Equity Issuance, Distress, and Agency Problems: The 20% Rule for Privately Issued Equity

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Abstract

Stock exchanges require shareholder approval for discounted placements that make up more than 20% of existing shares. This study shows discontinuity among placement distribution around the 20% threshold, which suggests that managers tend to avoid seeking approval by keeping the placement fraction just below 20%. Empirical results show that placements below 20% have negative announcement returns while firms that seek approval do not. Moreover, managers seem to avoid seeking shareholder approval not because the approval process is too costly, but because the placements are not in the best interests of shareholders. Overall, my findings suggest agency problems in private placements.

KEYWORDS: Private Placements, Shareholder Approval, Agency Problem

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Managers should issue equity only when expected shareholder benefits are large enough to justify costs.[1] Jensen and Meckling (1976) and Jensen (1989) argue, on the other hand, self-interested managers would issue equity, even in cases the issuance do not maximize shareholder value.[2] In particular, equity issuance could still decrease shareholder value, even when managers issue equity as financing of last resort. Self-interested managers would make shareholders pay a cost (e.g., dilution) that outweighs the benefits (e.g., decreasing the risk of bankruptcy, solving the underinvestment problem), because self-interested managers could enjoy the benefits without being affected by the costs.[3]

Although distress and equity issuance have been important settings for principal-agent conflict in classical theory models, it has been difficult to empirically show this conflict. Hence, literature is inconclusive on whether private placements, which have been argued to be financing of last resort,[4] are an act of increasing shareholder value or an act of agency problem.[5] Sorting out the motivation for private placements is difficult, because most important benefits in distress are difficult to measure, although some costs such as dilution is empirically measurable. To bypass this measurement problem, I use managers' decisions when facing a shareholder approval rule governing private placements as a novel identification, to show possible disagreement between principal and agent more directly.

NASDAQ and other exchanges require shareholder approval for discounted, privately issued, equity that makes up more than 20% of existing equity shares. I argue that the 20% rule provides empirical identification for this research in two stages. In the first stage, the distribution

[1] Assuming that managers are benevolent toward shareholders, Myers (1977) suggests that it is difficult for managers to issue equity under distress because of the cost of value transfer to creditors (i.e., the debt overhang problem).

[2] Aghion and Bolton (1992) and Dewatripont and Tirole (1994) provide arguments that managers have both private and monetary incentives to continue funding negative NPV projects.

[3] Grossman and Hart (1982) and Gilson (1989) argue that the bankruptcy risk can lead to large personal losses. These losses include loss of benefits, specialized human capital, and reputation.

[4] Brophy, Ouimet, and Sialm (2009) and Chaplinsky and Haushalter (2010) describe the distressed nature of firms that issue discounted equity and conclude that private placements are last resort financing.

[5] Hertzel and Smith (1993) argue that private placements could be the solution to the underinvestment problem. On the other hand, Barclay, Holderness, and Sheehan (2007), and Wu (2004) argue that private placements are used as a tool for managerial entrenchment.

around this 20% threshold will help identify whether or not managers purposely avoid seeking shareholder approval. If managers do not avoid shareholder approval, the distribution would be smooth around the threshold. If managers purposely avoid seeking shareholder approval, observations would be clustered below the 20% threshold. In my research, by looking at the distribution of private placements, I find a clustering just below the threshold, and a clear decrease in the number of observations above the 20% threshold, creating a distribution discontinuity. I also statistically test this distribution discontinuity, finding that the clustering at the 20% threshold is extremely unlikely to happen by simple chance. This distribution discontinuity suggests that many managers avoid shareholder approval by altering placement contracts (i.e., placement fraction), which establishes the setting for testing hypotheses.

In the next stage, observations that are distributed around the distribution discontinuity naturally form two groups necessary for testing hypotheses: treatment group (i.e., observations that issue less than 20%) and control group (i.e., observations that issue more than 20%). The significance of the control group is two-folds. (1) Control group's private placements are more likely to be in shareholders' best interest because the placements are subject to shareholder approval. (2) firms in the control group are comparable in many circumstances to those in the treatment group, especially for firms that issue near the 20% threshold (e.g., firms potentially distressed, willing to pay the similar cost of dilution for immediate cash). Comparing the treatment group to this particular control group will provide identification for testing if the avoidance behavior of the treatment group suggests agency problems.

Assuming that managers have highly accurate information about the likelihood of a voting outcome,[6] I form two main hypotheses on why managers would avoid seeking shareholder approval. Firstly, managers may avoid seeking shareholder approval when discounted issuances are misaligned with shareholders' best interests (the "Misalignment Hypothesis"). According to this hypothesis, managers would avoid the need for approval by issuing less than 20%, since managers know shareholders would not approve such issuances. Secondly, managers who

[6] Listokin (2008) compare the distribution of manager-proposed voting results and shareholder-proposed, finding that managers have highly accurate information on the vote outcome even before the actual vote.

