "No Votes" are not available. The figures should be treated with caution: Some pension funds may not report "no votes" on a consistent basis. Moreover, sometimes institutions deemed to have conflicts of interest report a "no vote" instead of an abstention. In some cases, they may attend a meeting and vote on some issues but not others on which there is no legal duty to vote. It is therefore hard to distinguish in the data between abstentions, no-shows and other classifications of "no votes." In this section we therefore distinguish only between FOR/AGAINST votes and all forms of non-participation.

outside investors, and especially when the law grants minority shareholders effective voting power (investors are less likely to incur the costs associated with voting when the controllers will dictate the outcome).

Consistent with our expectation, Table 1 shows that investors cast a vote when expressly required to do so (approximately 90% voting rate at categories 1, 2, and 7, for example, compared to 43% in category 0). Somewhat surprisingly, however, even though director elections constitute a key arena for shareholder activism, institutional investors fail to use their power to vote in director elections. Categories 3 (outside directors) and 9 (election of other directors and auditors) are those with the lowest voting rates: in close to 90% of the cases, institutional investors do not even bother to cast vote. One could argue that this finding is not surprising in companies with a controlling shareholder, as outside investors perceive director elections as a mere formality. However, as explained earlier, Israeli law provides minority shareholder with the power to veto the controller's candidates for an outside director position (Category 3). Yet, institutional investors do not vote on these proposals as well. In other words, although Israeli law provides minority shareholders with the power to influence board composition, institutional investors do not use this power.<sup>16</sup>

#### *Support Rates by Category*

A key channel for value diversion in firms with a controlling shareholder is “tunneling” and other self-dealing transactions (Djankov et al, 2008). One could thus expect institutional investors to be most reluctant to approve such transactions. Table 1, however, suggests that reality is more complex.

---

<sup>16</sup> Note that minority investors cannot nominate their own candidates. One might therefore interpret our findings as evidence that minority shareholders do not value much the mere ability to veto candidates nominated by controlling shareholders, although the proportion of active FOR/AGAINST votes in outside director elections (Category 3) in companies where the controlling shareholder holds less than 50% is not much higher than the figures reported in Table 1 (about 15%).

On average, institutional investors in our sample vote FOR company proposals on self-dealing transactions in 64.6% of the votes (consisting of both parts of Category 1, 3,822 votes in total). This support rate is not much different than the overall support rate in the sample (67.5% on average). However, institutional support for company proposals on executive compensation for professional managers (Category 7; 55.6% support) and directors (Category 10; 58% support) is much lower. This difference is somewhat puzzling because under Israeli law minority investors are unlikely to affect the outcome in the latter two categories, that is, the controller holds enough voting power to pass any decision. Moreover, when the issue at stake is compensation for professional (not related to the controlling shareholder) managers, outside investors could presumably rely on the controller to prevent excessive pay.

To explore the issue further, we divide the self-dealing votes in our sample to two groups: the first category, 1A (1,401 votes), consists of proposals on compensation arrangements with controlling shareholders or their family members; the second category, 1B (2,421 votes), consists of other self-dealing or related party transactions. In both cases, the interests of controlling shareholders may differ from those of the minority and the law subjects the transaction to a disinterested shareholder vote. Yet, the voting patterns of institutional investors significantly differ across categories: on average, institutional investors vote FOR in 41% of the votes on compensation (1A) and in 78.2% of the votes on other self-dealing transactions (1B).

There are two competing interpretations for the tendency to oppose executive compensation proposals both when institutions have the ability to influence outcomes (Category 1A) and when no special majority is required (as in categories 7 and 10). First, compensation-related proposals tend to be controversial and often attract considerable media attention (see Norden and Strand, 2008); institutional investors may choose to act defensively when they expect their actions to be closely observed, even when their vote is likely to make a difference. Second, our findings are also consistent with the hypothesis

that executive pay is an important source of concern even in firms with controlling shareholders. Under this view, controllers use generous compensation arrangements to divert value from the minority either directly or by securing managerial cooperation with minority shareholder oppression by offering managers and directors overly generous compensation arrangements. According to this view, outrageous managerial compensation packages (Category 1A) are often more detrimental to minority shareholders than standard related party transactions (Category 1B) and therefore induce objections on behalf of institutional investors that genuinely care about share value.

### *The Effect of the Required Majority: A Summary*

How do institutional investors vote when they know that their votes are unlikely to matter, that is, when the controlling shareholder has enough votes to dictate the outcome? One strategy would be to adopt a “just vote no” approach on *all* proposals under these circumstances. After all, the proposal will be ratified if the controller supports it, while voting against the controller would protect the institutional investor from potential allegations by the financial press, regulators, or its own investors that its vote was motivated by conflicts of interest. In addition, controlling shareholders may apply more pressure on institutional investors when they know that their votes matter, and perhaps “allow them to object” when the vote outcome is guaranteed. Moreover, other things equal, when institutional investors have no effective “voice,” companies are more likely to submit proposals that trigger objections. In contrast with these conjectures, the last three rows of Table 1 indicate that when aggregating vote categories into three groups representing the ability of minority (institutional) shareholders to influence outcomes, support rates seem to be roughly similar across the three groups (ranging between 63 and 69%). It is therefore difficult to argue that the extent to which the law grants power to minority shareholders has a clear effect on voting. We return to this issue below.

In sum, Table 1 establishes the following set of stylized observations: first, institutional investors are not keen to play an active role in corporate votes when not explicitly required to do so by law (e.g. director elections); second, support rates vary across voting categories, with compensation-related votes eliciting the lowest support rates regardless of the ability of the minority to influence outcomes; and finally, in line with the previous conclusion, the required majority does not seem to be strongly correlated with voting behavior.

#### *Institutional Investor Characteristics: Conflicts of Interests*

Table 2 presents several categories of institutional investors in our sample. A principal concern regarding activism by institutional shareholders is the extent to which conflicts of interest can induce institutional investors to cater to managerial interests. Business ties between institutional investors and firms in which they invest are an important source for conflict of interests. Information on business ties between an institutional investor and any given firm (or its controlling family) is unavailable in Israel (in contrast to the data used by Davis and Kim, 2007, and Ashraf et. al., 2009 for mutual funds in the United States); we therefore use several proxies for potential ties. First, we divide investors into four types: Type 1 consists of government-owned pension funds (five very large institutions, 747 FOR/AGAINST votes): During the 1990s, the Israeli government “nationalized” several pension funds that had been unable to meet their financial obligations. These so-called “old” pension funds are government-owned, have no other business activities, and are managed by appointed bureaucrats (and not elected politicians). Institutional investors of Type 2 are employee-owned pension funds (13 institutions, about 1800 FOR/AGAINST votes). These funds can either manage money for employees of a specific organization (e.g. the Hebrew University) or for groups of professionals within some sector (e.g. nurses). For our purposes, what matters is that these

funds do not engage in any other business activities. We refer to Type 1 and Type 2 institutions as “pure-play investors.”

