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## Do Voting Rights Matter: Evidence From the Adoption of Equity-based Compensation Plans

Joseph Weber, Peter R. Joos, Sudhakar V. Balachandran

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# **Do voting rights matter: Evidence from the adoption of equity-based compensation plans**

Sudhakar V. Balachandran  
Columbia Business School  
[svb34@columbia.edu](mailto:svb34@columbia.edu)

Peter Joos  
Sloan School of Management  
Massachusetts Institute of Technology  
[pjoos@mit.edu](mailto:pjoos@mit.edu)

Joseph Weber\*  
Sloan School of Management  
Massachusetts Institute of Technology  
[jpweber@mit.edu](mailto:jpweber@mit.edu)

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\* Corresponding author. The authors would like to thank Alok Baradwaj, Feng Cheng, Quinn Chiang, Andrew Cowen, and Devis Myteveli for valuable research assistance. The authors would also like to thank the seminar participants at Columbia for their valuable comments.

## **Abstract**

Recent corporate scandals and subsequent regulatory actions have heightened both the academic communities and the public's interest in corporate governance issues. Academics have long argued that voting rights constitute a critical component of a system of corporate governance. We provide evidence on the importance of one aspect of the firm's corporate governance system, namely shareholders' voting rights, by examining the determinants of the decision to grant equity-based compensation to the employees of the firm with or without shareholder approval. We find that poorly-performing firms and poorly-governed firms are more likely to adopt equity-based compensation plans without shareholder approval. Furthermore, when we examine financial performance subsequent to adoption of equity-based compensation plans, we find that poorly-governed firms that adopt equity-based compensation plans without consulting shareholder do not appear to gain any significant benefits associated with the incentives the plans are supposed to provide. In fact, in the year after an equity-based compensation plan is adopted, these firms perform worse than firms that have good systems of corporate governance or firms that place equity-based compensation plans to a shareholder vote. Overall, our results suggest that shareholder voting rights are an important tool of corporate governance.

## ***1. Introduction***

In the wake of the collapse of Enron, the downfall of Arthur Andersen and the wave of recent accounting scandals, regulators have adopted numerous regulatory changes to improve corporate governance and increase corporate transparency. One of the areas of regulatory attention is shareholder's voting rights. Regulators have argued that shareholder's voting rights are an important component in a system of good corporate governance. Although the regulator's standpoint is consistent with the predominant view in the academic literature, critics argue that allowing shareholders to participate in decisions concerning the day-to-day operations of the firm will destroy shareholder wealth.<sup>1</sup> That is, they argue that corporations are not participatory democracies but instead business entities affected by the market for their products (Easterbrook and Fischel 1983, p. 396). Therefore, allowing uninformed shareholders to be involved in the day-to-day operations of the firm will negatively affect firm performance, making shareholders worse off.

In the current study, we investigate the role and the importance of shareholders' voting rights in the corporate governance system by studying the ratification role of shareholders in the firms' decision to adopt equity-based compensation plans. Historically, firms faced few restrictions on the practices of adopting equity-based compensation plans with or without shareholder approval. The lack of uniform voting requirements has led to substantial cross-sectional heterogeneity in shareholder approved or non-approved plans.

The cross-sectional variation in approval of equity-based compensation plans allows us to conduct three analyses that provide evidence on the role and importance of

shareholder voting. The first analysis examines which factors affect firms' decisions to have its shareholders approve or ratify an equity-based compensation plan. The second analysis examines whether shareholder approval of equity-based compensation plans affect subsequent firm performance. Finally, the third analysis investigates whether a system of good corporate governance protects shareholders from wealth expropriation when managers adopt equity-based compensation plans without shareholder approval.

Our first analysis draws on hypotheses developed in the incomplete contracting and agency theory research to identify potential determinants of management's decision to adopt equity-based compensation plans without shareholder approval. In particular, we investigate whether the ratification decision depends on the probability that the firm's shareholders will vote down the plan and/or the quality of the firm's system of corporate governance. We predict managers will be more likely to adopt non-approved plans when the firm's shareholders are likely to vote down the plan and/or the firm has a weak governance structure.

The second analysis investigates whether approved plans are more likely to lead to relatively larger improvements in firm performance compared to non-approved plans. Agency theory tells us that well-designed equity-based compensation plans provide managers with the incentives to improve the firm's performance. We argue that if voting rights matter, firms that obtain shareholder approval of equity-based compensation plans will exhibit better future performance than firms that adopt plans without shareholder approval. The predicted result would also indicate that the regulatory attention recently devoted to the voting rights aspect of corporate governance is warranted. By contrast, a result that non-approved plans lead to similar or better performance than approved plans

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<sup>1</sup> E.g., Berle (1926), Berle (1959), Easterbrook and Fischel (1983).

would suggest that a regulation restricting firms from adopting non-approved plans will make shareholders worse off.

The third analysis relies on elements of the first two analyses. That is, to determine whether a good system of corporate governance protects shareholders from wealth expropriation, we examine whether corporate governance affects the approval decisions and subsequent performance. If the adoption of equity-based compensation plans without shareholder approval is a form of wealth expropriation, then firms with good systems of corporate governance should be less likely to adopt plans without shareholder votes. Furthermore, if firms with good corporate governance systems choose to adopt plans without shareholder approval, we predict these firms will have better future performance relative to the firms with non-approved plans and poor corporate governance systems.

To test our hypotheses, we take advantage of a new SEC regulation, effective July 2002, requiring firms to include a table of all equity-based compensation plans in their 10-Ks.<sup>2</sup> We search Lexis-Nexis for all 10-Ks and proxy statements between July and December 2002 to establish a sample of 479 firms that had adopted 1120 equity-based compensation plans between 1978 and 2002. Of these 1120 plans, 235 were adopted without shareholder approval. Consistent with commentators' observations, we find the adoption of non-approved equity-based compensation plans is a relatively recent phenomenon that has become increasingly important in the last few years (e.g., Wagner and Wagner 1997; Thomas and Martin 2000). We find that prior to 1997, only 11% of

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<sup>2</sup> To ensure financial statement users can easily identify the approval status of firms' equity-based compensation plans, firms must also identify which plans that have been adopted with and without shareholder approval.

equity-based compensation plans were adopted without shareholder approval. The percentage increases to over 40% during the period 1997-2002.

To test our first prediction on the determinants of a firm's decision to adopt non-approved equity-based compensation plans, we estimate a logistic regression that compares the characteristics of firms with approved equity-based compensation plans to those of firms with non-approved equity-based compensation plans. By focusing our tests on a sample of firms with equity-based compensation plans, we control for the factors that cause firms to adopt equity-based compensation plans and isolate the determinants of the decision to adopt the plans without seeking shareholder approval.

We find systematic differences between both sets of firms. Specifically, we find that firms adopting equity-based compensation plans without shareholder approval have a lower *ROA* in the year of plan adoption than firms with shareholder approved plans. The finding provides support for the hypothesis that managers of poorly performing firms elect to adopt plans without shareholder approval because they fear that the shareholders would likely reject additional equity-based compensation plans. We also find that firms with a higher number of insiders on the board and firms with a CEO who is also the chair of the board of directors are more likely to adopt equity-based compensation plans without shareholder approval. Finally, we find firms with 10% block-holder share-ownership are less likely to adopt plans without shareholder approval. The results therefore support our hypothesis that firms with weak corporate governance more likely adopt equity-based compensation plans without shareholder approval.

Our second analysis examines the extent to which the adoption of non-approved equity-based compensation plans affects future firm performance. We measure future

performance as one-year-ahead return on assets and show that firms that adopt plans without shareholder approval perform worse than firms that adopt plans with shareholder approval (i.e., firms that adopt plans without shareholder approval obtain lower future return on assets.) We then interact shareholder approval with our measure of good corporate governance and find that well-governed firms that adopt plans without shareholder approval perform better than poorly-governed firms. Combined with the results of the first analysis, the finding suggests that a good system of corporate governance can prevent shareholder wealth expropriation through the adoption of non-approved equity-based compensation plans.

Summarizing, our paper finds that poorly governed firms and/or poorly performing firms are more likely to adopt equity-based compensation plans without shareholder approval. In addition, firms with non-approved plans perform worse than firms with approved plans. However, conditional on adopting a plan without shareholder approval, firms with good systems of corporate governance perform better than poorly governed firms.