maximize shareholder value would possibly avoid seeking approval if the approval process itself is too costly (including non-monetary costs) for shareholders (the "Costly Approval Hypotheses"). In this case, we assume that managers know that the issuance is in shareholders' best interests, so that it would be approved if approval is required. If immediate financing is required as a result of extreme distress or important investment opportunities, however, managers would avoid seeking approval because approval process is too costly ("Costly Approval Hypothesis 1"). Managers would also avoid seeking approval, if they believe that shareholders are not sophisticated enough to understand the consequences of a placement and that there is a high chance of falsely rejecting a placement ("Costly Approval Hypothesis 2").[7]

The strongest test of the Misalignment and Costly Approval Hypotheses is the market response to the announcement of the issuances, because equity returns are the market assessment of the cost and benefit of a placement. The Misalignment Hypothesis would predict that market returns for the treatment group would respond with negative returns, while the control group would have non-negative returns. On the other hand, Costly Approval Hypotheses would predict non-negative market responses for both control and treatment groups, because it assumes that both groups would be aligned with shareholders' interests.

Using announcement day abnormal returns, I find that the approval-seeking group (i.e., discounted equity fraction placed from 20% to 22.5%) has positive abnormal returns of 3.07% (t-stat $= 2.13$), which is consistent with equity issuance optimizing shareholder value despite the issuance discount. The group that avoids seeking shareholder approval (i.e., discounted issuance fraction placed from 17.5% to 20%), however, has negative announcement day returns of -1.30% (t-stat $= -1.90$). The mean difference in the returns is economically and statistically significant for various sample ranges centered on the 20% thresholds and also for discount-adjusted returns while dilution is statistically. On the other hand, the mean difference in dilution costs are statistically insignificant close to the 20% threshold. These return patterns suggest that the issuances that avoid seeking shareholder approval are viewed negatively by the market and thus

[7] I discuss alternative hypotheses including Monetary Costs, Market Timing, Fiduciary Duties, and Uncertainty Hypotheses at the end of the paper.

are consistent with the Misalignment Hypothesis and reject the Costly Approval Hypotheses.

To further test the Misalignment and Costly Approval Hypotheses, I compare firm and issuance characteristics of the treatment group with the control group. I use a logit regression model to test whether or not various characteristics predict a higher chance of managers avoiding shareholder approval (i.e., issuance of less than 20%). The results show that relatively less distressed firms, firms that issue at higher discounts, firms with less managerial shares, and firms with higher number of investors avoid seeking approval more often than firms that gain shareholder approval.[8] Also, sophisticated investors owning majority shares, which make approval relatively easy, have higher chance to be found among avoiding firms. In sum, these results support the Misalignment Hypothesis, but do not support the Costly Approval Hypotheses.

In order to explore the benefits from the private placements, I regress discount-adjusted announcement returns on the decision to issue less than 20% and other characteristics. I find that firms that issue less than 20% have lower discount-adjusted returns even after adjusting for possible self-selection biases, suggesting that the low returns of firms that avoid approval are not simply due to known characteristics that may affect the decision to avoid approval. Further looking at groups separately, firms that state a specific use of proceeds have higher returns when avoiding shareholder approval, which suggest that the market does not appreciate the private placements when the use of proceeds are not clear and shareholder approval is avoided. Among firms that seek approval, on the other hand, firms that issue at higher discounts and firms with majority ownership by institutions and managers have higher discount-adjusted returns, which suggest that the higher returns of firms that seek approval could be due to certification effects by new and existing shareholders.

Finally, I study cash holdings of firms that avoid and seek shareholder approval. I find that firms that issue less than 20% have positive and higher (excess) cash holdings than firms that issue more than 20% after the placement, while they have insignificant different cash holdings

[8] I attempt various variables to proxy for better corporate governance and costly shareholder approval, such as different specifications for distress, institutional ownership, investor dispersion, board characteristics.

prior to the placement. These results suggest that firms that avoid seeking shareholder approval issue costly private placements, but do not efficiently use the gross proceeds after the placement, consistent with the Misalignment Hypothesis and reject the Costly Approval Hypothesis 1.[9]

This paper has three main contributions. Firstly, using the distribution discontinuity framework, I provide a novel setting for testing and showing agency problems in private placements by identifying the managers' selection to avoid shareholder approval. This identification setting is especially useful because it bypasses the need for measuring or using proxies to estimate which actions are misaligned with shareholders' best interests in distress setting, which is theoretically important, and empirically challenging. To the best of my knowledge, this is the first paper that documents and uses the distribution discontinuity at the 20% threshold as identification.[10]

Secondly, by introducing the shareholder approval rule, this study provides additional findings that contribute to the private placement literature. Wruck (1989), Hertzel and Smith (1993), and others document the positive announcement returns of private placements and propose the 'monitoring hypothesis' and 'certification hypothesis' of equity undervaluation to justify the positive announcement returns. On the other hand, Barclay, Holderness, and Sheehan (2007) argue that many other firm and issuance characteristics are consistent with 'managerial entrenchment hypothesis', with an exception of the positive announcement day returns. But I show that even the positive announcement day returns could be misleading in representing private placements complementing the weakness of the 'managerial entrenchment hypothesis.' I find that firms that issue at a discount less than 20% have negative announcement day returns and firms that issue above 20% have positive announcement day returns (consistent with the 'certification hypothesis').[11] Hence, my findings suggest that the well-known positive

[9] I also find that firms that avoid shareholder approval have positive discount-adjusted announcement returns and do not necessary have lower post-announcement returns than firms that seek approval, rejecting the hypothesis that managers are timing the market to sell over-priced equity.