There are two commercially-oriented investor types in the data set: Mutual funds (44 institutions, over 7000 FOR/AGAINST votes) and “commercial” pension funds (29 institutions, about 5600 FOR/AGAINST votes). Unlike the first two types, both mutual funds and commercial pension funds are normally managed by business entities that often provide additional financial services.

Our hypothesis is that investors with potential business ties would be more likely to vote FOR. Table 2 suggests that, indeed, the first two (“pure-play”) investor groups (especially Type 2) are less supportive of corporate insiders than the business-oriented institutional investors (Types 3 and 4). The most pronounced difference is between employee-owned pension funds and commercially-owned mutual funds.<sup>17</sup>

Consistent with the hypothesis that business ties can induce institutional investors to become more supportive of company proposals, “pure play” institutions appear to be more likely to stand up to insiders than institutions with commercial interests: the support rate among these not-for-profit institutions is about 10 percentage points lower than among “commercial” institutions (about 60% vs. about 70%, and this difference is statistically significant at the one percent level). Interestingly, this result is not due to the fact that “pure play” institutions always vote AGAINST: There is no (“pure play” or other) institution with a “just vote no” policy. Furthermore, among pure play institutions there is quite a bit of variance in voting patterns (with average support rates ranging between 41% and nearly 74% across different “pure play” institutions).

To shed some light on the reasons underlying the difference in voting patterns between pure-play and other investors, in Table 3 we break down the sample to present the difference between investor types for each category. Our hypothesis is that the

---

<sup>17</sup> All pairwise comparisons in this table are statistically significant. Interestingly, Table 2 suggests also that commercially-owned pension funds (Type 4) are less supportive of management than mutual funds (Type 3), perhaps because long term investors have more interest in corporate governance than their short term peers.

magnitude of the difference varies across issues. If investors carrying other business activities are more susceptible to pressure by insiders, we would expect pressure sensitive investors to be more inclined to vote FOR company proposals when their vote actually matters, i.e., when the law provides minority investors with an effective voting power. Put differently, insiders are more likely to apply pressure on institutional investors when the votes of minority shareholders matter.

Table 3 suggests that differences in support rates between “pure play” and commercially oriented institutions are not constant across voting categories, or issues. Somewhat surprisingly, however, the difference in the tendency to vote FOR between “pure play” and commercial institutions does not seem to vary with the ability of minority shareholders to influence outcomes: if the greater tendency of commercially-oriented institutions to support management is the result of pressure, we would expect the difference between investor types to be more pronounced in categories 1-4, where Israeli law requires the support of disinterested shareholders. However, this does not seem to be the case. For example, although self-dealing votes (Category 1B) require a disinterested shareholder vote the gap between “pure play” and other investors is quite small (73.3% and 79.2%). In Category 1A (compensation to the controlling shareholders) the difference is about twice as large as in the overall sample; similarly, the difference in support rates seems to be relatively high in other compensation-related votes (e.g. Category 7, where a regular majority is needed) and in (poorly attended) votes on director elections (Categories 3 and 9). The finding that the gap between “pure play” and other investors is not correlated with the likely impact of shareholder vote is inconsistent with the hypothesis that insiders are more likely to apply pressure when they perceive minority vote to be pivotal.<sup>18</sup> Moreover, the fact that differences between “pure play” and other investors are most pronounced in compensation-related proposals is also noteworthy.

---

<sup>18</sup> In passing, note that differences of about 10 percentage points between the support rates of “pure play” and commercial institutions are observed also in “close call” votes (which pass with a majority of 30-60%), and in the small number of cases where proposals are rejected. These differences resemble the differences

In Table 4 we further refine our analysis by looking at additional proxies for conflicts of interests due to business activities, and obtain information on whether each institutional investor — or its controlling shareholder — offers underwriting, insurance, or banking services,<sup>19</sup> and on whether or not the institution is owned by a publicly traded company or a business group.

It is clear from Table 4 that the support rate among bank-affiliated institutions is low (55%) in comparison with institutions with commercial interests other than banking (whose support rate is 72%, a statistically significant difference). Indeed, among the institutions with the lowest average support rates in the sample are several bank-affiliated mutual funds: perhaps because the commercial banking sector in Israel is concentrated and powerful, it is relatively unlikely that controlling shareholders could have sufficient leverage for exerting meaningful pressure on institutional investors affiliated with commercial banks. Possibly for a similar reason, insurance-affiliated institutions, especially the ones not affiliated with a business group, seem to be somewhat less supportive of management than other institutions.

Table 4 also indicates that institutional investors affiliated with a (non-bank) investment house offering certain additional financial services, in this case underwriting, are more likely to vote in support of company insiders than bank-affiliated or “pure play” institutions, in line with the conjecture that additional business interests can affect the voting behavior of institutional investors,

We now turn to the ownership of the commercially-oriented institutions in the sample. We obtain data on the ownership of all institutional investors from their own web sites and from the Ministry of Finance and identify institutional investors which are

---

in support rates in the full sample, indicating that votes by “pure play” institutions are not the reason why some proposals fail to win much support.

<sup>19</sup> Until 2005, the vast majority of Israeli mutual funds and provident funds were owned by commercial banks. In August 2005, the Israeli Parliament enacted a law requiring banks to sell their holdings in mutual funds and provident funds, and most banks sold their holdings by the end of 2006, at the end of our sample period. We intend to explore the impact of this exogenously-imposed ownership change on voting behavior in future work.



publicly-traded firms (or fully owned subsidiaries of publicly traded firms). This feature of the Israeli market can present a new source for conflicts of interest. Shareholder activism at one company can set the norms for others. Consider the case of a fund manager at a publicly-traded financial conglomerate who has to vote on a proposal to ratify a generous compensation package for the chairman of some public firm. Voting against such a proposal can ultimately affect pay practices at other public companies, including the fund manager's employer. The statistics presented in Table 4 are consistent with the conjecture that pension or mutual funds that are owned by a publicly-traded firm would be more likely to support corporate insiders.

Another dimension of variation in the ownership of institutions in the sample is that some institutional investors in Israel are ultimately owned by pyramidal business groups. This can create two types of conflicts of interest at the voting stage: first, subject to certain limitations, Israeli law permits these institutional investors to hold equity and debt issued by other firms within the group. Money managers of such institutional investors may hesitate to vote against proposal at other affiliated firms, especially when the issue at stake relates to self-dealing transactions by the family that ultimately controls the group, including the institutional investor. Second, for the reasons discussed above concerning publicly-owned institutional investors, investors affiliated with business groups may support insider-sponsored proposals even by firms not affiliated with their own group. We determine whether or not an institutional investor is affiliated with a group using the data set compiled by Konstantin Kosenko at the Bank of Israel (restricting attention to the largest 20 groups).

