

Center for Financial Markets and Policy

The Role of Institutional Investors in Voting: Evidence from the Securities Lending Market

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Abstract

We use a unique setting to examine the role of institutional investors in influencing firm-level corporate governance through proxy voting. Using a comprehensive proprietary data set from the equity lending market, we find that institutional investors restrict or call back their loaned shares prior to the record date in order to exercise their voting right. We find higher recall for firms with weaker corporate governance, weaker performance, higher institutional ownership, and when antitakeover or compensation proposals are on the ballot. The recall is most pronounced for contentious events such as proxy fights, mergers, negative changes in ISS's recommendation, and close votes in the previous year. Examining the subsequent vote outcome, we find higher recall to be associated with fewer FOR votes for management and more FOR votes for shareholder proposals. The influence of proxy advisory firm ISS is also evident in voting outcome. If ISS opposes management then we find the higher recall to be associated with less FOR votes for the proposal. We find an increase in borrowing demand on the record date, however there is no relation between borrowing demand and voting outcome. Our results indicate both that corporate governance is important to institutional investors and that the proxy process is an important channel for corporate governance.

JEL: G32; G34; G38

Keywords: Proxy Voting, Securities Lending, Institutional Investors

Corresponding author: Reena Aggarwal, McDonough School of Business, Georgetown University, Washington, D.C. 20057. Tel. (202) 687-3784, aggarwal@georgetown.edu. An earlier version of the paper was titled, "Does Proxy Voting Affect the Supply and/or Demand for Securities Lending?" We thank Alon Brav, Susan Christoffersen, Richard Evans, Mireia Gine, Slava Fos, Stuart Gillan, Steve Kaplan, Gregor Matvos, David Musto, Adam Reed, David Ross, Laura Starks and David Yermack; seminar participants at the Federal Reserve Board, U.S. Securities and Exchange Commission, 3rd Annual RMA - UNC Academic Forum for Securities Lending Research, Western Finance Association 2011, FMA Asia 2011, Drexel Conference on Corporate Governance 2011, Georgetown University, IESE, Università Cattolica del Sacro Cuore, Comisión Nacional del Mercado de Valores, London School of Economics, Temple University, University of Cambridge, Queen Mary, University of Maryland, University of Texas at Austin, and Imperial College for helpful comments. Conversations with several industry participants, particularly, Les Nelson of Goldman Sachs and Judith Polzer of J.P. Morgan helped us to understand the workings of the securities lending market. Doria Xu and Jiayang Yu provided excellent research assistance. Saffi acknowledges support from the Spanish Ministry of Science and Innovation under ECO2008-05155 at the Public-Private Sector Research Center at IESE. Aggarwal acknowledges support from the Robert E. McDonough endowment at Georgetown University's McDonough School of Business.

The Role of Institutional Investors in Voting: Evidence from the Securities Lending Market

I. Introduction

Understanding the preferences of institutional investors regarding governance is important for firms trying to attract new investors as well as policy makers considering the regulation of different governance mechanisms. Prior research has attempted to examine the preferences of institutional investors based on inferences of corporate governance attributes deemed important to institutional investors.¹ Gillan and Starks (2003) highlight the special role that institutional investors play in prompting change in corporate governance practices. Aggarwal, Erel, Ferreira and Matos (2011) find that changes in institutional ownership over time drive subsequent changes in firm-level governance. However, institutional investors' preferences related to governance tend to be private and are often conducted behind the scenes and hence are difficult to study. Therefore, there is limited empirical work examining the channels used by institutional investors to affect governance.

We use a unique setting that allows us to directly study the conditions that prompt institutional investors to engage in influencing firm-level governance, and the channels used for this purpose. To overcome the identification problems faced by previous studies, we use the securities lending market to examine the corporate governance preferences of institutions. Most large institutions have a securities lending program and consider it to be an important source of revenue, with estimates of \$800 million in annual revenue for pension funds alone (Greene 2010). At the same time, institutions have a fiduciary responsibility to vote their shares. If the shares are on loan on the voting record date then institutions cannot vote those shares. Hence, institutional investors must decide whether to restrict lending and even recall shares already on loan in the

¹ See for example, Gillan and Starks (2000, 2003, 2007), Hartzell and Starks (2003), Gaspar, Massa, and Matos (2005), Chen, Harford, and Li (2007), and Bushee, Carter, and Gerakos (2010).

event of an upcoming vote. Our focus is not on the value of a vote, which is examined by Christoffersen, Geczy, Musto, and Reed (2007) for an earlier time period. Rather, our aim is to examine the extent to which corporate governance matters to institutional investors and the extent to which they use the proxy process to exercise their opinions.

We use a comprehensive proprietary data set that comprises shares available to lend, shares that have actually been borrowed and are on loan, and the associated loan fee for the period 2007-2009. We find a marked reduction in the supply of lendable shares prior to the proxy record date as institutions restrict and/or recall their loaned shares so that they can exercise their voting rights. The supply returns to normal levels immediately afterwards. We show that shares are more likely to be recalled on the record date for firms that have performed poorly relative to their peers, have weaker governance, and larger institutional ownership. We find that institutional investors are most interested in exercising their voting rights when antitakeover and compensation proposals are on the ballot. We also find a statistically significant increase in borrowing demand and fee around the record date.

Unlike previous papers, our time-series data allows us to develop cleaner specifications and study changes in lending supply on record dates associated with four contentious/significant events: proxy contests, changes in ISS's recommendations, close votes in prior years, and mergers. In each of these proxy events we implement an empirical methodology that estimates the effect of the proxy event, the "treatment" group, relative to record dates for the same firm with no significant proxy event, the "control" group. Further, we employ a difference-in-difference methodology to identify the effect of the proxy event within firms controlling for time-series variation. For example, proxy contests allow for a natural setting where we are able to compare recall of shares of a firm on record dates with proxy contests, the "treatment" group,

relative to record dates for the same firm with no proxy contest, the “control” group. We find higher recall is associated with record dates that have proxy contests.

We show that the recommendations of proxy advisors strongly influence how institutional investors vote using the same difference-in-difference methodology. We find higher recall at meetings when the proxy advisory firm ISS changes its recommendation negatively for a firm. Next, we show that investors are more eager to exercise their vote by recalling shares if the vote was close in the preceding year. Further, we identify proxy events for targets and acquirers. We show that recall in lending supply is significantly greater for merger proposals where the firm is the target, compared with record date lending activity around non-merger proposals for the same firm. This result shows that institutions’ recall of shares is significantly greater when the proposal vote directly relates to corporate control. We do not find increased borrowing demand associated with proxy contests, changes in ISS recommendation, or a close vote in the prior year. However, we do find evidence that there is an increase in borrowing demand for merger proposals where the firm is the acquirer, but not the target.

We also investigate the relation between recall in lending supply at the record date and the subsequent votes cast on the meeting date. In general, we find that management proposals where ISS recommends voting against and shareholder proposals receive fewer votes. In addition, we find higher recall to be associated with more FOR votes for shareholder proposals, and fewer FOR votes for management, especially when ISS recommends voting against management. These results are consistent with both ISS advice being important for voting decisions and also institutions recalling shares to vote in the interests of shareholders. Further, we show that the recall in lending supply is more significant in explaining voting outcome in those proposals where votes are more likely to be borrowed leading up to the record date.

In addition, we examine voting by mutual funds to rule out that the relation between recall and voting outcome is driven by the alternative explanation that institutions recall shares to vote with management. Mutual funds provide an opportunity to better observe how voting behavior is influenced by the recall of lending shares by examining voting behavior only for those investors who provide lending supply. Mutual funds are significantly less likely to vote in favor of proposals where recall in lending supply is greater and ISS recommend voting against. This result alleviates the concern that mutual funds are recalling shares to vote with management when other shareholders are following ISS's advice and voting against management.

Our results show that beneficial owners of securities recall lending supply ahead of the proxy record date in order to vote. A small number of institutions always recall their shares prior to a vote, however the majority recall their shares selectively, depending on the proposals on the ballot. Further, the recall in supply is economically significant compared with borrowing demand. The results capture wider institutional behavior with regards to corporate governance. The findings in this paper imply that institutions take their responsibility to vote seriously, and make the effort to determine when it is important to recall shares in order to exercise voting rights.

In extensions to the main results, we examine the period of the financial crisis, and also check for robustness of our findings around dividend record dates. During the financial crisis of 2008, the general pattern of reduced supply and increased fee around the proxy voting date continued to hold. In contrast to the activity around voting record dates, we find that around the time of the ex-dividend record date, there is a statistically and economically significant increase in borrowing demand, with little change in the supply of lendable shares.

The issues we examine are particularly relevant for a period that has seen increased emphasis on both shareholder activism and securities lending. The increased focus on corporate governance during the last decade, and most recently during the financial crisis, has intensified the attention given to the fiduciary responsibility of institutions. Regulators have given more urgency to allowing shareholders access to proxies. In a speech given by SEC Chairman Schapiro in 2010, the chairman stated that there are more than 600 billion shares voted annually at more than 13,000 shareholder meetings every year. Voting provides an important mechanism for shareholders to affect firm-level corporate governance and policies. Since equity lending transfers voting rights, it has important ramifications for corporate governance. The increased interest in proxy voting and securities lending has resulted in fund boards now paying attention not only to the fee received from a securities lending program, but also to whether the securities are being loaned to “responsible” borrowers. Funds are screening companies' upcoming shareholder meetings where a vote may be important. According to a survey of funds by RiskMetrics/ISS, 37.9% of the respondents stated that a formal policy on securities lending is part of their proxy voting policy.²

Our paper adds to the literature on the governance role played by institutional investors. Gillan and Starks (2007) survey the evolution of institutional shareholder activism in the U.S. from the value effect of shareholder proposals to the influence on corporate events. Other studies find that institutional investors affect CEO turnover (Parrino, Sias, and Starks (2003) and Helwege, Intintoli, and Zhang (2012)), antitakeover amendments (Brickley, Lease, and Smith (1988)), executive compensation (Hartzell and Starks (2003)), and mergers (Gaspar, Massa, and Matos (2005) and Chen, Harford, and Li (2007)). Cuñat, Gine and Guadalupe (2012) show that

² See <http://www.riskmetrics.com/press/articles/040307boardiq.html>

passing a governance provision is associated with an increase in shareholder value. In an analysis of 23 countries, Aggarwal, Erel, Ferreira, and Matos (2011) find that changes in institutional ownership over time are positively associated with subsequent changes in firm-level governance, but the opposite is not true. Cuñat, Gine and Guadalupe (2012) show that passing a governance provision is associated with an increase in shareholder value, and more so for institution sponsored proposals. Chung and Zhang (2009) find that the fraction of a firm's shares held by institutions increases with the quality of governance. Bushee, Carter, and Gerakos (2010) find evidence that ownership by governance-sensitive institutions in the U.S. is associated with future improvements in shareholder rights.

In a survey of institutional investors, McCahery, Sautner, and Starks (2011) find that corporate governance is important to institutional investors, and that many institutions are willing to engage in shareholder activism. Recent papers such as Brav, Jiang, Partnoy, and Thomas (2008); Clifford (2008); and Klein and Zur (2009) study activism by individual funds, such as pension funds or hedge funds. Gantchev (2012) finds that the average activist campaign is estimated to cost \$10.5 million, and half of the costs come from proxy fights. Less than 5% of all campaigns reach a proxy fight; proxy fights having a 67% success rate. Cai, Garner, and Walkling (2009) find shareholder votes to be related to firm performance, governance, and director performance, however they conclude that the differences are economically trivial.

Christoffersen, Geczy, Musto, and Reed (2007) use 1998-1999 data from a large lending agent to examine borrowing demand and fee aspect of the securities lending market around a proxy vote. We find a statistically significant increase in borrowing demand and fee around the record date. However unlike for lending supply, in our time-series analysis, borrowing demand

and fee vary little if at all across proxy events. Kalay, Karakas, and Pant (2011) use the options market to determine the value of a vote and find that the value of voting rights is higher around shareholder meetings.

Our paper also contributes to the literature on equity lending. Studies such as Jones and Lamont (2002); D'Avolio (2002); Geczy, Musto, and Reed (2002); Ofek and Richardson (2002); Cohen, Diether, and Malloy (2007); and Edwards and Hanley (2010) examine the cost of borrowing stocks. Saffi and Sigurdsson (2011) describe international equity lending markets and how lending supply and loan fee are related to market efficiency and the distribution of stock returns. Kaplan, Moskowitz, and Sensoy (2010) conduct an experiment in which they introduce an exogenous supply shock to the loan supply of a single money manager. They find no adverse impact on stock prices. Asquith, Au, Covert, and Pathak (2012) describe borrowing in the bond market by analyzing data from one large lender for the period 2004-2007.

The paper proceeds as follows. Section 2 provides background on the proxy voting process, and the securities lending market. Section 3 describes the data on proxy voting, securities lending, and other firm-level corporate attributes. In Section 4, we show the changes in lendable shares around proxy voting record date. Section 5 shows the relation between changes in securities lending activity and proposal type. Section 6 presents results of our empirical findings on voting outcomes and the role of lendable shares. Section 7 provides additional analysis around dividend record dates, and during the financial crisis. Section 8 concludes.