Taken together, our findings highlight the importance of voting rights and the recent regulatory attention they have received. Our results suggest that in poorly-governed firms managers will take advantage of shareholders by adopting equity-based compensation plans without shareholder approval. Therefore, the recently adopted requirements by NYSE and NASDAQ, requiring shareholders to vote on *all* equity-based compensation plans, are likely to make the shareholders of poorly-governed firms better off, because they will have the option to reject plans that are unlikely to improve future performance.



However, we also provide evidence suggesting that regulation potentially will make the shareholders of well-governed firms worse off. Our findings suggest that although firms with good systems of corporate governance are less likely to adopt plans without shareholder approval, in circumstances that warrant the adoption of plans without shareholder approval, the firm actually experiences improvements in subsequent financial performance (relative to poorly governed firms). In other words, requiring well-governed firms to obtain shareholder approval for all equity-based compensation plans potentially reduces the firms' flexibility to adopt plans and/or increases the costs of adoption.

The rest of this paper is organized as follows: Section 2 discusses the theoretical and empirical literature on the importance of voting rights and the regulatory reform on shareholder voting rights. Section 3 develops hypotheses, and Section 4 describes our sample selection procedures. Section 5 develops our proxies and discusses the research design. Section 6 presents our results and Section 7 concludes.

## ***2. Background and Motivation***

### ***2.1 Economics of the firm and voting rights***

Agency theory views the firm as a 'nexus-of-contracts' and studies the conflict of interest between managers and owners of firms arising from the separation of ownership from control (see Coase 1937, Jensen and Meckling 1976, among others).<sup>3</sup> Within the agency theory framework, researchers focus specifically on the role and effect of managers' incentive mechanisms in the decision process of firms. As a guideline, Fama and Jensen (1983) model the decision process as having four steps: (1) Initiation –

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<sup>3</sup> A review of this literature is outside the scope of this paper, see Allen and Winton (1995) and Harris and Raviv (1992) for extensive overviews.

generation of proposals for resource utilization; (2) Ratification – selection of decisions to be implemented; (3) Implementation – execution of ratified decisions; and (4) Monitoring – measurement of performance of decision agents and implementation of rewards. They argue that both decision ratification and monitoring are control rights retained by the firm's owners.

Whereas a large body of empirical agency literature demonstrates the importance of monitoring in economic decision-making, relatively few studies focus on the role of decision ratification. Some exceptions are, for example, Lease et al. (1983), who examine firms with dual class stock and find shares with superior voting rights generally trade at a premium compared to shares with inferior voting rights. Similarly, DeAngelo and DeAngelo (1985) provide evidence that shareholder's voting rights are valuable by examining managers' stock holding decisions for firms with dual class stock. Also, Jarrell and Poulsen (1988) and Ruback (1988) provide evidence of a negative shareholder wealth effect associated with firms reducing voting rights through dual-class recapitalizations.

While providing evidence on the importance of voting rights, the early studies do not document what determines the importance of the voting rights or the particular circumstances under which voting rights become more valuable to shareholders. Recently however, the theoretical financial contracting literature, adopting the incomplete contracting framework developed by, among others, Grossman and Hart (1986) and Hart and Moore (1988, 1990), discuss more explicitly the role and importance of voting rights in corporate finance (see Hart 2001 for an overview). In particular, the financial contracting literature investigates how voting rights address the problem that contracts

typically cannot include all future contingencies that arise in the (dynamic) relation between managers and owners of the firm. One of the key questions in this literature is therefore how the right to make future decisions should be allocated between the managers and the owners of the firm.<sup>4</sup>

An important paper by Aghion and Bolton (1992) provides a theoretical framework to study this question. Aghion and Bolton (1992) analyze how voting rights shift between managers and owners as a function of the efficiency of a strict focus on cash flow as opposed to other benefits. Empirical work by Kaplan and Stromberg (2003) tests several theoretical predictions of the Aghion and Bolton (1992) framework focusing on the financial contracts that have been developed in the venture capital sector. They find empirical evidence that venture capital financing contracts allow separate allocation of cash flow and voting rights between entrepreneur and venture capitalists. More importantly, they also find that, consistent with the predictions of the Aghion and Bolton (1992) model, cash flow rights and voting rights are contingent on observable measures of financial performance: when the firm is performing poorly, the venture capitalists typically obtain full control, allowing them to terminate the project or remove the entrepreneur. As Hart (2001) argues, the shift of voting rights as a function of performance therefore makes the most efficient solution possible when events take a turn for the worst.

Summarizing, the economics literature suggests voting rights address the problem that incomplete contracts cannot include all future contingencies in the manager-owner relationship. Theoretical and empirical work shows evidence not only of separate

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<sup>4</sup> The financial contracting literature often phrases the problem in terms of the allocation of voting rights between the entrepreneur and investors, as opposed to manager and owners of the firm. The key features of

allocation of cash flow and voting rights between managers/entrepreneurs and owners, but also of shifts in voting rights between managers and owners are a function of observable measures of financial performance. The evidence therefore suggests certain firm-institutional factors determine the importance of voting rights for either managers or owners. From the standpoint of the owners of the firm, the issue of interest is to identify under which circumstances and for which decisions voting rights become most important.

Our research extends previous work on the importance of voting rights by investigating their role in the context of the adoption of equity-based compensation plans. As we discuss below, management has considerable flexibility to design equity-based compensation plans. In particular, management can design plans in such a way that it need *not* present them to shareholders for approval. We argue the determinants of management's decision to present plans for shareholder approval will relate directly to the importance of voting rights for shareholders. By investigating what institutional factors lead to the decision to adopt equity-based compensation plans without shareholder approval and by evaluating the effects of approved vs. non-approved plans, we are able to assess the importance of voting rights for the firm's owners. Before we develop formal hypotheses, we review the regulatory context of the ratification of equity-based compensation plans in the US in recent years.

## ***2.2 Regulatory context of ratification of equity-based compensation plans***

Prior to the early 1980's, few formal regulations required a firm to submit its equity-based compensation plans to a shareholder vote. However, relatively few plans were adopted without shareholder approval (Wagner and Wagner 1997). There were two

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the problem setting are the same though.

forces that combined to prevent firms from adopting equity-based plans without shareholder approval. First, SEC rule 16b-3 required shareholder approval of compensation plans that were to be exempt from Section 16(b) (the short swing sale prohibition for corporate insiders).<sup>5</sup> That is, Section 16b-3 required any compensation awarded to executives without shareholder approval to be subject to the SEC's short swing sale prohibition. The restriction made unapproved plans costly and caused most firms to ask shareholders to ratify equity-based compensation plans (Thomas and Martin 2000).<sup>6</sup> In addition to the SEC rules, the NYSE's requirements obliged listed firms to submit all plans to a shareholder vote unless they fall within the broad-based exception.

Amendments to both SEC and NYSE rules in recent years greatly affected management's decisions to obtain shareholder's approval of equity-based compensation plans (Thomas and Martin 2000). Specifically, in 1996 the SEC changed their exceptions to the short swing sale rule (rule 16b-3) allowing equity compensation plans an exemption if they are approved by the board of directors, a board committee, *or* the shareholders. In addition, the NYSE controversially amended their listing requirements in 1998 to loosen the shareholder approval requirement: the NYSE updated their listing requirements and expanded the types of options plans that were exempt from shareholder approval by changing the definition of broad-based plans. The amendment also created a non-exclusive safe harbor for those plans in which 20% of the firm's employees, half of whom are neither officers nor directors, are eligible to participate. The regulation states

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<sup>5</sup> Thomas and Martin (2000) report that prior to 1996, Rule 16b-3 stated that an employee benefit plan was exempt from rule 16(b) if it had been approved "by the affirmative votes of the holders of a majority of the securities or by their written consent."

<sup>6</sup> Another factor that potentially affects how often shareholders ratify option plans are state regulations that requires a shareholder vote to be taken on fundamental transactions if the shareholders have decided that the adoption of equity-based compensation is considered as such (Easterbrook and Fischel 1983).

that plans falling within the safe harbor do not require shareholder approval. Despite opposition to the changes from institutional investors, the amendment remained intact until 2002.