Table 4 suggests that, as expected, the overall the support rates of the eight non-bank, group-affiliated institutional investors in the sample (in about 1400 votes) are

relatively high (over 70%, a figure somewhat higher than the sample average and much higher than the support rates of bank-affiliated and “pure play” institutions).<sup>20</sup>

### *Institutional Investor Size and Equity Stake*

There are additional attributes that may affect the tendency of institutional investors to stand up to controlling shareholders. Large investors (as measured by assets under management), for example, may be more independent, as the departure of a single client is less likely to have a significant impact on their revenues. In line with this conjecture, Table 5 suggests that large institutions (whose size is above the sample median) offer less support (about 65% FOR votes) than small institutions which are perhaps more pressure-sensitive (their support rate is about 70%).

The equity stake held by an institutional investor may also affect its voting. On the one hand, a value-reducing transaction would have a relatively stronger impact on the institutional investors with a larger equity stake, thereby encouraging them to take a more active approach. On the other hand, the decision to buy more shares of a given company may reflect an investor’s trust and confidence in management or the controlling shareholder. Moreover, especially in proposals that require a special majority shareholder vote, institutional investors with relatively larger holdings are more likely to be pivotal. This also means, however, that they may become targets of pressure by companies, management, and controlling shareholders. We obtain data on institutional investors’ percentage ownership from their voting disclosure. There are many missing data points

---

<sup>20</sup> We also try to examine whether group-affiliated investors are affected by conflicts of interest arising from their investment within their own group. In our sample there is one large set of investors (consisting of a number of mutual and pension funds) which are owned by a large business group and make significant investments within the group and elsewhere. We therefore compare their votes with the votes of other investors both within and outside their group. Interestingly, outside investors exhibit a relatively high support rate (over 80%) in votes within this group, perhaps because this group is one of the largest in Israel, its affiliated firms tap financial markets often, and its controlling shareholder is considered business savvy. The support rate of investors affiliated with the same group is even higher (nearly 90%), although the support rate of institutions affiliated with this group is higher than the average support rates of other institutional investors even in votes outside their own group (74% vs. an average of about 65% for other investors). It is hard to conclude from this whether or not this constitutes evidence of an added bias in voting behavior.

and inconsistent reporting practices; our analysis in this context should thus be treated with caution. In practice, the ownership stakes of institutions in our sample are typically small, with a mean of about 0.35%, a median of about 0.08%, and only ten percent of the observations (votes) involving institutions with equity stakes above one percent, suggesting that the incentives of most institutions to exert much effort in improving corporate governance in their portfolio firms are limited.<sup>21</sup> Table 5 suggests that institutions with relatively high equity stakes are somewhat less supportive of management, perhaps because they “care more” about corporate governance as suggested above, or because they tend to be larger.

## **V. Main Findings II: Multivariate Probit Regressions**

So far, we have separately analyzed each factor that could affect voting. However, it may well be the case that some of the institutional-investor or proposal characteristics are correlated, or that the effect of a certain attribute may be different when considered separately. For example, it may be the case that bank-affiliated investors are less likely to vote FOR because they happen to be the largest (in terms of assets under management). We therefore turn to multivariate probit regressions in order to estimate the marginal impact of voting categories and institutional investor attributes on the tendency to cast an active vote and on the probability of choosing to vote FOR. In these regressions, we also control for firm-level factors which may have an effect on voting practices.

### *Firm-level Variables in the Regressions*

We include, in all regressions, measures of firm performance, as shareholders may be disinclined to support managers or controllers at poorly performing companies. This

---

<sup>21</sup> Aggregate statistics suggest that institutional investors typically hold 10-12% of the equity of listed companies. The figures in our sample are smaller by a factor of about 3, suggesting the existence of a reporting bias.

tendency could be more pronounced concerning proposals that require investors to make firm-specific decisions rather than follow some pre-determined voting policies. For example, one may expect voting on specific executive compensation arrangements to be more sensitive to firm performance than voting on a proposal to amend the charter in order to waive liability for duty-of-care violations. We rely on both stock market based performance measures (market-to-book ratios), and on accounting based performance measures (operating profitability and leverage). We also collect data on firm size. All variables are drawn from financial statements and refer to December 31, 2005.

Corporate ownership structure may also affect voting in several ways. First, to the extent that large block holders have a strong incentive to enhance share value, one should expect institutional investors to be more supportive of proposals submitted by companies with large block holders. This reasoning, however, does not apply to those proposals, such as Categories 1 and 2, where the controlling shareholder is conflicted. Second, when the company has a controlling shareholder, outside investors — including institutional investors — can potentially affect the outcome of the vote only if the proposal is subject to some special majority requirement. When a proposal requires approval by disinterested shareholders, however, the impact of institutional investors can be larger when the controller owns a larger percentage of the firm's shares because each investor becomes potentially more pivotal (and therefore possibly subject to more pressure to “cooperate”). Finally, the presence of a powerful shareholder may exacerbate the problem of conflicts of interest and the potential impact of business ties on voting. All controlling shareholders (and management) have to report their equity stakes to the Tel Aviv Stock Exchange; we use data on the aggregate stake of all controlling shareholders as of December 31, 2005. Ownership of public companies in Israel is highly concentrated with a median equity stake of the controlling stakeholders of about 67% (and an average of 63%).

As noted above, some of the largest companies in Israel are affiliated with a business group. The prevalence of business groups raises interesting research questions.

One possibility is that business groups exacerbate conflicts of interest. After all, the retaliation against an institutional investor that dares to vote against a proposal by a firm that belongs to a large business group can be far more devastating. Another possibility is that investors are less likely to support proposals at companies with a significant divergence of cash flow and voting rights. In our sample, about one fifth of the companies are classified as affiliated with a pyramidal group; some of these groups involve multiple layers of control (up to five in our sample) and consequently considerable separation of control and cash flow rights. Financial and ownership data for firms in our sample are presented in the Appendix.

#### *The Decision to Cast an Active FOR/AGAINST Vote*

Table 6 presents probit regression results identifying vote, institution and firm-level factors that drive the decision to cast an active vote.<sup>22</sup> Even controlling for other factors, participation rates vary by voting category — the categories with the lowest participation rates (0, 3, and 9) are all categories in which institutions exercise discretion whether or not to vote. In addition, beside some voting categories in which there is an unambiguous duty to vote and participation rates are consequently high (e.g. 1A, 1B, 2, 7 and 8), there are some categories which elicit high participation rates even when there is no explicit duty to vote. These tend to be categories where a supermajority is required (Categories 4, 5, and 6), perhaps because of the ambiguity of the legal requirement to vote in these categories. Alternatively, the observed high participation rates may be because the controlling shareholders exercise pressure on institutional investors to participate in these votes (and vote FOR), or because the investors realize that their votes are more important in these categories (even though they rarely object to the proposals at hand).