2. Background on Proxy Voting and Securities Lending

2.1 Proxy Voting

In the United States, state laws control the holding of annual meetings to elect directors and matters of corporate governance, as discussed by Karmel (2010). However, federal securities

laws control the solicitation of proxies. In light of changes in shareholder demographics, the structure of share holdings, technology, and the potential economic significance of each proxy vote, the SEC has reviewed the proxy infrastructure and issued a “proxy plumbing” concept release in July 2010. The concept release identified several issues that might require a regulatory response, including proxy voting and securities lending; “empty voting,” under which economic ownership is decoupled from voting rights; over-voting and under-voting, both of which can result from a mismatch between the number of shares held compared to the number of shares credited to a broker-dealer; and the need for investors to know proxy items before the record date so that they can decide whether to lend their shares or not.³ The SEC also raised the issues of whether funds should report the number of shares cast and how the funds voted.

One of the issues raised by the SEC’s 2010 Concept Release deals with proxy advisors’ influence on voting. Most institutional investors subscribe to one or more proxy advisors and some delegate voting authority to these advisors. Choi, Fisch, and Kahan (2010) examine the impact of proxy advisors on uncontested director elections during 2005-06. They find that proxy advisors, instead of providing independent information, effectively aggregate information on factors considered important by investors. The authors conclude that their recommendations are less influential than perceived. Sometimes different proxy advisory firms provide opposing recommendations. In the high-profile proxy fight between Terra Industries Inc. and CF Industries Holdings, RiskMetrics supported dissident CF, while Glass Lewis and Co. supported Terra. RiskMetrics supported the dissident slate in 40% of contests, and Glass Lewis favored the dissident slate in only 20% of fights in which the recommendations were publicly available.⁴

³ See Hu and Black (2006, 2007) for a discussion of empty voting.

⁴https://www.sharkrepellent.net/request?an=dt.getPage&st=1&pg=/pub/rs_20100722.html&&RiskMetrics_and_Glass_Lewis_Proxy_Fight_Vote_Recommendations&rnd=701086

There are many rules and regulations that apply to the proxy process. To give shareholders sufficient time to make an informed voting decision, registrants must follow a timeline. SEC proxy Rule 14a-13 requires that a “Broker Search” be distributed to banks, brokers, and nominees who then compile a list of beneficial owners. This broker search must take place 20 business days prior to the record date for an annual meeting and ten days for a special meeting. Most states (for example, California and Delaware) require that the record date be set at a maximum of 60 days and a minimum of ten days prior to the meeting; New York sets the maximum at 50 days. The record date determines the ownership date for voting purposes. As long as shares are not lent out on the voting record date, the owner can vote them. Preliminary proxy material must be filed with the SEC via EDGAR, ten days before distributing definitive copies to shareholders. Proxy material must be mailed out 40 days before the meeting date.

Mutual funds typically have an oversight process, with board involvement, to monitor the funds’ proxy voting process. The SEC’s Rule 206(4)-6 requires funds to adopt and implement proxy voting policies and procedures, and that they make voting record available to clients. According to the SEC, “This disclosure enables fund shareholders to monitor their funds’ involvement in the governance activities of portfolio companies.” In 2003, the SEC started requiring mutual funds to disclose proxy voting records by filing Form N-PX.

2.2 Securities Lending

Securities lending is generally defined as a transaction in which the beneficial owner of the securities, normally a large institutional investor such as a pension fund or mutual fund, agrees to lend its securities to a borrower, such as a hedge fund, in exchange for collateral consisting of cash and/or government securities. The lender earns a spread by investing the collateral in low-risk short-term securities. In a normal U.S. loan, the collateral is 102% on domestic securities

and 105% for international securities. The securities lending market has grown tremendously in the last decade. By 2007, the total value of securities on loan was estimated at \$5 trillion (Lambert 2009), with research estimates being that lending reaps \$8 billion to \$10 billion annually in fees for Wall Street.⁵ Most large institutional investors have a securities lending program and consider securities lending as a key source of revenue. Institutional investors suffered large losses in 2008 that led to lawsuits against big custodial banks. The allegation was that the custodians did not invest the collateral in safe, plain-vanilla securities, resulting in losses for their clients.

As is evident from the SEC's concept release of July 2010, there are questions about whether securities lending has contributed to proxy abuse. The concern is that market participants can obtain voting rights in a firm by borrowing shares, but without having any real economic ownership. Some researchers assume that activist investors borrow shares for the sole purpose of obtaining voting rights to exert influence or gain control of a company, and do so without corresponding economic ownership in the company (see Hu and Black, 2006 and 2007). Most securities lending involves shares borrowed from pension funds, mutual funds, and other large institutional investors. These institutions tend to have proxy voting guidelines that often contain policies on securities lending. Although lenders refer to these shares as being "on loan", the lender actually transfers ownership and voting rights. Shares may be borrowed for a variety of reasons, including short selling, covering a short position, or for trading strategies such as convertible bond arbitrage, dividend tax-arbitrage strategies (see Christoffersen, Geczy, Musto, and Reed (2005) and Thornock (2011)), and merger arbitrage, and possibly for empty voting.

Institutions have started to include policies on securities lending in their proxy guidelines but they vary considerably in scope and detail. Some funds require a total recall of shares, while

⁵ http://www.forbes.com/2007/09/25/retail-investors-securities-biz-cx_lm_0925brokerage.html

others weigh the lost revenue against the benefits of voting on a case-by-case basis. Below, we provide some examples from funds' proxy voting guidelines.

Putnam Funds

“The funds’ have requested that their securities lending agent recall each domestic issuer’s voting securities that are on loan, in advance of the record date for the issuer’s shareholder meetings, so that the funds may vote at the meetings.”⁶

TIAA-CREF

“Even after we lend the securities of a portfolio company, we continue to monitor whether income from lending fees is of greater value than the voting rights that have passed to the borrower. Using the factors set forth in our policy, we conduct an analysis of the relative value of lending fees versus voting rights in any given situation. We will recall shares when we believe the exercise of voting rights may be necessary to maximize the long-term value of our investments despite the loss of lending fee revenue.”⁷

State Board of Administration of Florida (SBA)

“Circumstances that lead the SBA to recall shares include, but are not limited to, occasions when there are significant voting items on the ballot such as mergers or proxy contests or instances when the SBA has actively pursued coordinated efforts to reform the company’s governance practices, such as submission of shareholder proposals or conducting a detailed engagement. In each case, the direct monetary impact of recalled shares will be considered and weighed against the discernable benefits of recalling shares to exercise voting rights. The SBA recognizes that it may not be possible to determine, prior to a record date, whether or not shares warrant recall.”⁸

Fund groups such as Vanguard and Fidelity do not have specific discussion of policies on recalling shares in their public proxy guidelines. California Public Employees’ Retirement System (CalPERS) has a two-step list. About 30 securities on the “Focus” list are completely restricted from lending because CalPERS takes an active interest in these securities and always wants the shares available to vote. For the second list of 300 securities, which represents the largest market value of CalPERS position, CalPERS wants ensure that the securities are returned

⁶ See https://content.putnam.com/shared/pdf/proxy_voting_guidelines.pdf

⁷ See http://www.tiaa-cref.org/ucm/groups/content/@ap_ucm_p_tcp/documents/document/tiaa01007871.pdf

⁸ See <http://www.sbafla.com/fsb/LinkClick.aspx?fileticket=mt0icmFCYMK%3d&tabid=378>

prior to a proxy vote.⁹ The SEC requires funds to recall shares for “material” events but has not defined materiality. In the ISS survey, 92.3% of the respondents indicated that mergers and acquisitions were the most important reason to recall shares.

As mentioned in SBA’s guidelines above, one of the challenges to recalling shares is that shareholders typically do not receive the proxy material until after the record date. However, in order to vote, institutions must recall the shares by the record date. Hedge funds have argued that they do not borrow shares simply for voting purposes because they do not even know about the items on the proxy ballot as of the record date. Listed companies on the New York Stock Exchange are required to provide the NYSE a notice of record and shareholder meeting dates at least ten days prior to the record date. The SEC is considering whether this information should be disseminated to the general public.

3. Data

3.1 Securities Lending Descriptive Statistics

For the most part, understanding the securities lending market has been limited partly because of the lack of transparency in this fragmented market. We obtain a proprietary equity lending data set from Dataexplorers for the period January 2007 to December 2009. Dataexplorers collects this information daily from 125 large custodians and 32 prime brokers in the securities lending industry and provides comprehensive coverage of equity lending activity available to market participants that includes lending supply, shares actually borrowed, and the corresponding fee. Our data covers more than 85% of the securities lending market. There are 4,333 firms in the equity lending sample, however the proxy voting data limits the analysis to Russell 3000 firms. As of December 2009, there was \$1.55 trillion in stocks available to lend,

⁹ See http://www.securitiestechologymonitor.com/issues/19_31/21468-1.html?zkPrintable=true

out of which \$113 billion was actually lent out and would be considered as being on loan. Saffi and Sigurdsson (2011) provide a detailed description of the data.

The main dependent variables in our study are equity lending supply, borrowing demand, utilization rate, and annualized loan fees. We define these variables as follows: lending supply (*SUPPLY*) is the dollar value of supply relative to a firm's market capitalization; loan quantity (*ON LOAN*) is the dollar value of shares on loan on a given day relative to market capitalization; utilization rate (*UTILIZATION*) is *ON LOAN* divided by *SUPPLY*; and loan fee (*FEE*) is the difference between the risk-free interest rate and the rebate rate expressed in basis points (bps) per annum. The rebate rate is the portion of the interest rate on the collateral that is returned to the borrower. We use the effective Federal Funds rate as our proxy for the risk-free rate. Stocks that have a fee greater than 100 basis points (1%) are commonly considered to be *SPECIAL*. Such stocks are more closely watched by investors and are more expensive to borrow.

In Panel A of Table 1 we present descriptive statistics for the equity lending market for 7,415 firm-years from 2007 to 2009. The table shows that, on average, 22.17% of a firm's market capitalization is available for lending, with 4.16% being on loan and resulting in a utilization rate of 19.64%. The minimum and maximum values of *SUPPLY* are 0.01% and 70.15%, respectively. *ON LOAN* varies from a high of 38.19% to a low of zero. Some stocks are heavily borrowed while others are not borrowed at all. *UTILIZATION* is as high as 100% in our sample, implying that, at times, all of the supply of lendable securities is on loan.

The mean annualized fee is 50 bps. Therefore the daily cost of borrowing \$1 billion worth of shares on the record date is quite low. However, this cost can quickly rise for stocks in high demand with the maximum fee in our sample being 1,114 bps. The minimum fee of -50.84 bps implies that the lender pays the borrower. In fixed contract lending, it is possible for the fee to be

negative because the rebate is fixed in advance. If the rebate is larger than the interest earned on the collateral, e.g. when interest rates quickly decrease, then the fee will be negative. During the sample period, 10% of the stocks had a fee greater than 100 basis points and were considered to be *SPECIAL*. The mean and median number of days for which stocks are on loan is 16 days and one day, respectively. Most loans are open loans, which are “open ended” and are rolled over every day.

The change in lending characteristics from the average of days -30 to -20 to record date 0 is shown in Panel B of Table 1. The average change in *SUPPLY* and *ON LOAN* is -1.93% and 0.06% of market capitalization, respectively. The resulting increase in *FEE* is 2.4 bps. Panel C of Table 1 shows that the supply of lendable securities as a percentage of market capitalization (*SUPPLY*) is relatively stable over the 2007-2009 period, ranging from 21.78% in 2007 to 21.26% in 2009. . However, average demand for borrowing shares (*ON LOAN*) experienced a severe drop, decreasing from 4.60% in 2007 to 3.22% in 2009. Fee varies from a high of 58.50 bps in 2008 to a low of 43.05% in 2009. In a recent paper, Asquith, Au, Covert, and Pathak (2012) report mean and median fee for bond loans to be 32 and 18 basis points, respectively for the period from January 2004 through December 2007. During the financial crisis, many restrictions were placed on short selling. These restrictions impacted several arbitrage strategies used by hedge funds, hence the drop in demand for borrowing shares.

3.2 Other Firm-Level Data

We use CRSP to obtain share price (*PRICE*), market capitalization (*SIZE*), turnover (*TURNOVER*), and bid-ask spread (*SPREAD*). We use only common shares with price over \$1, and further merge the data to Compustat and collect data on book equity (*EQUITY*) to calculate the book-to-market equity ratio (*BM*). We exclude closed-end funds, American Depositary

Receipts (ADRs) and real estate investment trusts (REITs). We obtain ownership data from the Thomson Reuters CDA/Spectrum database on SEC 13F filings. The 13F filings must be reported on a quarterly basis by all investment companies and professional money managers with assets over \$100 million under management. For each stock, we calculate total institutional ownership as a percentage of market capitalization (*INST*) and institutional ownership concentration (*INST CONC*), measured as the Hirschman-Herfindahl index normalized between zero and one. We use firm-level corporate governance index GOV_{41} as in Aggarwal, Erel, Ferreira, and Matos (2011). GOV_{41} assigns a value of one to each of the 41 governance attributes if the company meets minimally acceptable governance guidelines on that attribute, and zero otherwise.¹⁰

3.3 Proxy Voting Descriptive Statistics

We conduct a proposal-level daily analysis on 56,220 proposals obtained from RiskMetrics/ISS, henceforth ISS. The proxy voting data for the Russell 3000 firms includes proposal-level characteristics such as proposal description, sponsor, management's recommendation, ISS's recommendation, threshold for the proposal to pass, votes cast, and voting result.