Thus, during the period between 1996 and 2002, changes in SEC policy and NYSE listing requirements created a window of opportunity during which firms could relatively easily adopt equity-based compensation without shareholder approval. Recent regulatory changes though suggest firms will find it harder to adopt the non-approved plans in the future. In 2003, both NYSE and NASDAQ proposed and adopted modifications to their listing requirements in the wake of the corporate governance scandals in the US. As a result, all firms listed on the two exchanges are now required to submit all equity-based compensation plans to a vote, subject to a few minor exceptions.<sup>7</sup> The SEC approved the modification and the new rules of NYSE and NASDAQ on June 30<sup>th</sup>, 2003 (SEC 2003).

Realizing the current disclosure requirements did not help shareholders identify the existence of plans adopted without shareholder approval, in 2002 the SEC enacted regulatory changes to the disclosure format of equity-based compensation plans in the 10-K or proxy statement (SEC 2002). Beginning in July 2002, all firms that have unexercised options and/or options available for grant under an equity-based compensation plan must disclose the existence of their plans in a tabular format. Furthermore, the table must also disclose whether the plan was approved by the firm's shareholders. When adopting this regulation, the SEC explicitly stated that they designed the change in disclosure rules to allow financial statement users to easily identify any

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<sup>7</sup> The exceptions are plans of firms that were acquired in a merger, plans designed to give options to new hires, and plans associated with 401k's.

firm that adopted an equity-based compensation plan without shareholder approval (SEC 2002).

Summarizing, during the late 1990s when the use of equity-based compensation exploded, the regulatory requirements for the ratification of equity-based compensation plans were substantially relaxed.<sup>8</sup> As we will see below, many firms took advantage of the change to issue equity-based compensation without shareholder approval. Recent scandals, and calls for reforms in corporate governance caused the stock exchanges and SEC to require managers to obtain shareholder approval for equity-based compensation plans, and to disclose the existence of plans that were adopted without shareholder approval. We take advantage of the relaxed constraints and the change in disclosure requirements to provide evidence on the value of shareholder voting rights in the context of the adoption of equity-based compensation plans.

### ***3. Hypotheses***

To provide evidence on the importance of voting rights, we investigate what determines management's decision to seek shareholder ratification of equity-based compensation and how ratification affects future performance of the firm. We argue that if shareholders' voting rights are important they will affect both the determinants and the future outcomes of management's decisions. In other words, shareholders' voting rights are valuable if they lead to managers making better decisions to increase shareholder wealth when the firm's shareholders ratify the decision. However, we also explore the

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<sup>8</sup> Legal scholars highlight that at the same time the regulator and stock exchanges relaxed shareholder approval requirements, companies faced increasingly stronger shareholder resistance to the exploding allocation of stock to these plans. We therefore conjecture that shareholder activism lead managers to

alternative hypothesis that shareholders' ratification of management's decisions potentially harms the firm if allowing shareholders to interfere with day-to-day operations of the firm decreases its overall value.

Referring to our discussion in the previous section of the paper, we predict two factors will affect management's decision to adopt equity-based compensation plans without shareholder approval. First, we expect that the probability that shareholders will reject the plan will affect the decision to put the plan to a vote. We argue that shareholders will become more active during periods of poor performance, especially in matters concerning dilution of ownership and managerial compensation.<sup>9</sup> Therefore, we predict that managers, if they expect an increase in shareholder activism in times of poor firm performance, will be less likely to submit equity-based compensation plans to a vote when the firm is performing poorly.

Second, we expect poorly-governed firms will be more likely to adopt plans without seeking shareholder approval. In the regulatory debate leading up to the enactment in 2002 of the new NYSE and NASDAQ listing requirements for shareholder adoption of equity-based compensation plans, the SEC and a number of commentators mention the need to improve corporate governance as an explicit objective of the requirement. For example, in a comment letter to the SEC in support of the proposed changes to the listing requirements, Mark Heesen, the president of the National Venture Capital Association (NVCA) argues there are "recent instances where stock options contributed to a misalignment of the interests of senior executives and long-term

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explore means of implementing stock option plans without shareholder approval (Wagner and Wagner 1997).



shareholders...” He goes on to state that the NCVA “now support(s) the view that shareholders' concerns about dilution can only be allayed by a shareholder vote on all stock option plans.” We therefore predict firms that adopt equity-based compensation plans without shareholder approval will have worse corporate governance than firms that obtain shareholder approval.

Whereas our first analysis explores what factors determine management's decision to adopt equity-based compensation plans without shareholder ratification, it does not address whether requiring the shareholders to vote on each plan is optimal for the firm. To establish whether voting rights matter, in a second analysis we evaluate whether firm performance improves after management adopts non-approved plans. We do not formulate a one-sided hypothesis that non-shareholder approved plans will lead to a deterioration in future performance since opinions are divided on whether shareholder voting necessarily leads to better management decisions. As we mention before, a number of commentators argue that requiring shareholders to vote on all compensation matters will involve the shareholder too much in the day-to-day operations of the firm, where they are likely to be poorly informed relative to management or the board of directors. For example, Easterbrook and Fischel (1983) argue that “Shareholders (sic) are unlikely to know better than the managers how to run the firms and thus cannot either make good decisions or recognize bad ones. The more shareholders govern, the more poorly the firms do in the marketplace.” This view is supported by the director of the Employees Retirement System of Texas in her comment on the NYSE's proposal, where she argues that “companies' compensation practices should not be micromanaged and

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<sup>9</sup> Thomas and Martin (2000) present anecdotal evidence in support of our argument. They show that one of the contributing factors that led Gymoree Corporation's shareholders to vote against the equity-based

that shareholder approval should be required only for plans that dilute ownership over a certain threshold” (Securities and Exchange Commission 2003).

Underlying the argument is the idea that management needs the flexibility to adopt options plans to create the proper incentives to improve performance. For example, at times when the firm is performing poorly, equity-based compensation potentially becomes most effective. However, times of poor performance are exactly the circumstance under which shareholders will be unwilling to provide additional equity-based compensation. If equity-based compensation plans create the right incentives for managers to improve performance of the firm and if shareholder voting on equity-compensation plans is valuable, we expect to see a larger increase in future firm performance after the adoption of approved plans than after the adoption of non-approved plans. If, by contrast, the critics are correct, future performance of the firm will (at best) not vary as a function of the approval status of the adopted plans; in the extreme case where allowing shareholders to vote on the equity-based compensation plans destroys firm value, future performance of the firm will be better if management adopts non-approved plans rather than approved plans.

Finally, we examine how the interaction of corporate governance and shareholder approval of equity-based compensation plans affects the firm’s future performance to assess the importance of regulating shareholders’ voting rights. If poorly-governed firms that adopt plans without shareholder approval have poor future performance, then regulating voting rights makes shareholders of poorly-governed firms better off. By contrast, if well-governed firm that adopt equity-based compensation plans without shareholder approval improve future performance, then requiring well-governed firms to

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compensation plan in 1998 was the firm’s poor performance in the quarter prior to the plan’s adoption.

seek shareholder approval potentially increases the firm's costs of adopting the plans, thus making shareholders worse off.

#### ***4. Sample Selection***

To identify firms that adopted equity-based compensation plans without shareholder approval, we rely on the recent SEC regulation requiring firms to disclose annually all equity-based compensation plans in their 10-K or their proxy statement. More specifically, the new regulation requires firms to provide a summary table of equity-based compensation, partitioned on approval status of the adopted plans: the summary table discloses the number of shares available under the plan, the number of shares granted, and the average exercise price. We use the summary table to identify firms with equity-based compensation. Since the SEC regulation became effective on July 15, 2002, we begin our sample selection process by collecting all 10-K's and proxy statements filed with the SEC after the effective date and before December 15, 2002.<sup>10</sup> We then use a keyword search to identify firms that have equity-based compensation.<sup>11</sup> The process yielded 710 firms with equity-based compensation plans.

We then use the information disclosed in the equity-based compensation table and searched through the firm's 10-K's and proxy statements to find the specific adoption dates for the firm's equity-based compensation plans. 231 of the 710 firms that disclosed the existence of equity-based compensation plans did not provide enough information to

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<sup>10</sup> By searching over this time period, our sample consists primarily of firms that do not have a December fiscal year end. This feature of our sample is likely to create some industry clustering, but otherwise is unlikely to cause any biases in the subsequent tests we perform.