---

<sup>22</sup> Data are non-votes are not available for mutual funds which are excluded from this analysis. Unless otherwise noted, in all tables, standard errors are clustered at the firm level to address the possibility of a non-zero correlation between multiple observations at the same firm. The statistical significance of the coefficients is virtually identical when the standard errors are clustered at the individual vote level.

We also observe some differences by institution type, perhaps because of reporting practices regarding “no votes.” Bank-affiliated (and insurance-affiliated) institutions seem to be more active, a theme which is echoed also in their lower tendency to vote FOR. There is evidence to suggest that participation is somewhat lower when the controlling shareholder holds a large equity stake, perhaps because investors feel they cannot have much of an influence on corporate decisions (this result is nearly statistically significant).<sup>23</sup> There is also some indication of higher participation in votes taking place in larger firms and firms with higher market to book ratios. Publicly traded institutions are somewhat more reluctant to cast a vote than other institutions.

### *The Decision to Vote FOR*

Table 7 presents our main regression specification estimating the impact of vote categories, institution and firm-specific attributes on the decision to vote in support of a proposal. Several alternative specifications, including one with over 1000 vote-specific fixed effects, are discussed in the next section.

### *Support Rates across Categories*

In line with the univariate statistics presented above, in comparison with Category 0 (miscellaneous issues, the omitted benchmark category), low support rates are observed in compensation-related votes (Categories 1A, 7 and 10). The coefficients on these categories’ dummy variables are relatively large both in their negative magnitude and in their statistical significance. As noted above, this could be viewed as either evidence of a PR campaign on behalf of institutional investors who regard these votes as highly visible,

---

<sup>23</sup> The coefficient on the equity stake of the controlling shareholders is virtually identical in magnitude (though less statistically significant) when a similar probit regression is run for the sub-sample of votes in Categories 1 through 4, where the minority is potentially more influential.

or as evidence that compensation-related proposals can be the most detrimental to minority shareholders.<sup>24</sup>

*Institutional Investor Attributes: Business Interests and Other Biases*

Moving to institutional investor attributes, we find strong evidence that, controlling for all other factors, “pure play” institutions are less likely to support the controlling shareholders than commercially-oriented institutions. This finding, however, leaves open the possibility that the difference between pure-play and other investors is explained by differences in investment patterns rather than conflicts, i.e., different types of institutions hold different equity portfolios and take part at different types of votes. However, the coefficient on “pure play” institutions remains negative and statistically significant (albeit smaller in magnitude) even in a specification which includes individual vote fixed effects (discussed briefly below). This is consistent with the interpretation that the difference in support rates between commercially oriented and “pure play” institutions is not due to the fact that different types of institutions participate in different votes, but rather to different interests which affect their voting behavior at the same shareholder meetings.

As in the univariate statistics, Table 7 indicates that bank-affiliated and insurance-affiliated institutions offer relatively low support rates (again, this finding remains valid in a specification with vote-specific fixed effects), suggesting that these institutions are perhaps less pressure sensitive. In addition, all else equal, institutions with an affiliated underwriter are more likely vote FOR, presumably to attract underwriting business.<sup>25</sup>

---

<sup>24</sup> We intend to collect data on the possible monetary value of compensation-related and other proposals in future work.

<sup>25</sup> The coefficients in Table 7 can be converted into marginal probabilities to vote FOR a proposal. In the case of categorical variables, the marginal probability is calculated for a change from zero to one – thus, holding all else constant, bank affiliated institutions are about 32% less likely to support management than all institutions which are not bank affiliated; insurance affiliated institutions are about 23% less likely to support management; by contrast, institutions with an affiliated underwriter are 4% more likely to support management than all other institutions.

Table 7 provides support for the hypothesis that the ownership of institutional investors may produce conflicts which affect voting. When we control for firm-level and investor-level attributes, publicly-traded institutional investors are more likely to support insider-sponsored proposals than other institutions: the estimated coefficient implies that, all else constant, the probability of casting a supporting vote is about 11% higher for publicly traded institutions, a statistically significant difference. Likewise, institutional investors affiliated with business groups are more controlling shareholders-friendly than other institutions (the coefficient is close to being significant at the 10% level).

As in the univariate statistics, Table 7 confirms that large institutions are less likely to vote FOR, presumably because they are less susceptible to pressure by the controlling shareholders. The equity stake held by the institution has no observable effect on voting behavior, perhaps because of the quality of data used to generate this variable.

#### *Firm-level Attributes*

We first report the impact of firm performance on voting: In Table 7, none of the firm-specific performance variables (operating profit rate, market-to-book ratio, and leverage) affects voting decisions. These findings are inconsistent with the hypothesis that institutional shareholders' voting decisions are affected by firm performance. Note however, that these findings are not inconsistent with the hypothesis that performance affects institutional shareholders' initial decision to invest in the firm.

We also examine the impact of ownership structure on voting and do not find statistically significant results. High equity stakes held by insiders are positively correlated with the proportion of FOR votes, but the effect is far from being statistically significant. Similarly, group-affiliated firms tend to receive more FOR votes, but again, the coefficient is not statistically significant at conventional levels.

Finally, support rates at large companies tend to be higher (the effect is statistically significant, with a *p-value* of 10.1%). One possible interpretation is that firm



size is a proxy for conflicts of interest and potential business ties with the firm or its controlling shareholders (although group affiliation, which should have had the same effect, does not). Another possibility is that firm size is a proxy for sheer power, that is, the ability of controlling shareholders to exert pressure; we return to this conjecture below.

## **V. Additional Results and Robustness Tests**

Table 8 presents the results of a number of similar probit regression specifications for several sub-samples. First, we run the same regression specification of Table 7 for the sub-sample of votes by “pure play” institutions only. Focusing on this sub-sample allows us to examine whether the effect of firm characteristics is different for institutional investors with no commercial or business interests. Interestingly, as in the full sample, firm size has a positive and significant effect on the probability of a FOR vote whereas other firm attributes are not statistically significant. The positive correlation between firm size and the tendency of “pure play” investors to vote FOR has two plausible interpretations. It is consistent with the hypothesis that large firms can exert pressure even on “pure-play” investors; it is also consistent, however, with the interpretation that firm size serves as a proxy for unobservable firm attributes such as investor confidence, or company reputation.

Second, we focus only on the sub-sample of executive compensation decisions (Categories 1A, 7 and 10). We set these issues apart from others under the assumption that votes on specific compensation arrangements should at least in theory be more sensitive to firm-level attributes. The results are, in general, similar to the full sample regressions in the sense that firm performance does not affect institutional voting practices even when the vote is about compensation-related issues. Apparently, compensation-related proposals elicit objections regardless of whether or not they are brought to a vote in successful or ailing companies.