In Panel A of Table 2, we find that on average, 86.62% of votes are cast on proxy proposals, with 91.86% of those votes being in favor and only 7.54% against. This overwhelming majority in favor of proposals is reflected in the 70.16% vote margin by which they pass. We create different categories of proposals, with the explicit aim of exploring those that might be considered as contentious, based on disagreements between different parties, and those that are associated with significant events. First, we classify proposals as routine and non-routine. NYSE Rule 452 outlines non-routine proxy proposals as those in which broker voting is not allowed. Examples include proposals relating to antitakeover provisions, firm capitalization

¹⁰ Aggarwal, Erel, Stulz, and Williamson (2009) describe the data in more detail.

and mergers. Second, we examine proposals relating to antitakeover provisions (*G-INDEX*) included in the G-Index developed by Gompers, Ishi, and Metrick (2003) and compensation (*COMP*).

In Panel B we describe the voting outcome of non-routine proposals, which comprise 12.25% of the total sample. These proposals have almost three times more votes cast against the proposal than the total sample. Almost 60% of non-routine proposals are related to compensation. Shareholder-sponsored proposals are a much smaller subset (only 25.56%) and usually fail to pass, receiving an average of 40% of FOR votes, although when ISS is in favor of the proposal the average proportion of FOR votes increase to 46.17%. Examples of shareholder-sponsored proposals include Say on Pay; requests that the firm or institution provide cumulative voting; reduce supermajority voting; require independent chairman of board; require a majority vote for the election of directors; and declassify the board of directors.

Our time series data allows us to examine changes in lending supply around record dates associated with four significant proxy events. Proxy contests are one example of contentious proposals. In a proxy contest, shareholders vote to resolve a conflict between the firm's management and board of directors, referred to as "incumbents", and a group of shareholders, referred to as "dissidents". Some examples of high profile proxy contests include Carl Icahn's efforts to unseat Yahoo's board in 2008, and Hewlett Packard – Compaq merger in 2001. Dissident shareholders can initiate the proxy contest by filing a preliminary proxy statement PREC14A and definitive proxy statement in connection with contested solicitations DEFC14A.

To study the effect of proxy contests on recall in lending supply we implement an empirical methodology that estimates the effect of the proxy contest, the "treatment" group, relative to record dates for the same firm with no proxy contest, the "control" group. Further, we

employ a difference-in-difference methodology to identify the within firm effect of the proxy contest, controlling for time-series variation. Data on proxy contests is hand-collected and supplemented from data from Sharkrepellent.net, an organization that covers proxy fights and activism.

A second group of contentious proposals that we study is when management recommends FOR and ISS recommends AGAINST the proposal. Examples of management-supported and ISS-opposed proposals are: approve poison pill, approve or amend stock plan, authorize increase of common stock, and authorize new class of preferred stock. ISS recommendations exhibit persistence at the firm-level, perhaps because firm governance mechanism and often proposals change slowly. Therefore we examine the effect of an increase in the fraction of ISS “Against” recommendations for non-routine management proposals compared with the firm’s prior record date. Once again, we compare record dates where there was an increase in the fraction of ISS “Against” recommendation with a control group of record dates for the same firms where the ISS recommendation did not change relative to the firm’s prior record date.

Third, we expect that institutions will pay particular attention to voting on proposals for the firm in the current year if the firm experienced a close proposal outcome vote in the prior year. The meetings with a close outcome at the preceding meeting provide the treatment group, which we compare against the control group of meetings for which there was no close outcome at the prior meeting. Finally, we examine mergers. We identify merger proposals for targets and acquirers and contrast the difference in record date lending activity for mergers (the treatment group) with record date lending activity for the same firms for non-merger proposals (the control group).

4. Securities Lending and Record Date

4.1 Lending, Borrowing, and Loan Fee around Proxy Voting Record Date

Figure 1 shows the lending supply, borrowing, utilization, and loan fee for the period starting 30 days before the record date and ending 30 days after the record date. We define the record date (day 0) as the event date. For our 7,415 firm-record dates, the average time between the record date and the shareholder meeting is 53 days.¹¹ If the owner lends out shares on the record date then the borrower gets the voting rights, however this position can immediately be reversed on day 1.

The plots in Figure 1 show the average *SUPPLY*, *ON LOAN*, *UTILIZATION*, and *FEE* on each of the days (-30,+30) around the record date. For those firms in the highest utilization quartile, the equity lending market is more likely to be binding. When we examine the time series for lending supply, on loan, utilization and fee averages, we see that there is an event-date effect on the record date. The supply of shares available to lend as a fraction of market capitalization starts to decrease about 15 days before a vote, and is at its lowest point on day 0, the record date. *SUPPLY* starts at 24.05% on day -30 and reduces to 22.09% by the record date.. The amount available to lend is reduced by 1.96% of market capitalization, which corresponds to an 8.15% reduction. This result is consistent with institutions calling back their shares at the time of a vote and withdrawing them from the lendable pool of securities. On the first day after the record date, *SUPPLY* returns to pre-event levels inline with institutions not wanting to lose revenue from lending.

The results suggest that institutions start restricting supply in advance of the proxy record date to ensure that shares can be recalled and that they can exercise the vote. In practice,

¹¹ The sample is reduced to 7,415 record dates due to the requirement of observing all regression variables on each of the days in the window (-30,+30). Our results remain the same even if we do not impose this restriction on the sample.

discussions with lending agents revealed that institutions are generally advised to allow two weeks for a recall prior to a proxy vote, and possibly longer if the stock is “special”. Consistent with industry practice, we find that the drop in lendable shares starts to occur about two weeks before the record. Institutions might also recall shares in advance to provide sufficient notice to borrowers, thus alleviating possible problems for borrowers to find shares and improving an institution’s reputation as a stable and reliable lender.¹² Before the availability of electronic stock-loan monitoring systems, recalls frequently failed. The Securities Industry and Financial Markets Association estimated that in 2002, 25% of recalls failed.¹³

Examining the plot for borrowing demand (*ON LOAN*) shows a small increase around the record date. On day -30, on average, 4.12% of a firm’s market capitalization is on loan, and by the record date it grows to 4.14%, increasing by only 0.02% of a firm’s market capitalization. Finally, *UTILIZATION* and *FEE* both increase in the 15 days prior to the record date, mirroring the decrease in supply. The reduced lending supply and increased borrowing demand explains the increase in the utilization rate and loan fee relative to day -30 by 9.36% and 9.52%, respectively.

The documented relation between utilization and fees is consistent with the results in Kolasinski, Reed and Ringgenberg (2011a) and Saffi and Sturgess (2012). The finding also adds insight to Blocher, Reed and Van Wesp (2010), who argue that shifts in supply matters only for stocks on special by revealing that supply shifts become important even at relatively low levels of utilization.

¹² Hu and Black (2008) discuss the case of Fidelity and Morgan Stanley, who together held 10% shares of Telecom Italia and led a campaign against a takeover of Pirelli. However, they were only able to vote 1% of the shares because the remaining shares were lent out and could not be called in in time for the vote. The Pirelli bid was approved.

¹³ Securities Technology Monitor, November 13, 2007.

4.2 Determinants of Lending Supply, Borrowing Demand, and Loan Fee

We investigate the determinants of the equity lending market by estimating separate pooled regressions in which we use daily lending supply, borrowing, and loan fees on the record date as the dependent variables. For each of the 7,415 record dates, we consider an event window of -30 days to +30 days, where $t=0$ is the proxy voting record date. We include a record date dummy (*RDATE*) to examine whether there is abnormal equity lending market activity on the record date compared to the 30 days before and after the record date.

We follow Saffi and Sturgess (2012) by including the following variables to explain securities lending: To control for ownership, we use *INST*, institutional ownership from the end of the previous quarter measured as a percentage of market capitalization, and *INST CONC*, concentration of institutional holdings using the Hirschman-Herfindahl index. We use lagged values of log of market capitalization (*SIZE*), book-to-market ratio (*BM*), turnover (*TURNOVER*), and spread (*SPREAD*) as explanatory variables to control for firm characteristics. We also include a dummy for stocks with a share price below five dollars (*DPRICE*). We measure firm performance in the previous quarter by *ROA* and stock returns (*RET*).¹⁴ We classify firms as having *LOW ROA* or *LOW RET* if their return is below the 2-digit SIC industry median for that quarter. In all regressions we cluster standard errors by firm and include year-quarter fixed effects.

Table 3 reports the results for the determinants of lending supply. The dependent variable is lending supply, expressed as percentage of market capitalization. In column 1, we use firm-level attributes to explain lending supply, and we examine record-date effects. The explanatory variable *RDATE* has a coefficient of -1.672, which is significant at the 1% level. In terms of economic significance, the coefficient indicates that on average, lending supply is lower on the

¹⁴ Our results are robust to estimating performance over longer time periods.

record date by 1.672% of market capitalization, or approximately 8% of the level on day -30. In addition to standard control variables, we include firm-level corporate governance, *GOV41*. The positive and statistically significant coefficient of 3.88 on *GOV41* indicates that firms with better governance have a higher lending supply in general, even after controlling for institutional ownership and other firm characteristics. This finding shows that the lower supply on the record date is not simply a governance effect. This result is consistent with the argument that better governance alleviates shareholders' concerns that share lending will be detrimental to the value of their holdings. In addition, lending supply is higher when institutional ownership (*INST*) is higher, when institutional ownership is not concentrated (*INST CONC*), and for value stocks (*BM*); and lower for stocks with price below \$5 (*PRICE<\$5*). The *SIZE* coefficient is negative and significant when we include other firm-level attributes.¹⁵

We might expect that institutional investors have stronger preferences to exercise voting rights in firms with poor performance. In column 2 we introduce *LOW ROA* and the interaction of *RDATE* and *LOW ROA*. We find that for firms with poor performance as measured by *LOW ROA*, lending supply on the record date is an additional 0.862% lower. In column 3, we repeat the analysis with another proxy for firm performance based on stock price performance. The coefficient of the interaction term *RDATE x LOW RET* is negative and statistically significant, showing that, on the record date, lending supply is lower by an additional 0.206% of market capitalization using a stock market measure of performance.

Column 4 of Table 3 includes the interaction term *RDATE x GOV41*, with the 2.617 coefficient being statistically significant at the 1% level. The results imply that recall of shares is higher for firms with weak corporate governance. There are more shares to lend when

¹⁵ However, it is positive and significant if these other attributes are not included, particularly *INST*, because of the high correlation with *SIZE*.

institutional ownership is high, but higher institutional ownership is also associated with larger recall on record date as captured by the -1.004 coefficient of the interaction term $RDATE \times INST$. Finally, even when both $RDATE \times GOV41$ and $RDATE \times INST$ are included in column 4, both interaction terms continue to be significant. We can conclude that institutional investors are particularly interested in exercising their vote when corporate governance is weak but are less concerned if the firm has strong governance.

The determinants of borrowing demand appear in columns 1-4 of Table 4. The positive coefficient on borrowing demand indicates that demand is statistically higher on the record date. In the model shown in column 1, the coefficient of $RDATE$ is 0.075, which amounts to an increase of 1.9% compared to the average of the -30 to 30 day event window. Again, we include the corporate governance index $GOV41$ in this analysis. We note that the coefficient on $GOV41$ is negative and significant. Although better corporate governance alleviates shareholders' concerns when lending stocks, it appears to deter those investors who borrow stock. This result is consistent with the hypothesis that better governance deters stock borrowing and subsequent short selling because, all else equal, it is associated with fewer opportunities for investors to profit on the downside. Borrowing demand is higher if institutional ownership is higher and dispersed, and for stocks that are more liquid, and lower for stocks priced below \$5. In columns 2 and 3 we find no significant association between previous performance and borrowing demand on the record date.

Columns 5-8 of Table 4 report the results of similar tests using FEE as the dependent variable. In three of the four models, the coefficient of $RDATE$ is positive and significant, implying that the fee for borrowing stock increases on the record date. This corresponds to a 3.2% increase relative to the overall mean but one that is not economically significant. In unreported

results we also examine how utilization influences the record date change in borrowing fee. We find that the record date change in fee is approximately 5.5% for firms where utilization is in the top quartile (by year). This is consistent with evidence that slack (low utilization) in the market for equity lending results in fee being insensitive to changes in supply and demand (see Kolasinski, Reed and Ringgenberg, 2011a). The interaction terms with previous performance, governance and institutional ownership are also not significant.

5. Changes in Securities Lending and Proposal Type

In this section, we examine the relation between changes in lending supply, borrowing demand, fee and different types of proposals.

5.1 Lending, Borrowing, Fee and Proposal Type

Aggarwal, Erel and Starks (2012) find that shareholder proposals have started receiving more votes in their favor in recent years, and that they are becoming a more important part of the governance process. ISS conducted a recent survey in which they found that management is expected to make changes if a say-on-pay proposal received more than 40% negative vote and that their institutional investor clients set an even low bar, expecting to see the board or management make changes if the proposal received greater than 30% negative vote. Thus, it is not just a matter of whether a particular proposal passes (receives majority vote), but rather it is a method through which shareholders can voice their opinion with the board and management.