<sup>11</sup> When the SEC adopted this regulation, they emphasized the need for uniformity in the disclosure format. We conducted a pilot study of 50 proxy statements, and found that all firms that had equity-based compensation plans had tables entitled "**Equity Compensation Plan Information**". We used this uniformity

allow us to determine exactly when/which plans were approved or not approved by shareholders. As a result, our sample size dropped to 479 firms, with a total of 1,120 adopted equity-based compensation plans.

Table 1 provides the aggregate data for the 479 firms in the initial sample. In Panel A, we compare the terms of the approved equity-based compensation plans to the terms of the non-approved plans. We find approved plans are generally larger and have higher exercise prices. Since stock options are generally issued with an exercise price equal to the stock price of the firm's stock at the date of grant, the table suggests that management adopts non-approved plans when the firm is performing poorly.<sup>12</sup>

Panel B of Table 1 provides descriptive evidence on the categories of employees who are being compensated with equity-based compensation plans in our sample. The largest category of plans covers all of the firm's employees with a total of 778 plans. Of these 778 plans, 142 (or about 18 percent) were issued without shareholder approval. Plans that benefit officers of the firm represent the highest category of plans to specific firm employees issued without shareholder approval: 41 percent of all plans to officers are non-approved. The percentages of non-approved plans to directors (employee or non-employee) are much lower (15 and 10 percent, respectively). In addition, the large majority of plans that benefit consultants are typically issued without shareholder approval (87 percent).

In Table 2 we provide descriptive statistics regarding when plans were adopted, focusing on the adoption rate of approved and non-approved plans over our sample

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in disclosure requirements, and searched 10k's and proxy statement using the phrase "**Equity Compensation Plan Information**" to identify the firms in our sample.

<sup>12</sup> The conclusion is subject to the caveat that potentially systematic differences in the grant dates under the two different types of plans exist.

period. The Panel shows the adoption of equity-based compensation plans without shareholder approval is a relatively recent phenomenon. Over 85 percent of the non-approved plans were adopted during or after 1996.<sup>13</sup> The pattern suggests the SEC's amendment to rule 16b-3 in 1996 discussed earlier clearly affected firms' decisions to issue plans without shareholder approval. Also, relative to approved plans, the proportion of non-approved plans increases substantially during and after 1996.

The growth in the use of non-approved equity-based compensation plans also corresponds with an observed increase in shareholder activism over the same time-period. Thomas and Martin (2000) discuss shareholder-voting patterns relating to the adoption of equity-based compensation plans and find that prior to 1995 about 95-97 percent of shareholders typically voted in favor of equity-based compensation plans. Approval rates however drop in 1995 and 1996 when it became common to see 20-40 percent of shareholders vote against the adoption of equity-based plans. Furthermore, 1996 shows the first three instances where shareholders rejected proposals for equity-based compensation plans. During 1997 another 15 plans were defeated and 30 plans passed the shareholder vote only narrowly, with shareholder approval rates of less than 60 percent.<sup>14</sup> The pattern of anecdotal evidence therefore suggests boards of directors potentially began adopting plans without seeking shareholder approval to avoid the possibility that shareholders vote against their proposals.

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<sup>13</sup> The regulation only requires disclosure of active plans. Therefore, if there are systematic differences in the length of time that approved and non-approved plans remain active, then the statistic is biased. We are unable to obtain the data necessary to determine the extent of the potential bias.

<sup>14</sup> We are in the process of identifying all documented cases of shareholders rejecting a proposed option plan to assess the effect of their exclusion on our analysis of determinants of the decision to seek a shareholder vote.

## 5. *Research Design and Proxies*

In our first analysis, we investigate the determinants of the decision to adopt equity-based compensation plans without shareholder approval. We estimate a logistic regression, with the dependent variable being one if shareholders were not asked to approve the plan and zero otherwise. The independent variables include measures of the performance of the firm, the quality of the firm's corporate governance system, and control variables for the other determinants of the decision to adopt plans without shareholder approval.

Our logistic regression includes two proxies of firm performance. First, we use the firm's return-on-assets (*ROA*) in the fiscal period the plan was adopted. Second, we include firm's return-on-assets for the fiscal-year end the year prior to the plan's adoption (*LAG\_ROA*). We include both measures in the model since it is not unambiguously clear what performance horizon the manager considers when deciding to put the plan to a vote or not. In addition, many firms disclose only the year and not the month of plan adoption: for plans adopted early during the year, *LAG\_ROA* presumably will be of more relevance for management's decision, whereas for plans adopted later in the year *ROA* potentially will affect the decision.

To measure the quality of a firm's corporate governance, we use three measures taken from Bushman et al. (2003). Our first measure is an indicator variable that takes the value of one when the CEO is also the chair of the board, and zero otherwise (*CEOCHR*). Our second variable captures the number of insiders on the board, measured as the ratio of the number of members of the board of directors that are insiders to the total number of members on the board (*INSRAT*). Our third measure captures the

influence of block-holders, measured with an indicator variable that takes the value of one if the firm has an investor considered a beneficial owner by SEC insider rules, and zero otherwise (*BENOWN*). Note that the SEC insider rules classify any investor owning greater than 10% of the company's stock as a beneficial owner. We run the analysis including each of these measures of corporate governance individually, as well as with all three measures at once.

In addition to our main variables of interest, we also include a number of control variables for other characteristics that likely affect the decision to submit an equity-compensation plan to a shareholder vote. Specifically, we include indicator variables to control for the beneficiaries of the plans, namely the firm's outside consultants, officers or directors (*CONSULT*, *DIRECT*, *OFFICER*). We also control for the size of the equity-based compensation plan. Proponents of the changes in listing rules have argued that firms adopt large dilutive plans without shareholder approval. Alternatively, firms may elect to adopt small plans without shareholder approval. If small plans are adopted by firms to allow them to quickly provide equity-based compensation to new hires or promoted executives, then it would be costly and time consuming to place these plans to a vote. To measure the size of the plan, we define *SIZERAT* as the number of shares authorized for granting by a given option plan, divided by the number of share outstanding at the end of the year the plan was implemented.

We also control for the firm's size by including the natural log of the firm's assets (*LNASSETS*). We also include indicator variables to control for the firm's listing status on NYSE or NASDAQ (*NYSE*, *NASDAQ*). Finally, our last control variable is an

indicator variable that takes the value of one if the firm acquired the equity-based compensation plans in a merger, and zero otherwise (*MERGER*) (see fn. 7).

To evaluate if the approval of equity-based compensation plans affects future performance, we examine the determinants of the firm's *ROA* for the fiscal year after the plan was adopted (*FUT\_ROA*). To specifically examine the effects of shareholder approval on future performance, we include as independent variable in the model an indicator variable that takes on the value of one if the plan was not approved and zero otherwise (*NOT\_APPROVED*). To provide evidence on whether good corporate governance affects the association between plan approval and future performance we create a variable for firms that have good corporate governance systems (*GOOD\_GOV*) and interact this indicator variable with (*NOT\_APPROVED*). Our measure of good corporate governance, (*GOOD\_GOV*) is an indicator variable that takes the value of 1 if the firm's board is below the median *INSRAT*, does not have a CEO as chair (i.e., *CEOCHR* is equal to zero), and has a beneficial owner (i.e., *BENOWN* is equal to one.) The indicator takes the value of zero if any of the preceding conditions is not met.

We also include three control variables in our subsequent performance tests. First, we control for firm size (*LNASSETS*). Second, we control for past financial performance of the firm (*ROA*) to capture the mean-reverting pattern of return-on-assets (see for example Nissim and Penman 2001). Third, we include a Heckman self-selection correction variable (*SELECTION*) in the model to acknowledge that firms have a choice to place the plans to a vote or not and that systematic differences exist between the “types” of firms that elect to put their plans to a vote and firms that do not. We estimate our selection model of the determinants to adopt equity-based compensation without



shareholder approval using a probit-model and calculate the Inverse Mills Ratio for each plan in our sample (see below).

## **6. Results**

### **6.1 Univariate Results**

Before turning to our main results, we provide descriptive statistics on the variables we include in the analysis in Tables 3 and 4. Table 3 focuses on the means and medians of our independent variables and documents that firms with plans approved by shareholders appear to perform better than firms with non-approved plans. More specifically, relative to firms with non-approved plans, the median *ROA* for firms with approved plans is higher in the years before, during, and after plan adoption (*LAG\_ROA*, *ROA*, and *FUT\_ROA*, respectively). The result lends preliminary support to our hypothesis that poorly performing firms are less likely to place option plans to a vote.