We then present the results of similar regressions for three sub-samples: where the support of at least a third of the minority shareholders is needed; where 75% of all votes are needed; and where a regular majority is sufficient to pass a decision. The results are generally similar to the results in the full sample (with some slight variations), suggesting, as noted above, that the behavior and decision making of institutional investors are generally quite similar across these categories, regardless of the different power each of these categories assigns to minority shareholders.

Table 8 presents yet another specification in which we include industry dummies (using the Tel Aviv Stock Exchange standard industrial classification), to allow for the possibility that relative performance (within an industry) might affect voting behavior (rather than absolute levels of performance), but find no evidence of that.

We examine several additional regression specifications which are not tabulated. As noted above, regressions with about 1000 vote-specific fixed effects (and standard errors clustered at the vote level) generate results similar to those in the main specification of Table 7 (where the standard errors are clustered at the firm level), implying that differences in the portfolios of different institutions are not the main driving force in explaining differences in voting behavior between them.<sup>26</sup>

We also examine a specification with interactions between “pure play” institutions and voting categories. The coefficients on the interaction terms correspond closely to the univariate statistics of Table 3 and suggest that, even controlling for other firm and institution-specific attributes, “pure play” investors are less likely to offer their support in compensation-related voting categories (especially 1A and 7), as well as in director elections (Category 3) and in Category 5 (charter amendments).

To further study the effect of business group affiliation, in one specification we also include a variable which measures, for each group-affiliated company, its location in

---

<sup>26</sup> Very different institution-specific reporting practices imply that vote-specific fixed effects have to be constructed manually by matching voting reports across institutions. Because of the complexity of this procedure, we do not use this specification in the main regression in Table 7.

the group pyramid, to see if the larger “wedges” between control and cash flow rights in the lower ties affect voting; however, the effect of this variable is close to zero.

Finally, the regression results for a sample which excludes the smallest mutual funds (with assets under management below the minimal threshold for the other investor categories in our sample) are qualitatively similar to those of the full sample.

## **VI. Concluding Remarks**

Israeli law has put in place several legal mechanisms designed to encourage institutional investor activism and to protect minority shareholders. Do these mechanism work? Are the legal requirements to subject certain corporate decisions to a vote of “disinterested” minority shareholders sufficient to prevent minority shareholder expropriation?

This study cannot provide definitive answers to these questions. The conclusions that we can draw from the analysis, however, are not encouraging: Institutional investors tend to be active primarily when legally required to do so; they often fail to use the power that Israeli law grants to minority shareholders (most notably in the case of outside director elections). When they do vote, institutional investors tend to vote AGAINST in proposals related to compensation issues, even when it is clear that they cannot influence outcomes. Moreover, firm performance plays no consistent role in determining the voting strategies of institutional investors, and neither does the required majority (the legal power of minority shareholders). By contrast, proxies for conflicts of interest do seem to have a consistent effect on voting in many of the empirical experiments presented in this study. One possible policy implication of these findings could be that the removal of potential conflicts of interest may be a relatively effective way of inducing institutional investor involvement in corporate governance, whereas further measures to empower the minority may not bring about considerable improvement.

## Bibliography

Alexander, Cindy R., Mark A. Chen, Duane J. Seppi and Chester S. Spatt (2009), "The Role of Advisory Services in Proxy Voting," NBER Discussion Paper No. 15143.

Amzaleg, Yaron, Uri Ben Zion, and Aharon Rosenfeld (2007), "On the Duty of Care of Institutional Investors: Evidence on Participation of Mutual Fund Managers in Shareholders Meetings in Israel," *Advances in Financial Economics*, 12, 75-90.

Amzaleg, Yaron, Uri Ben Zion, and Aharon Rosenfeld (2009), "On the Role of Institutional Investors in Corporate Governance: Evidence from Voting of Mutual Funds in Israel," *Advances in Financial Economics*, 13, 197-215.

Ashraf, Rasha and Narayanan Jayaraman (2007), "Determinants and Consequences of Proxy Voting by Mutual Funds on Shareholder Proposals," unpublished manuscript, Georgia Tech.

Ashraf, Rasha, Narayanan Jayaraman, and Ryan E. Harley, Jr., (2009), "Conflict of interestss and Mutual Fund Proxy Voting: Evidence from Shareholder Proposals on Executive Compensation," unpublished manuscript, Georgia Tech.

Bebchuk, Lucian and Assaf Hamdani (2009), "The Elusive Quest for Global Governance Standards," *University of Pennsylvania Law Review*, 157, 1263-1317.

Becht, Marco, Julian Franks, Colin Mayer, and Stefano Rossi (2009), "Returns to Shareholder Activism Evidence from a Clinical Study of the Hermes U.K. Focus Fund," *Review of Financial Studies*, 22, 3093-3129.

Black, Bernard (1992), "Agents Watching Agents: The Promise of Institutional Investor Voice," *UCLA Law Review*, 39, 811-888.

Black, Bernard (1998), "Shareholder Activism and Corporate Governance in the United States," In: Peter Newman (Editor), *The New Palgrave Dictionary of Economics and the Law*, McMillan Press, New York.

Black, Bernard and Reinier Kraakman (1996), "A Self-Enforcing Model of Corporate Law," *Harvard Law Review* 109, 1911-1982.

Brickley, James, Ronald Lease, and Clifford Smith (1988), "Ownership Structure and Voting on Anti-takeover Amendments," *Journal of Financial Economics* 20, 267-291.

Brickley, James, Ronald C. Lease, and Clifford Smith (1994), "Corporate Voting: Evidence from Charter Amendment Proposals," *Journal of Corporate Finance* 1, 5-31.

Carelton, William, James Nelson, and Michael Weisbach (1998), "The Influence of Institutions on Corporate Governance through Private Negotiations: Evidence from TIAA-CREF," *Journal of Finance* 53, 1335-1362.

Cai, Jie, Jacqueline L. Garner, and Ralph A. Walkling (2009), "Electing Directors," *Journal of Finance*, 64, 2389-2421.

Chen, Xia, Jarrad Hartford, and Kay Li (2007), "Monitoring: Which Institutions Matter?" *Journal of Financial Economics* 86, 279-305.