We examine how equity lending activity varies by proposal type. First, we restrict attention to only the 6,887 non-routine proposals, which occur on 3,826 record dates. Next, we classify proposals by sponsor. *MGT* refers to management-sponsored proposals on the proxy ballot, and *SHDR* refers to shareholder-sponsored proposals on the ballot. In our sample, there are 5,127 management-sponsored proposals and 1,760 shareholder-sponsored proposals. For

each of the two groups, we examine the relation between change in the lending supply and type of proposal. The dependent variable is the change in the average lending supply during the period -30 to -20 days before the record date to the record date ($t=0$). The analysis is repeated for borrowing demand and fee. In addition to the firm-level control variables, we include dummies for antitakeover (*G-INDEX*) and compensation (*COMP*) proposals. These are proposal categories for which institutional investors are likely to be interested in voicing their opinion. For example, compensation issues have received a great deal of public attention particularly since the financial crisis of 2008.

Table 5 shows that the change in lending supply is higher when there is an antitakeover proposal for either management or shareholder-sponsored groups, the coefficient of *G-INDEX* being negative and significant in each case. The coefficient of *COMP* is also negative and significant for both groups, although at the 10% level. The results imply that investors are more likely to recall/restrict loaned shares if there are proposals related to compensation and antitakeover issues irrespective of whether management or shareholders are sponsoring the proposal. The results indicate that institutional investors are putting in effort to determine when to recall and vote their shares. Table 5 also reports results for changes in borrowing demand and fee as the dependent variable. There is no compelling evidence of increased demand and higher fee associated with these specific types of proposals.

5.2 Proxy Contests

Proxy contests are campaigns opposing management and serve as a mechanism to achieve strategic or governance changes at firms. They provide us with a unique setting to examine contentious events that institutional investors monitor carefully as part of their securities lending activities. We hand-collect data on proxy contests based on SEC filings and supplement

them with proxy contests reported by Sharkrepellent.net for the period January, 2007 to May, 2010. There are 182 proxy contests during our sample period; 50, 51, 56, and 28 in 2007, 2008, 2009, and 2010, respectively.¹⁶ Record dates with proxy contests serve as a treatment group and we match them with a control group of shareholder meetings with no proxy contest for the same firm. For example, CBOT Holdings had a proxy contest in 2007 but did not have a proxy contest in other years. This allows us to examine changes in lending supply with and without proxy contests for CBOT. Overall, our sample consists of 433 record dates: 182 record dates comprise the treatment group and 251 record dates comprise the control group, as shown in Panel A of Table 6. The change in lending supply on record date relative to the $t=-30$ to $t=-20$ average for the treatment group is 2.23% compared to 2.1% for the control group. The difference in recall between the two groups is not statistically significant. We also find no statistical difference for on loan and fee.

Dissidents might initiate a proxy contest that does not advance to a shareholder vote either because concessions are made and the issue is settled, or due to other reasons the dissident decides to withdraw. Of the 182 proxy contests in our sample, 75 advance to a shareholder vote as reported in Panel B of Table 6. The change in lending supply is -2.68% of market capitalization for the treatment group of 75 cases that go all the way to a vote. Again, we match up this treatment group with a control group of 107 cases that had no proxy contest. The control group experiences a change in lending supply of shares that is equal to -1.77%, almost 35% lower than the treatment group, and the difference is statistically significant at the 5% level. These descriptive statistics suggest that institutional investors are analyzing proxy ballots and, based on the importance of the items on the ballot, decide whether to restrict/recall shares in order to exercise their vote. The finding is consistent with the securities lending policies of

¹⁶ Many proxy contests are withdrawn even before a record date is set and hence are not part of our sample.

institutions that specifically identify proxy contests as one of the circumstances under which they are likely to recall their shares.

Next, we examine the association between proxy contests and lending in a regression framework, after controlling for other firm characteristics. We estimate the effect of proxy contests on changes in lending supply for the sample of treatment and control meetings, with and without firm characteristics and also with and without firm fixed effects. The difference in difference methodology with firm fixed effects mitigates concerns about identification because we are testing for the effects of proxy contests on lending behavior within firms. The results are reported in Panel A of Table 7. *DCONTEST* takes the value of 1 if the record date has a proxy contest, and zero otherwise. The sample size in Panel A consists of 433 observations that include 182 record dates associated with the treatment group with proxy contests, and 251 record dates for the control group with no proxy contest at that meeting. Firm characteristics included in the model are the same as in Table 3 and are not reported. The coefficient of the intercept term is negative and significant confirming our earlier results that shares are recalled around the record date. The coefficient of *DCONTEST* is not statistically significant for the full sample of proxy contests.

Results change however for the treatment group of 75 cases that go all the way to a vote and are not withdrawn or settled, with results being shown in Panel B of Table 7. The 182 observations include the 75 cases of the treatment group and 107 cases of the control group. In all four specifications, the coefficient of *DCONTEST* is negative and significant at the 1% level, implying that recall of shares is higher if the record date is associated with a proxy contest. These results suggest that institutions are not simply recalling shares for all firms and all meetings; instead they carefully analyze their lending decision, and recall when they want to vote on important proposals. Even for individual firms, institutions recall more around meetings that

include important ballot items. Fos (2011) documents that both potential and materialized proxy contests result in improving operating performance and benefitting shareholders.

5.3 Changes in ISS's Recommendations

Proxy advisory firms such as ISS provide recommendations to institutional investors on how to vote for each proposal on a ballot. Institutions subscribe to the services of proxy advisors and the recommendations of ISS are very influential. As attention on proxy voting and securities lending has increased, ISS has even started a Global Share Recall service to help institutional investors decide when to recall their shares for voting purposes. This service provides historic and real-time meeting information including predicted record date, meeting type (annual, special), if the meeting has a shareholder proposal on the ballot, is expected to be contentious, if the agenda is expected to have merger items, and details on borrowing demand.

We have information on ISS's recommendation for each proposal and our time series data also allows us to measure the change in ISS's recommendation for each firm over different meetings. Institutional investors pay attention to the recommendations of proxy advisors and pay even more attention to the changes in recommendations. The 1,753 sample comprises the treatment group of 319 record dates for which there is an increase in the fraction of ISS "Against" recommendations for non-routine management proposals compared with the firm's prior record date, and a control group of 1,434 record dates for which there was no increase in the fraction of ISS "Against" recommendations for the same firms (but different record dates) that appear in the treatment group. We examine the association between lending supply and changes in ISS's recommendation in a regression framework and define $\Delta ISSAGAINST$ as a dummy variable equal to one for record dates that have an increase relative to the previous meeting in the fraction of proposals with ISS recommendations against non-routine management proposals. Results based

on four specifications are shown in Table 8. Columns 1 and 2 do not include firm-fixed effects while columns 3 and 4 do. Firm-level controls discussed are those used in Table 3 and are not reported. The difference in difference estimations in columns (3) and (4) allow us to compare the record date lending activity for record dates where there is an increase in ISS recommendations against non-routine management proposals with proposals for the same firm, controlling for time effects. The coefficient of *ΔISSAGAINST* is negative and significant at the 1% level in the difference-in-difference specifications. The results show that recall is higher in years when ISS's recommendations for a firm become more negative. This setting again suggests that institutions are screening on various metrics to decide when to recall their shares. In unreported results, we repeat the same analysis for change in borrowing demand and change in fee, and do not find any association with changes in ISS's recommendation.

5.4 Prior Voting Outcome

Institutions are likely to pay more attention to voting for firms that had proposals with close votes in the prior period. Therefore, we next examine the relation between share recall and closeness of a vote in the prior period. The sample of 535 record dates comprises 202 record dates for which there was at least one non-routine proposal at the prior record date with an absolute vote margin less than 10% (a close outcome in the prior year), that form the treatment group, and a control group of 303 record dates for which there were no prior close outcome for the same firms (but different record dates) that appear in the treatment group. *DCLOSE* is a dummy variable equal to 1 if the record date belongs to the treatment group, zero otherwise. Table 9 reports the results with and without fixed effects and firm controls. In all four specifications, the coefficient of *DCLOSE* is negative and significant at the 1% level. We can

conclude that higher recall around the record date is associated with firms that had a close vote in the previous year. This result is not found for borrowing demand or fee, and is not reported.

5.5 Mergers

Mergers are one of the most important events in the life cycle of a firm. Consequently, we expect institutions to recall shares to vote in corporate control contests. Consistent with this, in a survey of institutional lenders ISS report that 92.3% of respondents indicated that mergers and acquisitions were the most important reason to recall shares. We combine data on merger votes based on SEC filings from ISS and Sharkrepellent.net for the period January, 2007 to December, 2009. There are 191 mergers during our sample period; 115 where the firm was the target and 76 where the firm was the acquirer.¹⁷ Once again we combine the treatment group of 191 mergers with a control group of 568 non-merger record dates for the same firms in the treatment group. This results in a final sample of 759 record dates.

In Table 10, we present evidence on lending activity around merger proposals. We estimate the effect of a *TARGET* and *ACQUIRER* merger proposal on record date changes in lending supply (Panel A) and on loan (Panel B) in estimations including firm controls, time effects and firm fixed effects. The difference in difference estimations in columns (3) and (4) allow us to compare the record date lending activity for merger proposals with non-merger proposals for the same firm, controlling for time effects. In Panel A, we show that the recall in lending supply is significantly greater for merger proposals where the firm is the target. We find no additional recall for proposals where the firm is the acquirer. This result shows that institutions' recall of shares is significantly greater when the proposal vote directly relates to corporate control. Conversely, in Panel B, we present evidence that there is an increase in on

¹⁷ The sample includes only those mergers where the voting outcome was available.

loan at the record date for merger proposals where the firm is the acquirer, but not the target. In unreported results, we find no result for the effect of merger proposals on fees.

The analysis in this section has focused on examining the relation between changes in lending supply and specific types of proposals. The results show that the pattern of recall varies by the type of proposal. There is more recall when there are contentious and/or significant proposals on the ballot, suggesting that institutional investors need to put in the effort to monitor firms and recall selectively.

6. Voting Outcome

Next, we study whether the recall of supply by institutional investors or an increase in borrowing demand have any impact on the vote outcome at the shareholder meeting. We estimate regressions for the 6,887 non-routine proposals where the dependent variable is *FOR*, the percentage of votes in favor of a proposal.¹⁸ For each proposal we test if the recall in lending supply and the increase in demand around the record date plays a role on how votes are cast on the subsequent meeting date. Importantly, the meeting date is on average 53 days after the record date. If institutions recall lending supply to exercise their vote, then we should expect that voting outcome is associated with recalled supply.

The independent equity lending variables are the change in lending supply, $\Delta Lending\ Supply$, and the change in borrowing demand, $\Delta On\ Loan$. These changes are based on the average lending supply and on loan during days (t=-30 to -20) to the record date (t=0). We include indicator variables for shareholder-sponsored proposals (*DSHDR*), and for management proposals that management supports and ISS opposes (*DISS*). For both of *DSHDR* and *DISS*, we interact the change in supply and the change in on loan with these characteristics to better

¹⁸ *FOR* is defined as the percentage of number of FOR votes, relative to the base by which the proposal is decided. The base depends by proposal, but may be the sum of FOR, AGAINST, and ABSTAIN votes, the sum of FOR and AGAINST votes, or the number of shares outstanding, for example.

understand when equity lending is important to determine support for a proposal. Further, we include the firm-specific characteristics and proposal fixed effects included in the earlier estimations, but omit these for brevity. All regressions include time dummies and the standard errors are clustered to account for correlation both at the firm level.

In column 1 of Table 11, we present evidence that shows the record date change in lending supply is positively associated with more votes against the proposal. The positive association implies that a recall in lending supply is negatively associated with support for non-routine proposals. This is consistent with institutional investors responsibly fulfilling a monitoring role whereby they provide prudence on behalf of shareholders. We find no relation between borrowing demand and a larger proportion of *FOR* votes for proposals. Further, shareholder sponsored proposals exhibit 45% less *FOR* votes, on average, than management sponsored proposals. However, the significant coefficient of -2.092 on $\Delta Lending Supply \times DSHDR$ shows that the record date recall in supply is positively associated with more votes being cast in favor of shareholder-sponsored proposals.

Next, in column 2 we examine those proposals where ISS recommends shareholders vote against management. Consistent with Alexander, Chen, Seppi, and Spatt (2010), we find that the recommendations of proxy advisors play an important role in the outcome of proposals. In general proposals that ISS recommend against are associated with significantly lower support. Further, the significant coefficient of 1.086 on $\Delta Lending Supply \times DISS$ is approximately three times larger than the coefficient on $\Delta Lending Supply$ of 0.292, meaning that a higher recall at the record date leads to less votes being cast in favor of a proposal if ISS opposes management. Once again, this result is consistent with both ISS advice being important for voting decisions and also institutions recalling shares to vote in the interests of shareholders. We also find that,

while borrowing demand does not vary by ISS recommendation or proposal type (other than for mergers), the increase in on loan on record date is associated with votes against the proposal when ISS also recommends against the proposal.

A valid concern when examining the impact of equity lending on voting outcome is that for most firms utilization (the proportion of available lendable shares actually lent out) is low. In Table 1 we show that the mean utilization rate is 19.64% for the period 2007-2009. Therefore, a recall in lending supply may have little impact on voting outcome if the recalled shares were unlikely to be lent out on the record date. To mitigate this concern we include *UTILIZATION* in the estimations of *FOR*. If higher recall in supply impacts voting outcome because the recall results in institutions voting shares instead of borrowers, then the effect of lending supply recall on voting outcome should be greatest for firms where utilization is higher.