Focusing on our measures of corporate governance, we see a higher percentage of insiders on the board (*INSRAT*) of firms with non-approved plans than of firms with approved plans; also, firms with non-approved plans are more likely to have a CEO that is also chairman of the board and firms with non-approved plans have fewer beneficial owners. Consistent with the results for the three corporate governance variables separately, a larger proportion of approved plan observations exhibit good governance (*GOOD\_GOV*) relative to non-approved plan observations. Jointly the results suggest that firms with non-approved plans exhibit lower corporate governance quality than firms with approved plans.

The table further shows a higher proportion of non-approved plans relates to compensation for consultants and officers, whereas a lower proportion relates to directors. Finally, in terms of the control variables, approved plans are generally larger than non-approved plans, as measured by *SIZERAT*, but we observe that there does not appear to be a difference in the size of firms with approved and non-approved plans, as measured by the log of assets (*LNASSETS*).

In Table 4, we present univariate Pearson and Spearman correlations between the independent variables in our analyses. We find that, although many univariate correlations are significant at the 5 percent level, the level of correlations is never high enough to suggest a multicollinearity problem in the main analyses.

### ***6.2 Determinants of the decision to place a plan to a shareholder vote.***

In Table 5, we report the results of the determinants to adopt equity-based compensation plans without shareholder approval. The table reports the results for different specifications of the main model. Focusing on the performance variables in all models, we find a negative and significant coefficient on current *ROA* in all specifications, suggesting current poor performance leads management to avoid bringing the plan to a shareholder vote. *LAG\_ROA* in contrast does not exhibit an association with the decision to put the plan to a shareholder vote. The results therefore suggest that, to avoid shareholder rejection of the plans, poorly-performing firms adopt equity-based compensation plans without bringing them to a shareholder vote.

The results further show that the quality of a firm's system of corporate governance affects the decision to adopt an equity-based compensation plan without shareholder approval. Specifically, we find that all three measures of corporate

governance (*INSRAT*, *BENOWN*, *CEOCHR*) are statistically significant in the hypothesized direction. In Models I through III, we include each corporate governance variable separately in the equation, and in Model IV, we include all three variables. In each specification, the coefficients on the corporate governance variables are significant with the predicted sign. Focusing on the control variables, we find that plans used to pay outside consultants or the firm's officers are less likely to be placed to a shareholder vote (*CONSULT*, *OFFICER*) while plans that are used to compensate directors are more likely to be placed to a vote (*DIRECTOR*). We also find that smaller plans are less likely to be put to a shareholder vote (*SIZERAT*). The remaining control variables are never significant in the models.

Overall, the results of the analysis suggest that when firms are performing poorly or when they exhibit weak governance, they are more likely to adopt equity-based compensation plans without a shareholder vote. The results therefore appear to support the recent regulatory attention given to the role of shareholder voting rights. However, to conclude that regulation requiring shareholders to vote on equity-based compensation plans will benefit the owners of poorly performing or weakly-governed firms, approved and non-approved plans need to lead to differential future performance of the firm. Before we investigate whether approval status affects future performance, we carry out sensitivity analyses to insure our determinant results are robust.

### **6.3 *Sensitivity Analyses***

First, we replace our governance measures with a single measure obtained through a factor analysis. We find the variable is statistically significant, in the hypothesized direction, suggesting that well-governed firms are less likely to adopt

equity-based compensation plans without shareholder approval. Second, we replace our financial performance measures (*ROA*, *LAG\_ROA*) with returns-based measures (equally-weighted and value-weighted returns). We find firms with lower equally-weighted and value-weighted returns in the year of plan adoption are more likely to adopt the plan without shareholder approval. Finally, we re-estimate the regressions using post-1996 data alone focusing on the years when it became easier to issue non-approved plans and find our results hold.

#### ***6.4 Does approval status affect subsequent performance?***

In Table 6 we provide evidence on whether firms with approved plans perform better than firms with non-approved plans in the period subsequent to plan adoption. We estimate three specifications of the subsequent performance model. Model I in Table 6 is the base model that includes our variable of interest *NOT\_APPROVED* and two controls (*ROA* and *LNASSETS*). We find that that after controlling for performance (*ROA*) in the year of plan adoption and size (*LNASSETS*) firms with non-approved plans perform worse than firms with approved plans (the coefficient on *NON\_APPROVED* is negative and significant.) The result is therefore consistent with the hypothesis that shareholder voting rights are valuable. Firms that adopted plans without consulting shareholders perform worse than firms that adopted approved equity-based compensation plans.

In Model II, we include the Heckman self-selection correction variable discussed earlier in the base model. We include the Inverse Mills Ratio as our self-selection variable (*SELECTION*) in a second stage regression to examine the effects of shareholder approval of equity-based compensation plans on subsequent firm performance.<sup>15</sup> We find

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<sup>15</sup> We use Model IV in Table 5 as our selection model to calculate the Inverse Mills Ratio with one adjustment. We use returns as our measure of past performance instead of *ROA* and *LAG\_ROA*. If the

our results do not change after controlling for self-selection: firms that adopt equity-based compensation plans without shareholder approval perform worse than firms that obtain shareholder approval. The effect becomes even more pronounced as the magnitude of the coefficient increases.

In Model III in Table 6 we investigate the effect of the interaction between the approval status of the plan and the quality of the firm's corporate governance on future performance of the firm. The results show that, when we interact the approval status of the firm's compensation plan with our earlier defined *GOOD\_GOV* variable the coefficient on *NOT\_APPROVED* remains negative and significant. However, we find a positive and significant coefficient on the interactive variable, suggesting that well-governed firms that adopt plans without shareholder approval perform better than poorly-governed firms with non-approved plans.

Summarizing, the results in Table 6 highlight the importance of voting rights. We initially find that firms that adopt equity-based compensation plans without shareholder approval perform worse than firms that obtain shareholder approval for their equity-based compensation plans, even after controlling for self-selection. The initial results in Models I and II suggest therefore that the use of non-approved equity-based plans is not particularly effective. At the extreme, the results suggest that managers that adopt equity-based compensation plans without shareholder approval are expropriating wealth from the shareholders.

The results of Model III however qualify the initial results in an important way by emphasizing the role of good corporate governance: the results of Model III show that

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selection model were to include *ROA*, there would be an identification problem in the second stage of our estimation. See Greene (2000) for a thorough discussion of our methodology.

poorly-governed firms that adopt non-approved plans perform worse than firms that either obtain shareholder approval for their plans or have good governance. The positive and significant coefficient on the interaction of good governance and approval status of the plan implies good corporate governance neutralizes potential negative effects of management adopting non-approved plans.

Our results also suggest recent regulation requiring firms to submit *all* plans to a shareholder vote potentially makes some shareholders worse off. Specifically, the shareholders of well-governed firms, whose boards adopt equity-based compensation plans without shareholder approval, potentially incur costs as a result of the regulation. We find that, after adopting equity-based compensation plans without shareholder approval, well-governed firms perform better than their poorly-governed counterparts. Therefore, if there is value to having the flexibility to adopt plans without having to put the plan to a shareholder vote, well-governed firms potentially incur costs when they lose the option to issue non-approved equity-based compensation plans.

## **7. Conclusion**

The recent scandals and corresponding regulatory changes have heightened both the academic communities and the public's interest in corporate governance issues. Academics have long argued that voting rights constitute a critical component of a system of corporate governance. When shareholders retain voting rights, they can intervene in the managerial decision making process and prevent managers from making decisions that hurt them. When they lose their voting rights, shareholders can only rely

on a good system of corporate governance to prevent managers from expropriating wealth at their expense.

Our paper provides evidence on the role and importance of shareholder voting in corporate governance by examining a situation where managers have the discretion to choose whether or not to have shareholders ratify their decisions, namely in the adoption of equity-based compensation plans. Our first analysis shows there are systematic differences between firms that place plans to a shareholder vote and the firms that avoid shareholder ratification. Specifically, the evidence is consistent with firms avoiding shareholder votes when the shareholders are likely to overturn managerial decisions because of poor firm performance and when the firm is poorly governed. In our second analysis, we find that firms that adopt equity-based compensation plans without shareholder approval perform worse in the year subsequent to adoption than firms that obtain shareholder approval for their equity-based compensation plans, suggesting the use of non-approved equity-based plans is not effective. In our final analysis however, we show that good corporate governance neutralizes potential negative effects of non-approved plans. In particular, we find poorly-governed firms that adopt non-approved plans perform worse than firms that either obtain shareholder approval for their plans or have good governance.