- Choi, Woong-Youl and Sung-Hoon Cho (2003), "Shareholder Activism in Korea: An Analysis of PSPD's Activities," *Pacific Basin Finance Journal* 11, 349-363.
- Cremers, Martijn and Roberta Romano (2009), "Institutional Investors and Proxy Voting On Compensation Plans: The Impact of the 2003 Mutual Fund Voting Disclosure Regulation," NBER Discussion Paper No. 15449.
- Davis, Gerald and Han Kim (2007) "Business Ties and Proxy Voting by Mutual Funds," *Journal of Financial Economics* 85, 552-570.
- De Jong, Abe, Gerard Mertens, and Peter Roosenboom (2006), "Shareholders' Voting at General Meetings: Evidence from the Netherlands," *Journal of Management and Governance* 10, 353-380.
- Djankov, Simeon, Rafael La Porta, Florencio Lopez de Silanes and Andrei Shleifer (2008), "The Law and Economics of Self Dealing," *Journal of Financial Economics* 88, 430-465.
- Fry, Elizabeth (2009), "Too Many Shareholders Not Voting, Asian Trade Body Says," *Financial Times*, July 12.
- Giannetti, Mariassunta and Luc Laeven (2009), "Pension Reform, Ownership Structure, and Corporate Governance: Evidence from Sweden," *Review of Financial Studies* 22, 4091-4127.
- Gillan, Stuart and Laura Starks (2000), "Corporate Governance Proposals and Shareholder Activism: The Role of Institutional Investors," *Journal of Financial Economics* 57, 275-305.
- Gillan, Stuart and Laura Starks (2003), "Corporate Governance, Corporate Ownership, and the Role of Institutional Investors: A Global Perspective," *Journal of Applied Corporate Finance* 13, 4-22
- Gillan, Stuart L. and Laura T. Starks (2007), "The Evolution of Shareholder Activism in the United States," *Journal of Applied Corporate Finance*, 19, 55-73.
- Gilson, Ronald (2006), "Controlling Shareholders and Corporate Governance: Complicating the Comparative Taxonomy," *Harvard Law Review* 119, 1641-1679.
- Gilson, Ronald and Jeffrey Gordon (2003), "Controlling Controlling Shareholders: New Limits on the Operate, Sale of Control, and Freeze Out Alternatives," *University of Pennsylvania Law Review* 152, 785-843.
- Goshen, Zohar (2003), "The Efficiency of Controlling Corporate Self-Dealing: Theory Meets Reality," *California Law Review* 91, 393-438.
- Hartzell, Jay and Laura Starks (2003), "Institutional Investors and Executive Compensation," *Journal of Finance* 58, 2351-2374
- Khanna, Tarun and Yishay Yafeh (2007), "Business Groups in Emerging Markets: Paragons or Parasites?" *Journal of Economic Literature* 45, 331-373.
- La Porta, Rafael, Florencio Lopez de Silanes, Andrei Shleifer, and Robert Vishny (1998), "Law and Finance," *Journal of Political Economy* 106, 1113-1155.

- La Porta, Rafael, Florencio Lopez de Silanes, and Andrei Shleifer (2006), "What Works in Securities Laws," *Journal of Finance* 61, 1-32.
- Listokin, Yair (2009), "If You Give Shareholders Power, Do They Use It? An Empirical Analysis", unpublished manuscript, Yale Law School.
- Matvos, Gregor and Michael Ostrovsky (2008), "Cross-ownership, Returns, and Voting in Mergers," *Journal of Financial Economics* 89, 391–403
- Matvos, Gregor and Michael Ostrovsky (2009), "Heterogeneity and Peer Effects in Mutual Fund Proxy Voting," forthcoming, *Journal of Financial Economics*.
- Maug, Ernst, and Kristian Rydkvist (2009), "Do Shareholders Vote Strategically? Voting Behavior, Proposal Screening, and Majority Rules," *Review of Financial Studies* 13, 47-79.
- Morck, Randall, Daniel Wolfenzon and Bernard Yeung (2005), "Corporate Governance, Economic Entrenchment, and Growth," *Journal of Economic Literature*, Vol. 43, 657-722.
- Morgan, Angela, Annette Poulsen, Jack Wolf, and Tina Yang (2009), "Mutual Funds as Monitors: Evidence from Mutual Fund Voting," unpublished manuscript, University of Georgia.
- Ng, Lillian, Qinghai Wang, and Nataliya Zaiats (2009), "Firm Performance and Mutual Fund Voting," *Journal of Banking and Finance*, Vol. 33, 2207-2217.
- Norden, Lars and Therese Strand (2008), "Shareholder Activism among Portfolio Managers Rational Decisions or 15 Minutes of Fame?" unpublished manuscript, Stockholm University.
- Rothberg, Burton and Steven Lillien (2006), "Mutual Funds and Proxy Voting: New Evidence on Corporate Governance," *Journal of Business and Technology Law* 1, 157-184.
- Taub, Jennifer S. (2009), "Able but Not Willing: The Failure of Mutual Fund Advisers to Advocate for Shareholders' Rights," *Journal of Corporation Law* 34, 101-151
- United States Securities and Exchange Commission (2003) "Disclosure of Proxy Voting Policies and Proxy Voting Records by Registered Management Investment Companies," Release No.8188 (January 31).

**Table 1 – Voting Categories**

Definition/Required Majority/Duty to Vote		% FOR/AGAINST votes out of all votes <sup>a</sup>	% FOR Votes	% Proposals Adopted <sup>b</sup>	# FOR/ AGAINST votes
Full Sample		57.2	67.5	97.8	15,475
Category 1A	Direct or indirect self-dealing by controlling shareholders – compensation related/Third of disinterested (minority) shareholders/Duty to vote	90.7	41.0	92.6	1,401
Category 1B	Direct or indirect self-dealing by controlling shareholders – related party transactions/Third of disinterested (minority) shareholders/Duty to vote	90.6	78.2	98.7	2,421
Category 2	Waivers of the duty of care, liability insurance, and indemnification when the beneficiaries of such measures include the controlling shareholders/Third of disinterested (minority) shareholders//Duty to vote	92.5	67.4	96.2	3,087
Category 3	Electing “outside directors” /Third of disinterested (minority) shareholders/No explicit requirement to cast a vote	12.2	78.0	99.1	227
Category 4	CEO/Chairperson unification/Two thirds of disinterested (minority) shareholders/ No explicit requirement to cast a vote	92.1	74.8	95.9	329
Category 5	Charter amendments/75% supermajority/ No explicit requirement to cast a vote	80.2	59.1	97.0	856
Category 6	Certain reorganizations/75% supermajority/ No explicit requirement to cast a vote	91.3	91.3	98.3	115
Category 7	Executive compensation for professional managers or directors/Regular majority/Duty to vote	89.8	55.6	99.7	2,589
Category 8	Liability waivers, liability insurance, and indemnification for directors or officers who are not related to the controlling shareholders/Regular majority/Duty to vote	91.9	73.4	98.4	1,221
Category 9	Electing directors and auditors/Regular majority/ No explicit requirement to cast a vote	6.3	89.1	99.7	349
Category 10	Compensation plans for board members/Regular majority/ No explicit requirement to cast a vote	64.2	58.0	98.7	720
Category 0	All other proposals (e.g. various charter and bylaw amendments, increasing the firm’s authorized capital, ratifying dividends, employee stock options plans etc.)/Regular majority/ No explicit requirement to cast a vote	43.1	83.1	99.5	2,160
All categories where the support of at least 1/3 of the minority shareholders is needed (Categories 1-4)		76.5	66.6	96.5	7,465
All categories where a 75% support is needed (Categories 5-6)		81.4	62.9	97.2	971
All categories where a regular majority is needed (all other categories)		44.3	69.1	99.3	7,039

a – Statistics in this column refer to institutional investors other than mutual funds for which data are not available

b – Statistics in this column refer to cases where a resolution was adopted (there is a small number of proposals which were postponed or where the outcome is unknown).