In column 3, we estimate *FOR* including average utilization measured over the $t=-30$ to $t=-20$ period prior to the record date and additionally interact utilization with the record date change in lending supply and on loan. We find that the recall in lending supply is associated with less support for non-routine proposals, on average, and further that the effect is amplified for firms with higher utilization. This result shows that the recall in lending supply matters more for voting outcome when it is more likely that the votes would otherwise be borrowed.

In columns (4) and (5) we examine if the effects examined in columns (1) – (3) hold jointly in column (4) and in a firm fixed effects framework in column (5). While the effects continue to hold in column (4), we find that the average recall effect is insignificant in a fixed effects framework. This is not surprising because in the absence of contentious and/or significant proposals on the ballot, both voting behavior and recall behavior is unlikely to change within firm.

The results in columns (1) – (5) show indirect evidence that lending supply recall is positively associated with votes for shareholder proposals, and against management proposals, especially when ISS recommends voting against management. However, we are unable to examine directly how the recalled shares are voted because we do not observe the identity of the institutions that recall shares. Consequently, our results could be driven by an alternative explanation of voting behavior by institutions with recalled shares. For example, it is possible that more shares are recalled in contentious proposals where ISS recommends voting against management because the institutions support management and therefore recall shares to vote with management, while at the same time other shareholders vote against management. To rule out this alternative explanation we examine voting only by mutual funds. Mutual funds provide an opportunity to better observe how recalled shares are voted because mutual funds are one of the largest lenders of shares (see for example D’Avolio (2002)). Therefore we can examine how voting behavior is influenced by the recall of lending shares, only for those investors who provide lending supply.

We obtain data on mutual fund voting behavior reported on SEC Form N-PX. Form N-PX identifies all proposals on which the fund has voted portfolio securities and discloses how the fund voted on each proposal (the number of shares voted is not required to be disclosed). Our sample includes mutual fund voting data for 6,651 individual funds that are part of 308 institutions (mutual fund families) for the 3,826 record dates that include non-routine proposals. In column (6) of Table 11 we examine how voting outcome is affected by recall in supply for mutual funds by estimating if the mutual fund voted *FOR* the proposal, where *FOR* is equal to 100 if the fund voted in favor of the proposal, and zero otherwise.¹⁹ We repeat the estimation of

¹⁹ We present OLS estimations to ensure that distributional assumptions do not unduly affect our results (Angrist and Pischke, 2009). The results are robust to employing logit estimations.

FOR presented in column (4) but at the mutual fund level and include institution fixed effects to control for institutional-level policies on both voting and lending supply recall. Consistent with the results in columns (1) – (5), the results for mutual funds show that mutual fund are significant less likely to support shareholder sponsored proposals and proposals for which ISS recommend voting against. Further, mutual funds are significantly less likely to vote in favor of proposals where recall in lending supply is greater and ISS recommend voting against. This last result alleviates the concern that mutual funds are recalling shares to vote with management when other shareholders are following ISS’s advice and voting against management.

Collectively, these results show that changes in lending of supply have a meaningful impact on voting outcomes and that institutions act on ISS recommendations. Further, while the fewer number of votes in favor of proposals may not result in the proposal being rejected there is evidence that votes recorded against proposals have spillover governance effects. Both Cai, Garner, and Walkling (2009) and Bethel and Gillan (2002) examine director elections and show that unfavorable recommendations by ISS lead to more votes against management. Cai, Garner, and Walkling (2009) and Fischer et. al. (2009) show that meaningful vote totals against director election proposals are followed by changes in the board, management, or corporate actions within the next year. Finally, the results on proposal characteristics in general compare favorably with those found by Iliev, Lins, Miller, and Roth (2011), regarding votes against management globally. Once again, our results are consistent with beneficial owners of securities recalling shares ahead of the proxy record date to exercise their vote. Further, the results suggest that the effort put in by institutional investors into determining when to recall shares does impact voting outcome.

7. Additional Analysis

7.1 Dividend Record Dates

There is some evidence that the equity lending market is affected by the dividend record date due to tax-arbitrage strategies (Christoffersen et al. (2005), Saffi and Sigurdsson (2011), and Thornock (2010)). To ensure that our results are not driven by an alternative explanation based on dividend tax-arbitrage strategies, we examine the frequency of dividend and proxy record dates. For the 7,415 proxy record dates in our sample, we observe 2,609 dividend record dates in the (-30,+30) days window around the proxy record date. The mean (median) number of days between the proxy record date and the dividend record date is 11.6 (11) days and only 235 proxy record dates coincide with a dividend record date.

In Figure 2 we plot the equity lending market activity around the dividend record date. We find a large spike in borrowing demand and fee around dividend record dates, but little change in lending supply. These results contrast sharply with Figure 1, which shows that the activity around proxy voting dates is characterized by a marked reduction in lending supply and only a small change in borrowing demand and fee.

In Panel A of Table 12 we present additional robustness results. We repeat the tests conducted for the proxy record date, but now we adjust for dividend record dates. We include a dummy variable equal to one if the firm reports paying a dividend at least once in the past three years (*DIV DUMMY*), and a dividend record date dummy equal to 1 if we find that the dividend record date is within (-1, +1) days of a proxy voting record date (*DIV RDATE*). We first estimate regressions by using only the dividend record date, and then include the proxy voting record date. When we examine the effects of dividends, we find that on average, firms that pay dividends exhibit a higher lending supply. In tests in which we exclude the proxy voting record date, we

find a significant recall in supply of -1.358% of market capitalization on the dividend record date and an increase in borrowing demand.

When we introduce the proxy voting record date, we see that our earlier results shown in Table 3 and Table 4 of reduced lending supply, increased borrowing demand, and fees continue to hold. However, after controlling for the proxy voting record date, we find that the results reported by Thornock (2010) and Ringgenberg (2011), that lending supply is lower around ex-dividend dates, no longer hold. Borrowing demand and loan fees both increase around the dividend record date. The 0.554% increase in borrowing demand is economically large, and an order of magnitude greater than the change in borrowing of 0.06% found for with the proxy voting record date. The equity lending market behaves differently around proxy voting record dates than it does around dividend record dates. There is a much larger increase in shares borrowed around a dividend record date than around the time of a proxy vote.

7.2 Financial Crisis

During the financial crisis of 2008 there was considerable concern about counterparty risk following the events surrounding Bear Stearns and Lehman Brothers. In addition, there was cash collateral reinvestment risk. The lender reinvests the cash received as collateral, problems were associated with liquidity and losses in cash collateral pools. The period exhibited high volatility in funding rates that also generated large swings in loan fee. Aitken and Singh (2009) examine the 10-Q reports of three major custodian banks (Bank of New York, State Street, and J.P. Morgan) before and after the bankruptcy of Lehman Brothers and find a decrease in total securities lending from \$1.48 trillion in June, 2008 to \$0.82 trillion by December, 2008. Some investors had concerns about the instruments used to invest the collateral and equity lenders sued some custodial banks. The drop off in the securities lending during the crisis was due to a

number of factors including decrease in demand as borrowers decreased their leverage and pulled to the side and very conservative cash reinvestment guidelines that got put into place.

The short-selling bans imposed by regulators in many markets also had an impact on short selling and securities lending. Beber and Pagano (2012) find that the short-selling bans imposed in more than 20 different countries during the financial crisis reduced liquidity, slowed price discovery, and failed to support stock prices. Boehmer, Jones, and Zhang (2011) study the short-selling ban in the U.S. and find a reduction in shorting activity and an increase in spreads, price impact, and intraday volatility. Kolasinski, Reed, and Thornock. (2011) find a significant increase in loan fee following the ban.

In Panel B of Table 12, we introduce a dummy *LEHMAN*, which we set equal to one for all days in 2008 on or after September 15th that characterize our “crisis” period. We use this dummy to examine the effect of the financial crisis on the equity lending market around record dates. Supply, demand, and fee all decreased after Lehman’s bankruptcy. Borrowing demand decreased more than lending supply, which explains why fees decrease by about 29 bps. Even after controlling for the financial crisis period, we find reduced supply and a small increase in demand at the record date; thus, our results continue to hold. The interaction of *RDATE* with *LEHMAN* does not result in any significant changes in lending supply before or after the crisis. However, we do find evidence to support less borrowing demand and fees on record dates following Lehman’s bankruptcy. This finding is consistent with borrowers becoming less keen to engage in short selling due to fewer profitable opportunities and .

8. Conclusion

The preferences of institutional investors tend to be private and generally cannot be studied because they are often conducted behind the scenes. We use a unique setting and a

comprehensive proprietary data set that allows us to directly observe the role of institutional investors in corporate governance. We examine change in lending supply, borrowing demand, and fee in the securities lending market around record date. In our study, we focus on the role of investors in voting and the alignment of economic exposure and voting rights. If institutions have loaned out their shares then they cannot exercise their vote. Hence, institutional investors must decide whether to restrict lending and even recall shares already on loan in the event of an upcoming vote. Thus, our study differs from papers that focus on the borrowing side that examine the objective to decouple economic exposure and voting rights. Our focus is not on the value of a vote. Rather, our aim is to examine the extent to which corporate governance matters to institutional investors and the extent to which they use the proxy process to exercise their opinions.

We find stronger corporate governance to be associated with a larger lending supply, perhaps because it alleviates shareholders' concerns when lending. Stronger governance is negatively related to borrowing demand. This finding is consistent with the hypothesis that better governance deters shorting activities. Just prior to the proxy record date, we find a significant reduction in the supply of lendable shares, because institutions restrict or call back their loaned shares in order to vote. The recall of shares is higher for firms with weaker governance, weaker performance, higher institutional ownership, and when significant antitakeover or compensation-related proposals are on the ballot. The reduction in the supply of lendable shares is most pronounced when there are contentious or significant events such as, proxy fights, negative changes in recommendations by proxy advisors, close votes in the previous year, and mergers. We also find an increase in borrowing demand on record date, the change in borrowing demand is found to be higher for mergers but not for the other three contentious events. On the record

date, there is also a statistically significant increase in borrowing fees but this does not appear to be higher for contentious or significant events.

We show that the recall in equity lending supply is related to the subsequent vote outcome. Higher recall is associated with fewer FOR votes for management and more FOR votes for shareholder proposals. The influence of proxy advisory firm ISS is also evident in voting outcome. If ISS opposes management, then we find the higher recall to be associated with less FOR votes for the proposal. We find no relation between borrowing demand and vote outcome.

Our findings are consistent with the fact that a small number of institutions always recall shares on loan in advance of every proxy vote, however the majority recall their shares selectively, depending on the proposals on the ballot. Even though it might be argued that by recalling shares for a few days, institutions are not giving up much in terms of lending fees, our evidence suggests that institutions are putting in significant effort in the proxy voting process in determining when to recall. The results imply that institutions do care about corporate governance and they use the proxy voting process as a channel. Our analysis suggest policy makers should address several issues related to proxy voting, including the need for investors to learn about proxy items before the record date so that they can decide whether to lend their shares or not.

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Figure 1
Equity Lending Market Activity around Record Date

The figure presents a daily plot of lending supply, on loan, utilization and loan fees for the period (-30,+30) for 7,415 record dates (day t=0 is the proxy voting record date) during the years 2007-2009. *SUPPLY* is the percentage of market capitalization available to lend; *ON LOAN* is the percentage of market capitalization actually borrowed; *UTILIZATION* is the ratio of *ON LOAN* to *SUPPLY* expressed in percentage; *FEE* is the annualized borrowing fees expressed in basis points. In the top panel *SUPPLY* is shown on the left-hand axis and *UTILIZATION* is shown on the right-hand axis. In the bottom panel, the left-hand axis shows *ON LOAN* and the right-hand axis shows *FEE*.