Overall, our results are consistent with shareholder voting rights being valuable and lend support to the attention the regulator has devoted to voting rights. Our findings suggest that absent voting rights and good systems of corporate governance, shareholders are subject to greater losses caused by managerial expropriation of wealth using non-approved equity-based compensation plans. However, our results also suggest recent

regulation requiring firms to submit *all* plans to a shareholder vote potentially makes some shareholders worse off. Whereas our results are consistent with regulation benefiting shareholders of poorly-governed firms, they also suggest regulation potentially hurts shareholders of well-governed firms by taking away the flexibility to adopt plans without having to put them to a shareholder vote in cases where such action is warranted.



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**Table 1**  
**Summary of Approved and Non-approved Plans**

Panel A: Equity Compensation Plan Information (for the 1120 plans for the 479 firms in our sample, number of shares in thousands)

	<b>Number of Shares Represented</b>		<b>Average Exercise Price</b>		<b>Number of Securities Approved, but Not Issued</b>	
<b>Plans Approved by Shareholders</b>	N=	885	N=	885	N=	885
	Mean	6,379	Mean	12.06	Mean	7,260
<b>Plans Not Approved By Shareholders</b>	N=	235	N=	235	N=	235
	Mean	4,667	Mean	10.36	Mean	3,323

**Table 1**  
**Summary of Approved and Non-approved Plans**

Panel B: Plans by grantee (number of plans above, percent of category below)

<b>Grantee</b>	<b>Number of Approved Plans</b>	<b>Number of Non- approved Plans</b>	<b>Total</b>
<b>Directors</b>	51 (85%)	9 (15%)	60
<b>Non-Employee Directors</b>	53 (90%)	6 (10%)	59
<b>Officers</b>	54 (59%)	37 (41%)	91
<b>Employees</b>	636 (82%)	142 (18%)	778
<b>Consultants</b>	3 (13%)	20 (87%)	23
<b>Other</b>	6 (50%)	6 (50%)	12
<b>SubTotal</b>	803 (78%)	220 (22%)	1,023
<b>Missing Data Total</b>	82	15	97
	885	235	1,120

**Table 2**  
**Descriptive Statistics**

**Panel A: Number of plans by year of implementation**

<b>Year</b>	<b>Approved Plans</b>	<b>Non-approved Plans</b>
1978	2	0
1979	1	0
1983	2	0
1984	6	0
1985	5	1
1986	13	0
1987	16	2
1988	20	0
1989	14	5
1990	27	0
1991	24	1
1992	66	5
1993	57	7
1994	65	6
1995	81	8
1996	84	18
1997	101	25
1998	90	31
1999	85	26
2000	93	44
2001	67	36
2002	39	30
<b>Sub Total</b>	<b>878</b>	<b>234</b>
<b>Year not reported</b>	<b>7</b>	<b>1</b>
<b>Total</b>	<b>885</b>	<b>235</b>

**Table 3**  
**Comparison of Approved and Non-approved Plans**

<b>Variable</b>	<b>Approved Plans</b>	<b>Non-approved Plans</b>	<b>Difference</b>
	Mean (Median)	Mean (Median)	
<b><i>Performance Variables</i></b>			
<i>LAG ROA</i>	-0.211 (0.028)	-0.136 (0.005)	0.075 (0.023) ***
<i>ROA</i>	-0.076 (0.029)	-0.155 (0.006)	0.079 *** (0.023)***
<i>FUT ROA</i>	-0.073 (0.027)	-0.192 (-0.006)	0.119 *** (0.033)***
<b><i>Governance Variables</i></b>			
<i>INSRAT</i>	.203 (0.143)	0.249 (0.182)	-0.046 ** (0.040)***
<i>BENOWN</i>	0.547 (1.000)	0.447 (0.000)	0.100 *** (1.000)***
<i>CEOCHR</i>	0.189 (0.000)	0.258 (0.000)	-0.069 ** (0.000) **
<i>GOOD GOV</i>	0.227 (0.000)	0.158 (0.000)	0.070 ** (0.000)
<b><i>Plan Characteristics</i></b>			
<i>CONSULT</i>	0.004 (0.000)	0.091 (0.000)	-0.087 *** (0.000) ***
<i>DIRECTOR</i>	0.202 (0.000)	0.123 (0.000)	0.079 *** (0.000) ***
<i>OFFICER</i>	0.061 (0.000)	0.162 (0.000)	-0.101 *** (0.000) ***
<b><i>Control Variables</i></b>			
<i>SIZERAT</i>	0.200 (0.099)	0.103 (0.026)	0.097 *** (0.073) ***
<i>LNASSETS</i>	4.456 (4.356)	4.675 (4.434)	-0.219 (-0.078)
<i>NYSE</i>	0.206 (0.000)	0.209 (0.000)	-0.003 (0.000)
<i>NASDAQ</i>	0.454 (0.000)	0.392 (0.000)	0.063 * (0.000) *
<i>MERGER</i>	0.024 (0.000)	0.094 (0.000)	-0.070 *** (0.000) *

\*, \*\*, \*\*\* indicate two-tailed significance at the 10, 5 and 1 percent level in a t-test (Wilcoxon rank sum test)

### **Variable Definitions**

<b><i>LAG_ROA</i></b>	ROA as defined below, measured in the fiscal year before the plan is adopted.
<b><i>ROA</i></b>	Earnings before extraordinary items (Compustat Annual Data Item #18) measured at the fiscal year end for the year the plan is adopted divided by total assets (Compustat Annual Data Item #6) at the beginning of the fiscal year.
<b><i>FUT_ROA</i></b>	<i>ROA</i> as defined above, measured in the fiscal year after the plan is adopted.
<b><i>INSRAT</i></b>	The number of managers in the company on the board of directors divided by the total number of board members
<b><i>BENOWN</i></b>	An indicator variable that is set to 1 if the firm has an investor that is considered a beneficial owner by SEC insider rules, and zero otherwise. SEC insider rules classify any investor owning greater than 10% of the company's stock as a beneficial owner.
<b><i>CEOCHR</i></b>	An indicator that takes the value of 1 if the CEO of the firm is also the Chairman of its Board of Directors, and 0 otherwise.
<b><i>GOOD_GOV</i></b>	An indicator variable that takes the value of 1 if the firm's board is below the median <i>INSRAT</i> , has a <i>CEOCHR</i> equal to zero, and <i>BENOWN</i> equal to one. The indicator takes the value of 0 if any of the proceeding conditions are not met.
<b><i>CONSULT</i></b>	An indicator variable that is set to 1 if a given option plan provides options to be granted to outside consultants to the company, and 0 otherwise.
<b><i>DIRECTOR</i></b>	An indicator variable that is set to 1 if a given option plan provides options to be granted to the members of the board of directors of the company, and 0 otherwise.
<b><i>OFFICER</i></b>	An indicator variable that is set to 1 if a given option plan provides options to be granted to the officers of the company, and 0 otherwise.
<b><i>SIZERAT</i></b>	Number of shares authorized for granting by a given option plan, divided by the number of share outstanding at the end of the year (Compustat Annual Data Item #25) the plan was implemented.
<b><i>LNASSETS</i></b>	The natural log of total assets (Compustat Annual Data Item #6)
<b><i>NYSE</i></b>	An indicator variable that is set to 1 if the firm's stock is traded on the New York Stock Exchange and 0 otherwise (Compustat Annual Data Item <i>ZLIST</i> ).
<b><i>NASDAQ</i></b>	An indicator variable that is set to 1 if the firm's stock is traded on the NASD exchange and 0 otherwise (Compustat Annual Data Item <i>ZLIST</i> ).
<b><i>MERGER</i></b>	An indicator variable that is set to 1 if a given plan was implemented in a company that was subsequently merged into the company represented in the observation.