**Table 2: Institutional Investor Types (mutually exclusive)**

		No. of Institutions	Mean Equity Stake (%)	% of FOR votes	Size (mean value of assets under management, million 2005 NIS)	No. of Bank-affiliated	No. of Insurance affiliated	No. with affiliated underwriter	No. of publicly traded	No. of non-bank group-affiliated	No. of Votes
Type 1	Gov't-controlled Pension Funds	5	0.25	64.2	20,319	0	0	0	0	0	747
Type 2	Employee-owned, Enterprise-specific Pension or Provident Funds	13	0.18	57.3	1,836	0	0	0	0	0	1,812
Type 3	Mutual Funds	44	0.36	70.6	4,271	13	6	27	22	4	7,276
Type 4	Pension and Provident Funds	29	0.38	67.2	11,560	4	17	18	21	5	5,640



**Table 3: Support Rates of "Pure Play" vs. Institutions with Commercial Interests by****Category**

All the category-specific differences are statistically significant except for the differences in categories 0 and 6.

Category	"Pure Play" Institutions (Types 1 and 2) % of FOR Votes	Institutions with Commercial Interests (Types 3 and 4) % of FOR Votes
Full Sample	59.3 (N=2,559)	69.1 (N=12,916)
0	82.7	85.0
1A	22.2	43.6
1B	73.3	79.2
2	59.8	68.8
3	41.9	86.4
4	53.5	80.0
5	41.2	63.2
6	92.3	91.2
7	40.8	58.7
8	68.5	74.3
9	70.4	92.5
10	51.4	59.6
"Close Call Votes" (with support rates of 30-60%, N=992)	37.8	48.9
Rejected Proposals (N=350)	9.5	19.5

**Table 4: Institutional Investors with Various Business Activities  
(not mutually exclusive)**

	No. of Institutions	% of FOR votes	Average Size (assets under management, million 2005 NIS)	No. of Bank-affiliated	No. of Insurance affiliated	No. with affiliated underwriter	No. publicly traded	No. of non-bank group-affiliated institutions
Bank-affiliated Institutions	17	55.0	10,438	N/A	0	12	12	0
All non-bank Institutional investors with business activities	55	72.4	6,554	0	23	45	43	8
Insurance-affiliated Institutions	23	66.5	10,728	0	N/A	17	22	6
Non-bank institutions with an Affiliated Underwriter	34	73.0	6,742	0	17	N/A	23	6
Non-bank publicly-traded Institutions	31	71.7	8,586	0	22	23	N/A	7
Non-bank group-affiliated Institutions	8	72.6	15,437	0	6	6	7	N/A
Non-“pure play” Institutions with none of the above business activities	13	71.4	4,810	0	0	0	0	0

**Table 5: Institutional Investors by Size and Equity Stakes**

	% of FOR votes	Average Size (assets under management, million 2005 NIS)	Number of Votes
Institutions whose size is above the sample median (2862 million 2005 NIS)	65.2	14,283	7033
Institutions whose size is below the sample median	70.8	1,207	7417
Institutions whose equity stake is above the sample median (0.08%)	65.7	9,678	6152
Institutions whose equity stake is below the sample median	69.8	5,308	6661

**Table 6: Probit Regression of the Decision to Actively Participate in a Vote**

The dependent variable takes the value one if the investor casts a FOR/AGAINST vote. The sample excludes mutual funds for which “No Votes” data are not available as well as observations with outlying values for operating profits and market to book ratios. Standard errors (clustered at the firm level) are in parentheses; \*\*\*, \*\*, and \* denote statistical significance at the 1, 5 and 10 percent levels, respectively.

	Full Sample
Category 0	Omitted
Category 1A	1.89*** (0.16)
Category 1B	2.00*** (0.14)
Category 2	1.88*** (0.13)
Category 3	-1.16*** (0.20)
Category 4	1.81*** (0.28)
Category 5	1.10*** (0.22)
Category 6	2.05*** (0.78)
Category 7	1.60*** (0.11)
Category 8	1.83*** (0.22)
Category 9	-1.40*** (0.17)
Category 10	0.63*** (0.20)
Controlling Shareholders' Equity Stake	-0.44 (0.27)
Operating Profits to Sales	-0.000 (0.002)
Total Assets (coefficient multiplied by 1,000,000)	6.70* (3.90)
Market-to-Book	0.13** (0.06)
Leverage	0.38 (0.26)
Group-affiliated	-0.16 (0.12)
Institution Size (coefficient multiplied by 1,000,000)	4.04* (1.32)
Institution Type 2	-0.24*** (0.10)

Institution Type 4	-0.02 (0.10)
Group-affiliated Institution	-0.19 (0.14)
Bank-affiliated Institution	0.38*** (0.12)
Insurance-affiliated Institution	0.36** (0.17)
Institution with an Affiliated Underwriter	-0.01 (0.05)
Publicly-traded Institution	-0.38*** (0.14)
Institution's Equity Stake	-0.07* (0.04)
Constant	Yes
N	11385
Pseudo R-squared	0.50

**Table 7: Probit Regression of the Decision to Vote FOR – Main Specification**

The dependent variable takes the value one if the investor casts a vote FOR. The sample includes all FOR/AGAINST votes and excludes observations with outlying values for operating profits and market to book ratios. Standard errors, clustered at the firm level, are in parentheses. \*\*\*, \*\*, and \* denote statistical significance at the 1, 5 and 10 percent levels, respectively.