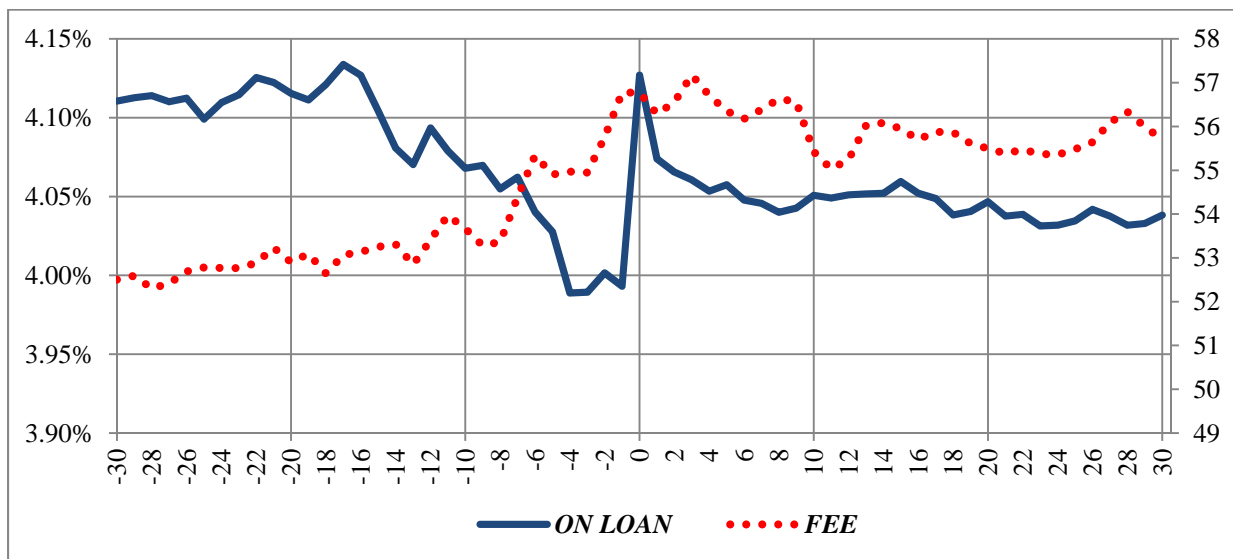
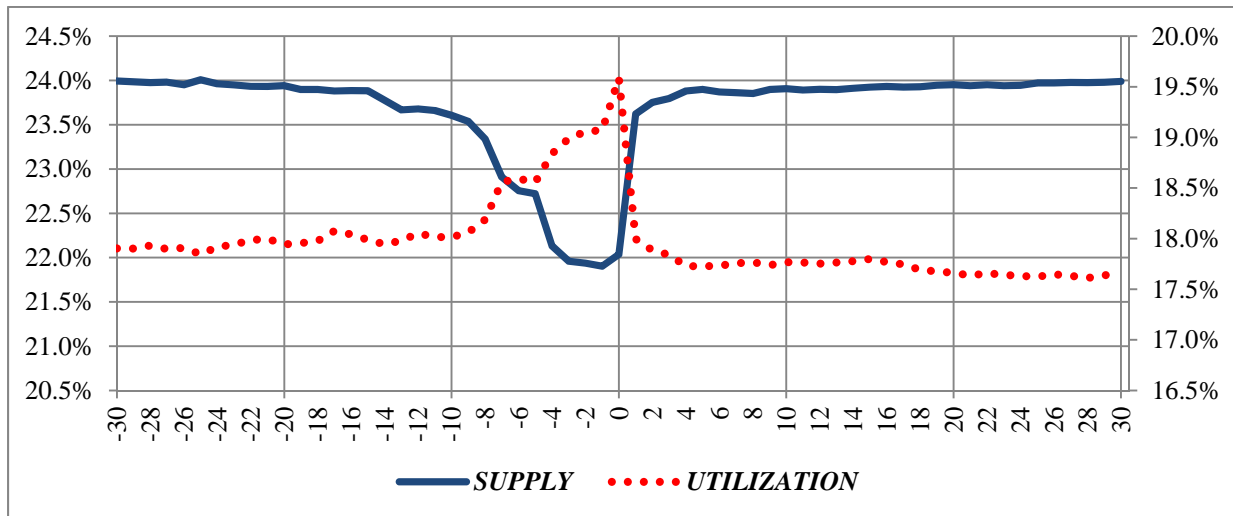


Figure 2
Equity Lending Market Activity around Ex-Dividend Dates

The figure presents a daily plot of lending supply, on loan, utilization and loan fees for the period (-30,+30) for 14,278 dividend ex-dividend dates (day t=0 is based on settlement taking place on ex-dividend date) during the years 2007-2009. *SUPPLY* is the percentage of market capitalization available to lend; *ON LOAN* is the percentage of market capitalization actually borrowed; *UTILIZATION* is the ratio of *ON LOAN* to *SUPPLY* expressed in percentage; *FEE* is the annualized borrowing fees expressed in basis points. In the top panel *SUPPLY* is shown on the left-hand axis and *UTILIZATION* is shown on the right-hand axis. In the bottom panel, the left-hand axis shows *ON LOAN* and the right-hand axis shows *FEE*.

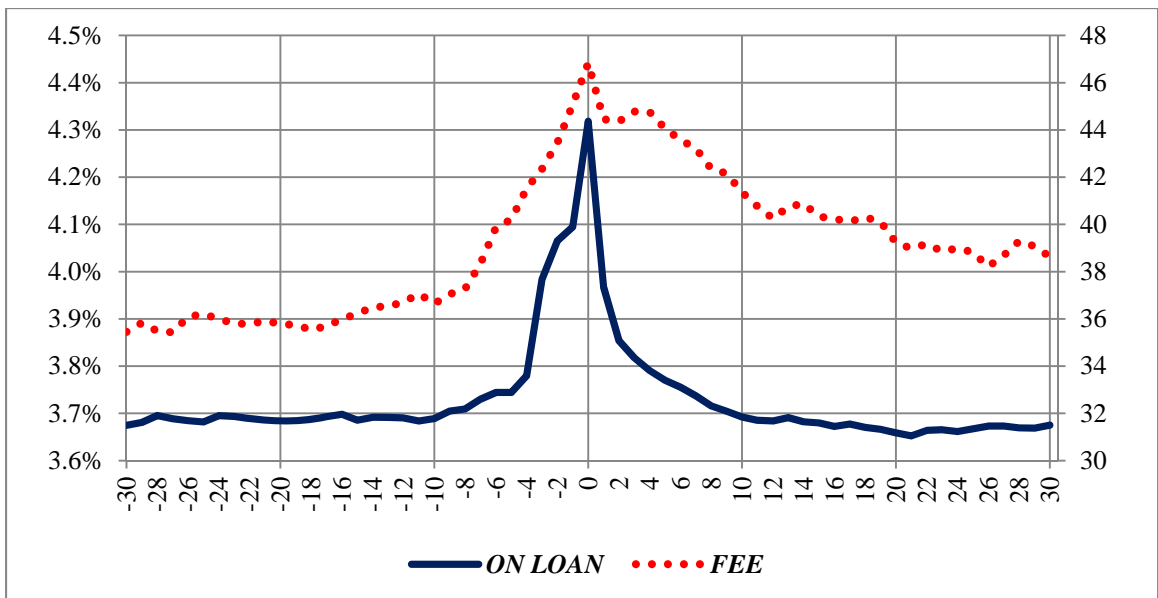
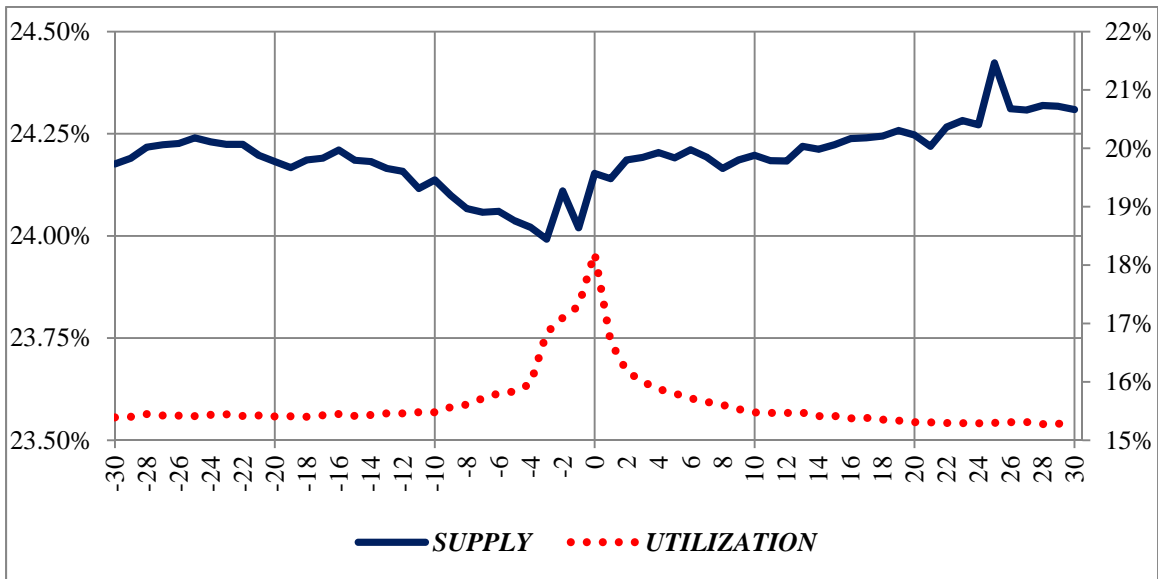


Table 1
Equity Lending and Firm Characteristics

The table presents characteristics of the equity lending market from 2007 to 2009 for Russell 3000 firms. Panel A presents average equity lending characteristics. *SUPPLY* is the percentage of market capitalization available to lend; *ON LOAN* measures borrowing demand and is the percentage of market capitalization actually borrowed; *UTILIZATION* is the ratio of *ON LOAN* to *SUPPLY* expressed in percentage; *FEE* is the annualized borrowing fee expressed in basis points; and *SPECIAL* is the fraction of stocks that have a borrowing fee greater than 100 basis points. Panel B shows the change in lending characteristics from the average of days -30 to -20 to record date 0. In Panel C we show the yearly averages of the equity lending variables.

Panel A: Equity Lending Characteristics						
	<i>Obs.</i>	<i>Mean</i>	<i>Median</i>	<i>Std Dev</i>	<i>Min</i>	<i>Max</i>
<i>SUPPLY</i>	7,415	22.17%	22.78%	10.39%	0.01%	70.15%
<i>ON LOAN</i>	7,415	4.16%	2.81%	4.28%	0.00%	38.19%
<i>FEE</i>	7,415	50.02	10.21	160.81	-50.84	1113.81
<i>UTILIZATION</i>	7,415	19.64%	14.80%	17.04%	0.02%	100.00%
<i>SPECIAL</i>	7,415	0.10%	0.00%	0.29%	0.00%	1.00%
Panel B: Changes in Equity Lending on Proxy Record Date						
<i>SUPPLY</i>	7,415	-1.93%	-1.31%	2.71%	-19.85%	34.42%
<i>ON LOAN</i>	7,415	0.06%	0.03%	1.11%	-7.85%	12.90%
<i>FEE</i>	7,415	2.40	0.48	40.37	-553.41	1080.85
<i>UTILIZATION</i>	7,415	1.81%	1.10%	5.69%	-49.98%	94.38%
Panel C: Average Equity Lending Over Time						
	2007	2008	2009			
<i>SUPPLY</i>	21.78%	23.42%	21.26%			
<i>ON LOAN</i>	4.60%	4.72%	3.22%			
<i>FEE</i>	48.34	58.50	43.05			
<i>UTILIZATION</i>	22.52%	20.99%	15.75%			
<i>SPECIAL</i>	0.08%	0.13%	0.08%			

Table 2
Descriptive Statistics – Voting Proposals

The table presents descriptive statistics for 56,220 proxy proposals of Russell 3000 firms in the 2007-2009 period. Panel A shows data for all proposals while Panel B shows voting outcome statistics for non-routine proposals. *VOTES CAST* is the percentage of the total votes cast relative to shares outstanding. *FOR*, *AGAINST*, and *ABSTAIN* are the total number of votes for, against, and abstained for the proposal, respectively, relative to the *BASE* by which the proposal outcome is measured (expressed as a percentage). *VOTE MARGIN* is defined as *FOR* minus the minimum threshold required for the proposal to pass. Voting outcome variables are winsorized at the 1%-level. *NON ROUTINE* proposals are proposals not relating to operational or uncontested directorships. *MGT* are management-sponsored proposals. *SHDR* are shareholder-sponsored proposals. *ISS AGAINST* are management proposals for which ISS recommends “Against”. *ISS FOR* are shareholder proposals for which ISS recommends “For”. *G-INDEX* and *COMP* are, respectively, dummies for antitakeover, and compensation related proposals.

Panel A: All Proposals						
	Obs.	Mean	Median	Std Dev	Min	Max
<i>VOTES CAST</i>	56,220	86.62%	88.74%	9.49%	37.42%	100.00%
<i>FOR</i>	56,220	91.86%	97.37%	14.15%	18.94%	100.00%
<i>AGAINST</i>	56,220	7.54%	2.48%	13.25%	0.00%	75.02%
<i>ABSTAIN</i>	56,220	0.41%	0.00%	1.56%	0.00%	11.89%
<i>VOTE MARGIN</i>	56,220	70.16%	87.10%	30.79%	-31.37%	100.00%

Panel B: Non-Routine Proposals						
	Obs.	VOTES CAST	FOR	AGAINST	ABSTAIN	VOTE MARGIN
<i>NON ROUTINE</i>	6,887	77.65%	73.24%	23.02%	1.86%	23.43%
<i>MGT</i>	5,127	78.82%	84.61%	11.73%	0.97%	35.01%
<i>ISS AGAINST</i>	1,274	81.27%	71.29%	26.57%	0.95%	23.75%
<i>G-INDEX</i>	563	84.66%	83.47%	5.43%	0.62%	23.61%
<i>COMP</i>	3,649	78.12%	85.21%	13.67%	1.12%	35.21%
<i>SHDR</i>	1,760	74.27%	39.99%	55.91%	4.44%	-10.50%
<i>ISS FOR</i>	1,123	74.05%	46.17%	50.80%	3.55%	-2.16%
<i>G-INDEX</i>	627	74.94%	48.86%	48.63%	1.53%	-2.29%
<i>COMP</i>	375	74.21%	36.44%	60.33%	3.51%	-15.52%

Table 3
Abnormal Lending Supply around Proxy Voting Record Dates

The table presents results from an event study on the effect of proxy voting on equity lending supply in the period (-30,+30) days around 7,415 voting record dates (record date is t=0). Lending supply is the percentage of market capitalization available to lend. *RDATE* is a dummy equal to one on the record date. Firms are classified as having *Low ROA* or *Low RET* if their return is below the 2-digit SIC industry median for that quarter. Control variables comprise governance index (*GOV41*), institutional ownership (*INST*), concentration of institutional ownership as measured by the Herfindahl index (*INST CONC*), the natural log of market capitalization (*SIZE*), book to market (*BM*), stock turnover (*TURNOVER*), bid-ask spread (*SPREAD*), and a small stock dummy (*PRICE<\$5*). All regressions include quarterly time-effects and robust standard errors clustered at the firm-level, presented in parentheses. *** (**,*) indicates significance at the 1% (5%, 10%) level.