**Table 4**  
**Univariate Correlations<sup>1</sup>**

	LAG_ROA	ROA	FUT_ROA	INSRAT	BENOWN	CEOCHR	CONSULT	DIRECTOR	OFFICER	SIZERAT	LNASSETS	NYSE	NASDAQ	MERGER
<i>LAG_ROA</i>		<b><i>0.100</i></b>	0.066	<b><i>-0.146</i></b>	<b><i>-0.102</i></b>	-0.009	<b><i>-0.113</i></b>	0.034	0.011	<b><i>-0.083</i></b>	<b><i>0.321</i></b>	<b><i>0.272</i></b>	-0.011	-0.038
ROA	<b><i>0.641</i></b>		<b><i>0.557</i></b>	<b><i>-0.126</i></b>	<b><i>-0.093</i></b>	-0.012	<b><i>-0.084</i></b>	<b><i>0.067</i></b>	0.005	<b><i>-0.153</i></b>	<b><i>0.250</i></b>	<b><i>0.270</i></b>	0.016	-0.058
FUT_ROA	<b><i>0.508</i></b>	<b><i>0.664</i></b>		<b><i>-0.176</i></b>	-0.087	-0.009	-0.067	0.008	-0.018	-0.009	<b><i>0.258</i></b>	<b><i>0.292</i></b>	0.005	-0.104
INSRAT	<b><i>-0.074</i></b>	<b><i>-0.097</i></b>	<b><i>-0.151</i></b>		<b><i>0.166</i></b>	<b><i>0.361</i></b>	<b><i>0.067</i></b>	-0.017	-0.004	-0.056	<b><i>-0.100</i></b>	<b><i>-0.139</i></b>	<b><i>0.069</i></b>	-0.016
BENOWN	-0.056	<b><i>-0.135</i></b>	<b><i>-0.125</i></b>	<b><i>0.149</i></b>		0.040	-0.014	0.031	-0.040	<b><i>0.114</i></b>	<b><i>-0.159</i></b>	<b><i>-0.081</i></b>	<b><i>0.068</i></b>	0.041
CEOCHR	<b><i>-0.068</i></b>	0.044	-0.000	<b><i>0.270</i></b>	0.040		0.020	-0.021	<b><i>-0.081</i></b>	-0.049	<b><i>0.201</i></b>	0.059	<b><i>0.087</i></b>	-0.035
CONSULT	0.002	0.018	-0.013	0.056	0.014	0.020		-0.054	0.047	<b><i>-0.103</i></b>	<b><i>-0.100</i></b>	-0.056	<b><i>-0.069</i></b>	-0.004
DIRECTOR	<b><i>0.093</i></b>	<b><i>0.088</i></b>	0.021	-0.011	0.031	-0.021	-0.054		<b><i>-0.145</i></b>	<b><i>-0.151</i></b>	0.023	<b><i>0.097</i></b>	-0.025	<b><i>-0.060</i></b>
OFFICER	-0.036	-0.035	0.015	-0.045	-0.040	<b><i>-0.081</i></b>	-0.047	<b><i>-0.145</i></b>		<b><i>-0.151</i></b>	<b><i>-0.064</i></b>	-0.041	<b><i>-0.060</i></b>	-0.026
SIZERAT	<b><i>-0.081</i></b>	-0.029	-0.028	-0.047	0.061	-0.016	<b><i>-0.207</i></b>	<b><i>-0.116</i></b>	<b><i>-0.085</i></b>		<b><i>-0.187</i></b>	<b><i>-0.078</i></b>	<b><i>0.078</i></b>	-0.060
LNASSETS	<b><i>0.158</i></b>	<b><i>0.371</i></b>	<b><i>0.221</i></b>	-0.034	<b><i>-0.152</i></b>	<b><i>0.182</i></b>	<b><i>-0.114</i></b>	0.024	<b><i>-0.064</i></b>	<b><i>-0.181</i></b>		<b><i>0.554</i></b>	<b><i>-0.088</i></b>	0.058
NYSE	0.051	<b><i>0.186</i></b>	<b><i>0.190</i></b>	<b><i>-0.120</i></b>	<b><i>-0.081</i></b>	0.059	-0.056	<b><i>0.097</i></b>	0.041	-0.052	<b><i>0.557</i></b>		<b><i>-0.450</i></b>	0.032
NASDAQ	0.026	0.058	0.050	<b><i>0.084</i></b>	<b><i>0.067</i></b>	<b><i>0.087</i></b>	<b><i>-0.069</i></b>	-0.025	<b><i>-0.060</i></b>	<b><i>0.067</i></b>	<b><i>-0.103</i></b>	<b><i>-0.450</i></b>		-0.001
MERGER	-0.004	-0.038	<b><i>-0.153</i></b>	-0.015	0.041	-0.035	0.004	<b><i>-0.060</i></b>	-0.026	<b><i>-0.073</i></b>	0.057	-0.032	-0.001	

<sup>1</sup> Pearson correlations below the main diagonal, Spearman correlations above the main diagonal: correlations significant at the 5% level are in *italics*).

**Variable Definitions**

- LAG\_ROA** ROA as defined below, measured in the fiscal year before the plan is adopted.
- ROA** Earnings before extraordinary items (Compustat Annual Data Item #18) measured at the fiscal year end for the year the plan is adopted divided by total assets (Compustat Annual Data Item #6) at the beginning of the fiscal year.
- FUT\_ROA** ROA as defined above, measured in the fiscal year after the plan is adopted.
- INSRAT** The number of managers in the company on the board of directors divided by the total number of board members
- BENOWN** An indicator variable that is set to 1 if the firm has an investor that is considered a beneficial owner by SEC insider rules, and zero otherwise. SEC insider rules classify any investor owning greater than 10% of the company's stock as a beneficial owner.
- CEOCHR** An indicator that takes the value of 1 if the CEO of the firm is also the Chairman of its Board of Directors, and 0 otherwise.



- GOOD\_GOV*** An indicator variable that takes the value of 1 if the firm's board is below the median *INSRAT*, has a *CEOCHR* equal to zero, and *BENOWN* equal to one. The indicator takes the value of 0 if any of the preceding conditions are not met.
- CONSULT*** An indicator variable that is set to 1 if a given option plan provides options to be granted to outside consultants to the company, and 0 otherwise.
- DIRECTOR*** An indicator variable that is set to 1 if a given option plan provides options to be granted to the members of the board of directors of the company, and 0 otherwise.
- OFFICER*** An indicator variable that is set to 1 if a given option plan provides options to be granted to the officers of the company, and 0 otherwise.
- SIZERAT*** Number of shares authorized for granting by a given option plan, divided by the number of share outstanding at the end of the year (Compustat Annual Data Item #25) the plan was implemented.
- LNASSETS*** The natural log of total assets (Compustat Annual Data Item #6)
- NYSE*** An indicator variable that is set to 1 if the firm's stock is traded on the New York Stock Exchange and 0 otherwise (Compustat Annual Data Item *ZLIST*).
- NASDAQ*** An indicator variable that is set to 1 if the firm's stock is traded on the NASD exchange and 0 otherwise (Compustat Annual Data Item *ZLIST*).
- MERGER*** An indicator variable that is set to 1 if a given plan was implemented in a company that was subsequently merged into the company represented in the observation.

**Table 5**  
**Determinants of Approved and Non-Approved Plans<sup>1</sup>**

Model I:  $P(\text{Plan Not Put to Shareholder Vote}) = \alpha_j + \beta_1 \text{SIZERAT}_j + \beta_2 \text{ROA}_j + \beta_3 \text{LAG\_ROA}_j + \beta_4 \text{INSRAT}_j + \beta_5 \text{DIRECTOR}_j + \beta_6 \text{OFFICER}_j + \beta_7 \text{CONSULT}_j + \beta_8 \text{NASDAQ}_j + \beta_9 \text{NYSE}_j + \beta_{10} \text{MERGER}_j + \varepsilon_j$

Model II:  $P(\text{Plan Not Put to Shareholder Vote}) = \alpha_j + \beta_1 \text{SIZERAT}_j + \beta_2 \text{ROA}_j + \beta_3 \text{LAG\_ROA}_j + \beta_5 \text{BENOWN}_j + \beta_6 \text{DIRECTOR}_j + \beta_7 \text{OFFICER}_j + \beta_8 \text{CONSULT}_j + \beta_8 \text{NASDAQ}_j + \beta_9 \text{NYSE}_j + \beta_{10} \text{MERGER}_j + \varepsilon_j$