Category 0	Omitted
Category 1A	-1.12*** (0.17)
Category 1B	-0.07 (0.20)
Category 2	-0.36** (0.16)
Category 3	-0.30 (0.30)
Category 4	-0.36 (0.29)
Category 5	-0.54** (0.27)
Category 6	0.14 (0.49)
Category 7	-0.72*** (0.20)
Category 8	-0.25 (0.18)
Category 9	0.42 (0.27)
Category 10	-0.70** (0.30)
Controlling Shareholders' Equity Stake	0.33 (0.33)
Operating Profits to Sales	-0.001 (0.003)
Total Assets (coefficient multiplied by 1,000,000)	11.3 (6.90)
Market-to-Book	-0.05 (0.10)
Leverage	-0.17 (0.27)
Group-affiliated	0.13 (0.12)

Institution Size (coefficient multiplied by 1,000,000)	-3.14* (1.71)
“Pure Play” Institutions (Types 1 and 2)	-0.49*** (0.07)
Group-affiliated Institution	0.11 (0.07)
Bank-affiliated Institution	-0.85*** (0.07)
Insurance-affiliated Institution	-0.63*** (0.08)
Institution with an Affiliated Underwriter	0.12*** (0.05)
Publicly-traded Institution	0.31*** (0.07)
Institution’s Equity Stake	-0.03 (0.04)
Constant	Yes
N	9679
Pseudo R-squared	0.11

**Table 8: Probit Regressions of the Decision to Vote FOR – Additional Specifications**

The dependent variable takes the value one if the investor casts a vote FOR. The sample includes all FOR/AGAINST votes and excludes observations with outlying values for operating profits and market to book ratios. Standard errors (clustered at the firm level) are in parentheses, \*\*\*, \*\*, and \* denote statistical significance at the 1, 5 and 10 percent levels, respectively.

	Pure Play Institutions Only	Compensation-related Votes (Categories 1A, 7 and 10)	Votes requiring the support of at least 1/3 of minority shareholders (Categories 1 through 4)	75% support needed (Categories 5-6)	Regular majority needed (all other categories)	Full Sample with Industry Dummies
Category 0	Omitted	N/A	N/A	N/A	Omitted	Omitted
Category 1A	-1.69*** (0.27)	-0.29 (0.29)	-0.76*** (0.27)	N/A	N/A	-1.12*** (0.17)
Category 1B	-0.16 (0.31)	N/A	0.27 (0.28)			-0.09 (0.20)
Category 2	-0.64*** (0.24)	N/A	-0.04 (0.26)	N/A	N/A	-0.41*** (0.16)
Category 3	-1.80*** (0.44)	N/A	0.09 (0.34)	N/A	N/A	-0.31 (0.31)
Category 4	-1.07** (0.45)	N/A	Omitted	N/A	N/A	-0.37 (0.29)
Category 5	-1.07** (0.43)	N/A	N/A	Omitted	N/A	-0.58** (0.27)
Category 6	-0.09 (0.26)	N/A	N/A	0.87 (0.67)	N/A	0.22 (0.49)
Category 7	-1.16*** (0.34)	0.09 (0.30)	N/A	N/A	-0.75*** (0.21)	-0.73*** (0.21)
Category 8	-0.58* (0.31)	N/A	N/A	N/A	-0.28 (0.20)	-0.28 (0.20)
Category 9	0.32 (0.45)	N/A	N/A	N/A	0.41 (0.26)	0.52** (0.24)
Category 10	-1.02*** (0.33)	Omitted	N/A	N/A	-0.73** (0.32)	-0.63** (0.31)
Controlling Shareholders' Equity Stake	0.29 (0.43)	-0.54 (0.47)	0.88** (0.42)	1.87 (2.15)	-0.12 (0.52)	0.23 (0.31)
Operating Profits to Sales	0.003 (0.004)	-0.003 (0.003)	-0.004 (0.003)	0.03*** (0.008)	-0.002 (0.004)	-0.001 (0.003)
Total Assets (coefficient multiplied by 1,000,000)	12.1** (5.0)	2.45 (9.70)	10.6** (4.7)	3.0 (2.0)	10.3 (9.4)	10.3** (4.9)
Market-to-Book	-0.04 (0.12)	0.10 (0.14)	-0.02 (0.09)	0.48 (0.50)	-0.01 (0.14)	0.03 (0.07)

Leverage	-0.27 (0.32)	0.48 (0.48)	-0.10 (0.38)	-2.82** (1.29)	0.18 (0.40)	-0.10 (0.29)
Group-affiliated	0.05 (0.15)	0.11 (0.19)	0.10 (0.16)	-1.57*** (0.59)	0.18 (0.16)	0.18 (0.13)
Institution Size (coefficient multiplied by 1,000,000)	3.21 (2.67)	0.09 (3.17)	-1.36 (2.23)	-22.5*** (5.6)	-2.79 (2.33)	-3.54** (1.73)
“Pure Play” Institutions (Types 1 and 2)	N/A	-0.65*** (0.11)	-0.47*** (0.09)	-0.93*** (0.31)	-0.50*** (0.12)	-0.48*** (0.07)
Group-affiliated Institution	N/A	0.17 (0.11)	-0.07 (0.10)	0.42* (0.24)	0.27*** (0.10)	0.10 (0.08)
Bank-affiliated Institution	N/A	-0.78*** (0.09)	-0.81*** (0.09)	-1.21*** (0.28)	-0.91*** (0.07)	-0.86*** (0.07)
Insurance-affiliated Institution	N/A	-0.66*** (0.14)	-0.53*** (0.11)	-1.67*** (0.28)	-0.66*** (0.11)	-0.63*** (0.09)
Institution with an Affiliated Underwriter	N/A	0.09 (0.08)	0.08 (0.07)	0.42** (0.20)	0.11* (0.06)	0.12** (0.04)
Publicly-traded Institution	N/A	0.26*** (0.09)	0.37*** (0.09)	0.65*** (0.22)	0.25*** (0.08)	0.33*** (0.07)
Institution’s Equity Stake	-0.003 (0.11)	0.05 (0.06)	-0.05 (0.05)	0.20** (0.10)	-0.03 (0.05)	-0.03 (0.03)
Constant	Yes	Yes	Yes	Yes	Yes	Yes and Industry Dummies
N	1526	3024	4960	669	4050	9679
Pseudo R-squared	0.15	0.07	0.12	0.31	0.12	0.13



## Appendix: Characteristics of the Sample of Firms where Voting Takes Place

Variable	Definition/ Source	Units	Mean	Std	25%	Median	75%	Number of Votes
Operating Profits to Sales	Financial Statements, end of 2005 <sup>a</sup>	Percent	16.8	19.1	5.5	11.9	25.0	12,178
Total Assets	Financial Statements, end of 2005	Million 2005 NIS	23,308	56,860	686	3,573	15,534	15,392
Market-to-Book	Financial Statements, end of 2005 <sup>b</sup>		0.99	1.40	0.26	0.70	1.18	15,386
Leverage	Debt to total assets/ Financial Statements, end of 2005		0.59	0.24	0.47	0.62	0.75	13,016
Group-affiliated	Dummy which takes the value 1 if the firm is affiliated with one of the 20 major business groups / Kosenko (2008)	0/1	0.20	0.40	0	0	0	15,475
Controlling Shareholders' Equity Stake	% of total equity held by all controlling shareholders and management / Bank of Israel, end of 2005	Percent	0.63	0.19	0.53	0.67	0.77	14,711

a - Excluding observations with profit rate exceeding 100% in absolute value.

b - Values above 50 are ignored.