	(1)	(2)	(3)	(4)
<i>RDATE</i>	-1.672*** [0.038]	-1.336*** [0.039]	-1.575*** [0.051]	-1.409*** [0.041]
<i>RDATE x Low ROA</i>		-0.862*** [0.070]		-0.807*** [0.069]
<i>RDATE x Low RET</i>			-0.206*** [0.079]	
<i>RDATE x GOV41</i>				2.617*** [0.394]
<i>RDATE x INST</i>				-1.004*** [0.142]
<i>Low ROA</i>		-0.280 [0.181]		-0.281 [0.181]
<i>Low Ret</i>			0.125 [0.113]	
<i>GOV41</i>	3.880*** [1.178]	3.914*** [1.178]	3.878*** [1.178]	3.871*** [1.180]
<i>INST</i>	28.096*** [0.441]	28.195*** [0.446]	28.086*** [0.441]	28.211*** [0.447]
<i>INST CONC</i>	-51.557*** [2.261]	-51.455*** [2.257]	-51.498*** [2.266]	-51.455*** [2.257]
<i>SIZE</i>	-0.727*** [0.068]	-0.740*** [0.068]	-0.726*** [0.068]	-0.740*** [0.068]
<i>BM</i>	1.139*** [0.150]	1.181*** [0.154]	1.124*** [0.152]	1.181*** [0.154]
<i>TURNOVER</i>	0.049 [0.064]	0.049 [0.064]	0.049 [0.064]	0.049 [0.064]
<i>SPREAD</i>	-0.203 [0.125]	-0.222* [0.124]	-0.203 [0.125]	-0.222* [0.124]
<i>PRICE<\$5</i>	-2.239*** [0.260]	-2.191*** [0.261]	-2.251*** [0.260]	-2.191*** [0.261]
<i>Constant</i>	10.316*** [1.040]	10.370*** [1.037]	10.264*** [1.042]	34.086*** [0.859]
<i>Adjusted R-squared</i>	0.669	0.669	0.669	0.669

Table 4
Borrowing Demand and Fees around Proxy Voting Record Date

The table presents results from an event study on the effect of proxy voting on borrowing demand and lending fees in the period (-30,+30) days around 7,415 voting record dates (voting record date is t=0). Borrowing demand is percentage of market capitalization borrowed (on loan) and fee is the cost to borrow on an annualized basis. *RDATE* is a dummy equal to one on the record date. Firms are classified as having *Low ROA* or *Low RET* if their return is below the 2-digit SIC industry median for that quarter. Control variables comprise institutional ownership (*INST*), concentration of institutional ownership as measured by the Herfindahl index (*INST CONC*), the natural logarithm of market capitalization (*SIZE*), book to market (*BM*), stock turnover (*TURNOVER*), bid-ask spread (*SPREAD*), and a small stock dummy (*PRICE<\$5*). All regressions include quarterly time-effects and robust standard errors clustered at the firm-level, presented in parentheses. *** (**, *) indicates significance at the 1% (5%, 10%) level.

	Borrowing Demand				Fee			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>RDATE</i>	0.075*** [0.013]	0.066*** [0.016]	0.052** [0.025]	0.074*** [0.017]	1.946*** [0.389]	1.488*** [0.484]	0.992 [0.834]	1.655*** [0.464]
<i>RDATE x Low ROA</i>		0.024 [0.028]		0.017 [0.028]		1.151 [0.793]		1.025 [0.784]
<i>RDATE x Low RET</i>			0.049 [0.047]				2.034 [1.659]	
<i>RDATE x GOV41</i>				0.272* [0.154]				-6.235 [4.539]
<i>RDATE x INST</i>				0.101* [0.055]				2.288 [2.081]
<i>Low ROA</i>		0.157 [0.107]		0.157 [0.107]		-9.451** [4.309]		-9.449** [4.309]
<i>Low Ret</i>			0.224*** [0.064]				0.782 [3.018]	
<i>GOV41</i>	-2.325*** [0.697]	-2.344*** [0.696]	-2.328*** [0.696]	-2.348*** [0.696]	18.240 [29.683]	19.346 [29.754]	18.232 [29.689]	19.449 [29.745]
<i>INST</i>	5.333*** [0.259]	5.280*** [0.264]	5.313*** [0.260]	5.279*** [0.264]	-137.044*** [15.661]	-133.901*** [15.548]	-137.115*** [15.659]	-133.938*** [15.544]
<i>INST CONC</i>	-4.270*** [0.718]	-4.325*** [0.711]	-4.162*** [0.719]	-4.325*** [0.711]	272.581*** [55.227]	275.878*** [55.276]	272.973*** [55.233]	275.878*** [55.277]
<i>SIZE</i>	-0.718*** [0.039]	-0.711*** [0.039]	-0.715*** [0.039]	-0.711*** [0.039]	-7.969*** [1.366]	-8.379*** [1.422]	-7.959*** [1.363]	-8.379*** [1.422]
<i>BM</i>	0.004 [0.084]	-0.019 [0.083]	-0.024 [0.085]	-0.019 [0.083]	-5.904 [5.391]	-4.542 [5.472]	-6.005 [5.423]	-4.542 [5.472]
<i>TURNOVER</i>	1.110*** [0.048]	1.110*** [0.048]	1.108*** [0.048]	1.110*** [0.048]	22.210*** [2.092]	22.187*** [2.085]	22.205*** [2.092]	22.187*** [2.085]
<i>SPREAD</i>	-0.312*** [0.047]	-0.301*** [0.047]	-0.312*** [0.047]	-0.301*** [0.047]	-12.690*** [3.500]	-13.297*** [3.493]	-12.694*** [3.499]	-13.297*** [3.493]
<i>PRICE<\$5</i>	-0.614*** [0.130]	-0.639*** [0.131]	-0.636*** [0.130]	-0.639*** [0.131]	50.750*** [10.897]	52.266*** [10.875]	50.669*** [10.963]	52.266*** [10.875]
<i>Constant</i>	4.659*** [0.572]	4.627*** [0.575]	4.567*** [0.573]	7.042*** [0.482]	137.290*** [28.231]	139.206*** [28.287]	136.970*** [28.099]	51.560** [21.208]
<i>Adj.R-squared</i>	0.284	0.284	0.285	0.284	0.108	0.109	0.108	0.109

Table 5
Change in Lending Supply and Borrowing Demand by Proposal Type

The table presents changes in lending supply, borrowing demand (on loan), and fee for management (*MGT*) and shareholder proposals (*SHDR*). The dependent variable is the change in average lending supply from days ($t=-30$ to -20) to record date ($t=0$). Proposal types included as explanatory are antitakeover (*G-INDEX*) and compensation (*COMP*) and proposals. Control variables include institutional ownership (*INST*), concentration of institutional ownership as measured by the Herfindahl index (*INST CONC*), the natural logarithm of market capitalization (*SIZE*), book to market (*BM*), stock turnover (*TURNOVER*), bid-ask spread (*SPREAD*), a small stock dummy (*PRICE<\$5*), and prior twelve month return (*RETURN*). All regressions include quarterly time-effects and robust standard errors clustered at the firm-level, presented in parentheses. *** (**, *) indicates significance at the 1% (5%, 10%) level.

	Lending Supply		Borrowing Demand		Fee	
	<i>MGT</i>	<i>SHDR</i>	<i>MGT</i>	<i>SHDR</i>	<i>MGT</i>	<i>SHDR</i>
<i>G-INDEX</i>	-0.400*** [0.126]	-0.276*** [0.092]	-0.007 [0.056]	-0.097** [0.047]	0.669 [0.799]	-0.581 [0.896]
<i>COMP</i>	-0.217** [0.087]	-0.205* [0.108]	-0.033 [0.039]	-0.054 [0.055]	0.167 [0.555]	0.455 [1.048]
<i>INST</i>	-1.736*** [0.163]	-0.076 [0.302]	0.141* [0.073]	0.089 [0.154]	0.109 [1.034]	12.243*** [2.924]
<i>INST CONC</i>	2.713*** [0.757]	-1.016 [2.000]	0.095 [0.339]	-1.735* [1.019]	4.959 [4.797]	9.246 [19.386]
<i>SIZE</i>	0.554*** [0.025]	0.371*** [0.031]	0.027** [0.011]	0.016 [0.016]	-0.233 [0.158]	-0.279 [0.301]
<i>BM</i>	-0.476*** [0.047]	-0.160** [0.072]	0.005 [0.021]	0.083** [0.037]	-1.035*** [0.300]	-2.968*** [0.702]
<i>TURNOVER</i>	0.224*** [0.029]	0.254*** [0.038]	-0.011 [0.013]	0.039** [0.019]	0.118 [0.183]	-0.400 [0.367]
<i>SPREAD</i>	34.680*** [7.338]	2.815 [20.550]	3.386 [3.285]	17.374* [10.474]	-116.480** [46.525]	154.913 [199.203]
<i>PRICE<\$5</i>	0.286** [0.116]	-0.006 [0.214]	-0.019 [0.052]	0.220** [0.109]	0.918 [0.734]	1.219 [2.075]
<i>RET</i>	-0.378*** [0.084]	-0.401*** [0.146]	-0.036 [0.038]	-0.196*** [0.074]	-1.217** [0.533]	-3.390** [1.412]
<i>Constant</i>	-4.639*** [0.279]	-4.351*** [0.504]	-0.176 [0.125]	-0.205 [0.257]	4.395** [1.768]	-1.050 [4.887]
<i>Observations</i>	5,127	1,760	5,127	1,760	5,127	1,760
<i>Adj. R-squared</i>	0.155	0.178	0.007	0.074	0.020	0.068

Table 6
Proxy Contests

The table presents the change from days (t=-30 to -20) to record date (t=0) in lending supply, on loan, fee and utilization for the treatment group of firm-level record dates that had a proxy contest and the control group of record dates for the same firm at which there were no proxy contests. The sample comprises 182 proxy contest record dates, of which 75 are completed, that form the treatment group, and a control group of 251 (107 for completed proxy contests) non-proxy contest record dates for the same firms (but different record dates) that appear in the treatment group. Panel A is based on all proxy contests and Panel B only on proxy contests that went to a vote and were not withdrawn. *SUPPLY* is the percentage of market capitalization available to lend; *ON LOAN* is the percentage of market capitalization actually borrowed; *UTILIZATION* is the ratio of *ON LOAN* to *SUPPLY*; *FEE* is the annualized borrowing fee expressed in basis points; and *N* is the sample size. ** indicates significance at the 5% level.

Panel A: All Proxy Contests				
	All	Record Dates with Proxy Contest	Record Dates with No Proxy Contest	Difference
<i>SUPPLY</i>	-2.15%	-2.23%	-2.10%	-0.14%
<i>ON LOAN</i>	-0.02%	-0.13%	0.06%	-0.20%
<i>FEE</i>	0.56	0.76	0.42	0.34
<i>UTILIZATION</i>	1.39%	1.01%	1.65%	-0.64%
<i>Observations</i>	433	182	251	
Panel B: Completed Proxy Contests				
<i>SUPPLY</i>	-2.19%	-2.68%	-1.77%	-0.91%**
<i>ON LOAN</i>	0.00%	-0.11%	0.02%	-0.13%
<i>FEE</i>	1.03	2.71	-0.21	2.92
<i>UTILIZATION</i>	1.62%	1.90%	1.43%	0.47%
<i>Observations</i>	182	75	107	

Table 7
Proxy Contests and Change in Lending Supply

The table presents results from a regression analysis where the dependent variable is the change in average lending supply from days (t=-30 to -20) to record date (t=0). The sample comprises 182 proxy contest record dates, of which 75 are completed, that form the treatment group, and a control group of 251 (107 for completed proxy contests) non-proxy contest record dates for the same firms (but different record dates) that appear in the treatment group. *DCONTEST* is a dummy variable equal to one for record dates with a proxy contest, zero otherwise. Results are reported separately for all proxy contests (Panel A) and for only those proxy contests that went to a vote and were not withdrawn (Panel B). Control variables include institutional ownership (*INST*), concentration of institutional ownership as measured by the Herfindahl index (*INST CONC*), the natural logarithm of market capitalization (*SIZE*), book to market (*BM*), stock turnover (*TURNOVER*), bid-ask spread (*SPREAD*), a small stock dummy (*PRICE<\$5*), and prior twelve month return (*RETURN*). Columns (3) and (4) present estimates including firm FE where the constant is the average fixed effect. All regressions include quarterly time-effects and robust standard errors clustered at the firm level. *** indicates significance at the 1% level.