Model III:  $P(\text{Plan Not Put to Shareholder Vote}) = \alpha_j + \beta_1 \text{SIZERAT}_j + \beta_2 \text{ROA}_j + \beta_3 \text{LAG\_ROA}_j + \beta_4 \text{CEOCHR}_j + \beta_5 \text{DIRECTOR}_j + \beta_6 \text{OFFICER}_j + \beta_7 \text{CONSULT}_j + \beta_8 \text{NASDAQ}_j + \beta_9 \text{NYSE}_j + \beta_{10} \text{MERGER}_j + \varepsilon_j$

Model IV:  $P(\text{Plan Not Put to Shareholder Vote}) = \alpha_j + \beta_1 \text{SIZERAT}_j + \beta_2 \text{ROA}_j + \beta_3 \text{LAG\_ROA}_j + \beta_4 \text{INSRAT}_j + \beta_5 \text{BENOWN}_j + \beta_6 \text{CEOCHR}_j + \beta_7 \text{DIRECTOR}_j + \beta_8 \text{OFFICER}_j + \beta_9 \text{CONSULT}_j + \beta_8 \text{NASDAQ}_j + \beta_9 \text{NYSE}_j + \beta_{10} \text{MERGER}_j + \varepsilon_j$

		Model							
Variable	Pred	I		II		III		IV	
		$\beta_t$	p-value <sup>2</sup>	$\beta_t$	p-value <sup>2</sup>	$\beta_t$	p-value <sup>2</sup>	$\beta_t$	p-value <sup>2</sup>
INTCPT		-1.799	(0.000)	-1.453	(0.000)	-1.585	(0.000)	-1.550	(0.000)
LAG_ROA	-	0.179	(0.264)	0.091	(0.362)	0.143	(0.292)	0.184	(0.242)
ROA	-	-1.064	(0.001)	-1.088	(0.001)	-1.040	(0.001)	-1.111	(0.000)
INSRAT	+	0.782	(0.029)					0.685	(0.056)
BENOWN	-			-0.362	(0.032)			-0.405	(0.021)
CEOCHR	+					0.436	(0.030)	0.346	(0.079)
CONSULT		2.690	(0.000)	2.736	(0.000)	2.670	(0.000)	2.713	(0.000)
DIRECTOR		-0.714	(0.037)	-0.726	(0.034)	-0.749	(0.028)	-0.662	(0.054)
OFFICER		1.063	(0.000)	0.917	(0.002)	0.946	(0.001)	1.112	(0.000)
SIZERAT	-/+	-2.063	(0.002)	-2.183	(0.001)	-2.201	(0.001)	-2.036	(0.003)
LNASSETS		0.102	(0.124)	0.100	(0.124)	0.080	(0.226)	0.075	(0.277)
NYSE		0.159	(0.631)	0.117	(0.721)	0.101	(0.759)	0.163	(0.626)
NASDAQ		0.145	(0.535)	0.213	(0.356)	0.135	(0.560)	0.138	(0.557)
MERGER		0.435	(0.381)	0.374	(0.440)	0.366	(0.449)	0.579	(0.245)
N (Not Approved)		165		167		167		165	
N (Approve)		481		494		494		481	
Fit Statistic		78.25		77.81		77.80		84.43	

<sup>2</sup> p-values are one-sided when we predict the direction of the effect or two-sided otherwise.

**Variable Definitions**

**LAG\_ROA** ROA as defined below, measured in the fiscal year before the plan is adopted.

<b><i>ROA</i></b>	Earnings before extraordinary items (Compustat Annual Data Item #18) measured at the fiscal year end for the year the plan is adopted divided by total assets (Compustat Annual Data Item #6) at the beginning of the fiscal year.
<b><i>INSRAT</i></b>	The number of managers in the company on the board of directors divided by the total number of board members
<b><i>BENOWN</i></b>	An indicator variable that is set to 1 if the firm has an investor that is considered a beneficial owner by SEC insider rules, and zero otherwise. SEC insider rules classify any investor owning greater than 10% of the company's stock as a beneficial owner.
<b><i>CEOCHR</i></b>	An indicator that takes the value of 1 if the CEO of the firm is also the Chairman of its Board of Directors, and 0 otherwise.
<b><i>GOOD_GOV</i></b>	An indicator variable that takes the value of 1 if the firm's board is below the median <i>INSRAT</i> , has a <i>CEOCHR</i> equal to zero, and <i>BENOWN</i> equal to one. The indicator takes the value of 0 if any of the preceding conditions are not met.
<b><i>CONSULT</i></b>	An indicator variable that is set to 1 if a given option plan provides options to be granted to outside consultants to the company, and 0 otherwise.
<b><i>DIRECTOR</i></b>	An indicator variable that is set to 1 if a given option plan provides options to be granted to the members of the board of directors of the company, and 0 otherwise.
<b><i>OFFICER</i></b>	An indicator variable that is set to 1 if a given option plan provides options to be granted to the officers of the company, and 0 otherwise.
<b><i>SIZERAT</i></b>	Number of shares authorized for granting by a given option plan, divided by the number of share outstanding at the end of the year (Compustat Annual Data Item #25) the plan was implemented.
<b><i>LNASSETS</i></b>	The natural log of total assets (Compustat Annual Data Item #6)
<b><i>NYSE</i></b>	An indicator variable that is set to 1 if the firm's stock is traded on the New York Stock Exchange and 0 otherwise (Compustat Annual Data Item <i>ZLIST</i> ).
<b><i>NASDAQ</i></b>	An indicator variable that is set to 1 if the firm's stock is traded on the NASD exchange and 0 otherwise (Compustat Annual Data Item <i>ZLIST</i> ).
<b><i>MERGER</i></b>	An indicator variable that is set to 1 if a given plan was implemented in a company that was subsequently merged into the company represented in the observation.

**Table 6**

**Performance after Implementation of Approved vs. Non-Approved Plans<sup>1</sup>**

Model I:  $FUT\_ROA_j = \alpha_j + \beta_1 NOT\_APPROVED_j + \beta_2 ROA_j + \beta_3 LNASSETS_j + \varepsilon_j$

Model II:  $FUT\_ROA_j = \alpha_j + \beta_1 NOT\_APPROVED_j + \beta_2 ROA_j + \beta_3 LNASSETS_j + \beta_4 SELECTION_j + \varepsilon_j$

Model III:  $FUT\_ROA_j = \alpha_j + \beta_1 NOT\_APPROVED_j + \beta_2 GOOD\_GOV_j + \beta_3 NOT\_APPROVED*GOOD\_GOV_j + \beta_4 ROA_j + \beta_5 LNASSETS_j + \varepsilon_j$

Variable	Model					
	I		II		III	
<i>Intercept</i>	-0.027	(0.039)	-0.001	(0.969)	-0.033	(0.034)
<i>NOT_APPROVED</i>	-0.072	(0.012)	-0.176	(0.050)	-0.085	(0.009)
<i>GOOD_GOV</i>					0.028	(0.387)
<i>NOT_APPROVED*GOOD_GOV</i>					0.143	(0.071)
<i>ROA</i>	0.576	(0.000)	0.877	(0.001)	0.613	(0.000)
<i>LNASSETS</i>	0.000	(0.164)	0.000	(0.590)	0.000	(0.175)
<i>SELECTION</i>			0.124	(0.030)		
N	801		566		734	
Adj, R-Square	0.330		0.485		0.364	

**Variable Definitions**

***FUT\_ROA*** ROA as defined above, measured in the fiscal year after the plan is adopted.

***NOT\_APPROVED*** Indicator variable, that takes on the value of one if the plan was not approved by shareholders, zero otherwise.

***GOOD\_GOV*** An indicator variable that takes the value of 1 if the firm's board is below the median *INSRAT*, has a *CEOCHR* equal to zero, and *BENOWN* equal to one. The indicator takes the value of 0 if any of the preceding is not met.

***ROA*** Earnings before extraordinary items (Compustat Annual Data Item #18) measured at the fiscal year end for the year the plan is adopted divided by total assets (Compustat Annual Data Item #6) at the beginning of the fiscal year.

***LNASSETS*** The natural log of total assets (Compustat Annual Data Item #6)  
***SELECTION*** Obtained by estimating Model IV in Table 5 using a probit regression,  
and calculating the Inverse Mills Ratio for each observation in our  
sample.