Panel A: All Proxy Contests

	(1)	(2)	(3)	(4)
<i>DCONTEST</i>	-0.038 [0.280]	0.068 [0.285]	0.061 [0.260]	0.016 [0.267]
<i>Constant</i>	-2.309*** [0.444]	-4.945*** [1.140]	-2.330*** [0.491]	-1.798 [3.464]
<i>Firm FE</i>	No	No	Yes	Yes
<i>Firm Controls</i>	No	Yes	No	Yes
<i>Observations</i>	433	433	433	433
<i>Adjusted R-squared</i>	0.062	0.158	0.387	0.386

Panel B: Completed Proxy Contests

<i>DCONTEST</i>	-1.212*** [0.411]	-1.322*** [0.427]	-1.051** [0.403]	-1.257*** [0.432]
<i>Constant</i>	-2.304*** [0.768]	-5.904*** [1.764]	-2.705*** [0.969]	-2.253 [7.317]
<i>Firm FE</i>	No	No	Yes	Yes
<i>Firm Controls</i>	No	Yes	No	Yes
<i>Observations</i>	182	182	182	182
<i>Adjusted R-squared</i>	0.131	0.218	0.394	0.363

Table 8
Change in ISS's Recommendation

The table presents results from a regression analysis where the dependent variable is the change in average lending supply from days (t=-30 to -20) to record date (t=0). The sample comprises 319 record dates for which there is an increase in the fraction of ISS "Against" recommendations for non-routine management proposals compared with the firm's prior record date, that form the treatment group, and a control group of 1,434 record dates for which there was no increase in the fraction of ISS "Against" recommendations for the same firms (but different record dates) that appear in the treatment group. $\Delta ISSAGAINST$ is a dummy variable equal to one for record dates had an increase relative to the previous meeting in the fraction of proposals with ISS recommendations against non-routine management proposals, zero otherwise. Control variables include institutional ownership (*INST*), concentration of institutional ownership as measured by the Herfindahl index (*INST CONC*), the natural logarithm of market capitalization (*SIZE*), book to market (*BM*), stock turnover (*TURNOVER*), bid-ask spread (*SPREAD*), a small stock dummy (*PRICE<\$5*), and prior twelve month return (*RETURN*). Columns (3) and (4) present estimates including firm FE where the constant is the average fixed effect. All regressions include quarterly time-effects and robust standard errors clustered at the firm level. *** indicates significance at the 1% level.

	(1)	(2)	(3)	(4)
<i>ΔISSAGAINST</i>	-0.078	0.049	-0.759***	-0.773***
	[0.155]	[0.145]	[0.282]	[0.286]
<i>Constant</i>	-1.982***	-6.072***	-1.667***	-8.864***
	[0.137]	[0.474]	[0.147]	[2.607]
<i>Firm FE</i>	No	No	Yes	Yes
<i>Firm Controls</i>	No	Yes	No	Yes
<i>Observations</i>	1,753	1,753	1,753	1,753
<i>Adjusted R-squared</i>	0.004	0.166	0.459	0.466

Table 9
Closeness of Vote in Previous Year

The table presents results from a regression analysis where the dependent variable is the change in average lending supply from days (t=-30 to -20) to record date (t=0). The sample comprises 202 record dates for which there was at least one non-routine proposal at the prior record date with an absolute vote margin smaller than 10% (a close outcome in the prior year), that form the treatment group, and a control group of 303 record dates for which there were no prior close outcomes for the same firms (but different record dates) that appear in the treatment group. *DCLOSE* is a dummy variable equal to one if there was at least one proposal in the previous year with a vote margin difference smaller than 10%. Control variables include institutional ownership (*INST*), concentration of institutional ownership as measured by the Herfindahl index (*INST CONC*), the natural logarithm of market capitalization (*SIZE*), book to market (*BM*), stock turnover (*TURNOVER*), bid-ask spread (*SPREAD*), a small stock dummy (*PRICE<\$5*), and prior twelve-month return (*RETURN*). Columns (3) and (4) present estimates including firm FE where the constant is the average fixed effect. All regressions include quarterly time-effects and robust standard errors clustered at the firm level. *** indicates significance at the 1% level.

	(1)	(2)	(3)	(4)
<i>DCLOSE</i>	-0.504** [0.211]	-0.411** [0.194]	-0.468*** [0.168]	-0.437** [0.171]
<i>Constant</i>	-1.033*** [0.253]	-4.177*** [0.927]	-1.279*** [0.241]	-6.214* [3.541]
<i>Firm FE</i>	No	No	Yes	Yes
<i>Firm Controls</i>	No	Yes	No	Yes
<i>Observations</i>	535	535	535	535
<i>Adjusted R-squared</i>	0.074	0.231	0.444	0.444

Table 10
Merger Proposals

The table presents results from a regression analysis where the dependent variable is the change in average lending supply (Panel A) and borrowing demand measured as on loan (Panel B) from days (t=-30 to -20) to record date (t=0). The sample comprises 191 merger record dates (115 targets and 76 acquirers) that form the treatment group, and a control group of 568 non-merger record dates for same firms that appear in the treatment group. *TARGET* is a dummy variable equal to one if there was a merger proposal for which the firm was the target; *ACQUIRER* is a dummy variable equal to one if there was a merger proposal, for which the firm was the acquirer. Control variables include institutional ownership (*INST*), concentration of institutional ownership as measured by the Herfindahl index (*INST CONC*), the natural logarithm of market capitalization (*SIZE*), book to market (*BM*), stock turnover (*TURNOVER*), bid-ask spread (*SPREAD*), a small stock dummy (*PRICE < \$5*), and prior twelve-month return (*RETURN*). Columns (3) and (4) present estimates including firm FE where the constant is the average fixed effect. All regressions include quarterly time-effects and robust standard errors clustered at the firm level. *** indicates significance at the 1% level.

Panel A: Change in Lending Supply				
	(1)	(2)	(3)	(4)
<i>TARGET</i>	0.108 [0.306]	-0.181 [0.341]	-0.770** [0.376]	-0.837** [0.405]
<i>ACQUIRER</i>	0.440 [0.341]	0.287 [0.341]	0.449 [0.350]	0.352 [0.368]
<i>Constant</i>	-1.645*** [0.283]	-4.604*** [0.754]	-1.758*** [0.281]	0.768 [2.579]
<i>Firm FE</i>	No	No	Yes	Yes
<i>Firm Controls</i>	No	Yes	No	Yes
<i>Observations</i>	759	759	759	759
<i>Adjusted R-squared</i>	0.057	0.148	0.284	0.284
Panel B: Change in Borrowing Demand				
	(1)	(2)	(3)	(4)
<i>TARGET</i>	-0.115 [0.119]	-0.100 [0.139]	-0.250 [0.169]	-0.209 [0.179]
<i>ACQUIRER</i>	0.172 [0.132]	0.264* [0.139]	0.237 [0.158]	0.315* [0.162]
<i>Constant</i>	0.315*** [0.110]	0.201 [0.307]	0.340*** [0.127]	0.686 [1.138]
<i>Firm FE</i>	No	No	Yes	Yes
<i>Firm Controls</i>	No	Yes	No	Yes
<i>Observations</i>	759	759	759	759
<i>Adjusted R-squared</i>	0.01	0.035	0.011	0.05

Table 11
Voting Outcome

The table presents results from a regressions analysis of voting outcome. The dependent variable is *VOTES FOR*, the percentage of votes FOR the proposal. Columns (1) – (5) presents estimation results for 6,887 non-routine proxy proposals in the 2007-2009 period. Column (6) presents estimation results for mutual fund voting behavior for non-routine proxy proposals. The independent variables are: Δ *Lending Supply* and Δ *On Loan*, the change in lending supply and on loan from days (t=-30 to -20) to record date (t=0). *DSHR* is a dummy equal to one if shareholders sponsor the proposal, zero otherwise. *DISS* is a dummy equal to 1 when management is in favor and ISS is against the proposal. *UTILIZATION* is the ratio of *ON LOAN* to *SUPPLY*. All estimations include proposal fixed effects and firm-level controls. Control variables include *GOV41*, the internal governance measure, institutional ownership (*INST*), concentration of institutional ownership as measured by the Herfindahl index (*INST CONC*), the natural logarithm of market capitalization (*SIZE*), book to market (*BM*), stock turnover (*TURNOVER*), bid-ask spread (*SPREAD*), a small stock dummy (*PRICE*<\$5), and prior twelve-month return (*RETURN*). All regressions include quarterly time-effects and robust standard errors clustered at the firm level (firm-record date level in column (7)), presented in parentheses. *** (**, *) indicates significance at the 1% (5%, 10%) level.

	Proposal Voting					Mutual Fund Voting
	(1)	(2)	(3)	(4)	(5)	(6)
<i>ΔLending Supply</i>	0.339*** [0.124]	0.292** [0.115]	0.312** [0.128]	0.228* [0.118]	0.165 [0.207]	-0.251 [0.168]
<i>ΔOn Loan</i>	-0.091 [0.249]	0.222 [0.225]	-0.065 [0.372]	0.371 [0.342]	0.598 [0.514]	
<i>DSHDR</i>	-44.696*** [1.601]	-45.548*** [1.596]	-44.629*** [1.603]	-45.442*** [1.596]	-42.829*** [1.792]	-48.262*** [0.815]
<i>DISS</i>		-17.846*** [0.956]		-17.975*** [0.959]	-19.879*** [1.153]	-34.99*** [1.108]
<i>UTILIZATION</i>			6.786** [3.084]	8.210*** [2.996]	3.716 [3.711]	0.4109 [3.310]
<i>ΔLending Supply x DSHDR</i>	-2.092*** [0.537]	-1.929*** [0.531]	-2.038*** [0.535]	-1.865*** [0.533]	-2.073*** [0.543]	-0.038 [0.289]
<i>ΔLending Supply x DISS</i>		1.086*** [0.281]		1.042*** [0.283]	0.852*** [0.316]	1.1024*** [0.313]
<i>ΔLending Supply x UTIL</i>			3.189*** [1.118]	2.212** [1.093]	-0.166 [1.154]	-0.429 [0.929]
<i>ΔOn Loan x DSHDR</i>	1.116 [1.760]	0.816 [1.771]	1.115 [1.715]	0.809 [1.723]	0.154 [1.658]	
<i>ΔOn Loan x DISS</i>		-2.877*** [0.675]		-2.813*** [0.689]	-2.025*** [0.734]	
<i>ΔOn Loan x UTIL</i>			-2.033 [2.620]	-1.912 [2.622]	-0.216 [2.239]	
<i>Constant</i>	80.523*** [3.012]	91.039*** [2.865]	78.770*** [3.160]	88.775*** [2.979]	81.497*** [11.596]	95.735*** [4.418]
<i>Firm FE</i>	No	No	No	No	Yes	No
<i>Institutional FE</i>	No	No	No	No	No	Yes
<i>Observations</i>	6,887	6,887	6,887	6,887	6,887	1,524,290
<i>Adjusted R-squared</i>	0.599	0.657	0.600	0.659	0.723	0.492

Table 12
Equity Lending Market around Dividend Record Date and the Financial Crisis of 2008

The table presents results from an event study on the effects of proxy voting on the equity lending market in the period (-30,+30) days around 7,415 voting record dates (record date is at t=0) during the 2007-2009 period. The independent variables are equity lending supply, borrowing demand and borrowing fee. *RDATE* is a dummy equal to one on the voting record date. *GOV41* is the internal governance measure from Aggarwal et al. (2011). In Panel A we investigate the robustness of results to the inclusion of dividend record dates. *DIV DUMMY* is a dummy variable equal to one if the firm has paid a dividend in the past three years. *DIV RDATE* is a dummy variable equal to one for the 326 dividend record dates in the window (-1,+1) around proxy voting date. In Panel B we examine the equity lending market post financial crisis. *LEHMAN* is a dummy equal to one for all days in 2008 on or after 15th September, and *RDATE x LEHMAN* is dummy equal to one if the voting record date falls in this period. Control variables (not shown) include institutional ownership (*INST*), concentration of institutional ownership (*INST CONC*), the natural log of market capitalization (*SIZE*), book to market (*BM*), stock turnover (*TURNOVER*), bid-ask spread (*SPREAD*), a small stock dummy equal to one if stock price is less than \$5 (*PRICE<\$5*), and a cumulative five day return (*RETURN*). Dividend record date regressions include quarterly time-effects and financial crisis regressions include yearly time effects. All regressions include robust standard errors clustered at the firm-level, presented in parentheses. *** (**,*) indicates significance at the 1% (5%, 10%) level.

	Panel A: Dividend Record Date						Panel B: Financial Crisis		
	Lending Supply		Borrowing Demand		Fee		Lending Supply	Borrowing Demand	Fee
<i>RDATE</i>	-1.659***		0.060***		1.340***		-1.634***	0.096***	2.170***
	[0.039]		[0.015]		[0.394]		[0.044]	[0.017]	[0.421]
<i>RDATE x LEHMAN</i>							-0.073	-0.044*	-1.763**
							[0.048]	[0.026]	[0.738]
<i>LEHMAN</i>							-0.698**	-1.102***	-40.493***
							[0.347]	[0.198]	[9.017]
<i>DIV DUMMY</i>	1.093***	1.091***	0.179	0.179	-4.389	-4.388			
	[0.219]	[0.219]	[0.129]	[0.129]	[4.902]	[4.902]			
<i>DIV RDATE</i>	-1.358***	-0.187	0.596***	0.554**	5.459	4.513			
	[0.315]	[0.325]	[0.212]	[0.216]	[6.084]	[6.195]			
<i>GOV41</i>	3.566***	3.567***	-2.355***	-2.355***	-43.455	-43.456	4.210***	-2.276***	-49.346*
	[1.171]	[1.171]	[0.692]	[0.692]	[29.524]	[29.524]	[1.182]	[0.697]	[29.787]
<i>Adj. R-squared</i>	0.67	0.67	0.29	0.29	0.29	0.06	0.67	0.28	0.05