[10] Arena and Ferris (2007) investigate the impact of shareholder approval on board appointments related to private placement. They identify such approval by examining press releases, 8-K filings, and proxy statements rather than by using the 20% rule and distribution discontinuity, ending up with a much smaller sample. Also, this strategy does not identify firms that avoid seeking approval.

[11] I also find a strong monitoring effect by private placement which the investor acquires a board position.

announcement day returns of private placement could be the result of averaging effect of the returns from these different regions of the sample.

Thirdly, this paper contributes to the empirical literature on agency problems in equity issuance, as well as distress. By using market-to-book equity to proxy for growth opportunities, Jung, Kim, and Stulz (1996) show that equity issuances by firms with poor growth opportunities suggest agency problems and that stock returns react negatively to these equity issuances. Using L.A. Gear's example, DeAngelo, DeAngelo, and Wruck (2002) illustrate how managers can gain substantial operating discretion to fund losses by selling assets during financial distress. More recently, Gormley and Matsa (2011) find that firms respond to liability risk by acquiring unrelated businesses with relatively high operating cash flows. They find that these acquisitions are motivated by managers' personal exposure to firms' risk. This paper complements these studies by showing agency problems in private placements. Moreover, this paper shows explicitly, using a large sample distribution, how managers alter a specific term (i.e., placement fraction) in contracts to avoid the need for aligning with shareholder's interests.

The remainder of the paper is organized as follows: Section 2 introduces the shareholder approval regulation and examines the distribution discontinuity that suggests that managers tend to avoid seeking shareholder approval. Section 3 discusses the empirical framework and hypotheses to test the motivation of the avoidance behavior. Section 5 describes the empirical results, and Section 6 discusses other alternative hypotheses. Finally, section 8 concludes.

2. Do Managers Avoid Seeking Shareholder Approval?

In general, empirically showing agency problems in equity issuance is a difficult task, mainly because it is difficult to directly weigh the benefits against the costs. Especially in distress situations, managers would argue that the issuance could have many benefits for shareholders despite the cost of dilution. The benefits would include decreasing the probability of default or increasing firm value by undertaking new positive net present value (NPV) projects. These

benefits, however, are difficult to measure, while the cost of dilution is directly measurable.

To bypass this measurement problem and test agency problems in private placements, I use the managers' decision when facing a shareholder approval rule. This section briefly introduces the 20% shareholder approval rule and some basic characteristics of private placements. Then I look at the distribution around the 20% threshold to see if managers avoid seeking shareholder approval.

2.1. The 20% Shareholder Approval Rule

A private placement is a private equity issuance by a publicly traded firm issued to a limited group of accredited investors. Private placements include both registered direct (RD) issuances and private investment in public equity (PIPE). Pricing of the equity issuance, the speed with which funds can be raised, the manner in which the offering is marketed (private placements may not publicly solicit investors), and the lack of underwritting are some important characteristics that differentiate a private placement from traditional public offerings. Private placements are typically traded at a discount averaging from 15% to 30%, and a typical deal takes two to four weeks, while public offerings are offered close to the market price and go through lengthy process of public offering.[12]

Because of the dilutive nature of private placements, NASDAQ, NYSE, and NYSE MKT (formerly AMEX) have corporate governance listing regulations for these placements. In this section, I focus on describing the NASDAQ regulations because 76% of my observations are from NASDAQ, while 17% are from NYSE MKT and 7% from NYSE. Also, NASDAQ has a separate on-line Listing Center with a Frequently Asked Question section that provide detailed interpretation of the rules that are helpful in understanding the applications of the rules. I note, however, very similar regulations including the exceptions and additional regulations exist for

[12] See Chaplinsky and Haushalter (2010) for detailed description of private placement discounts and the distressed nature of firms that issue privately.

both NYSE MKT and NYSE exchanges.[13]

NASDAQ listing Rule 5635 (previously 4350) states the regulations of listed firms regarding shareholder approval, which include regulations for acquisition of stocks of director, officer or substantial shareholder; change of control, equity compensation, etc. In particular, Rule 5635(d) states that "*Each company shall require shareholder approval prior to the issuance of securities... at a price less than the greater of book or market value which... equals 20% or more of the common stock or 20% or more of the voting power outstanding before the issuance.*"[14] Where shareholder approval is required, the minimum vote will be the majority of the total votes cast on the proposal. These votes may be cast in person, by proxy at either an annual meeting or a special meeting, or by written consent of majority shareholders (see NASDAQ Rule 5635 (e)(4)). This shareholder approval regulation does not apply to public offerings.

Because private placements are utilized by many distressed companies, NASDAQ also makes an exception to the 20% rule when a delay in equity financing would seriously jeopardize the financial viability of the firm (the "financial viability exception", Rule 5635 (f)). This financial viability exception still needs to be approved by the audit committee or a comparable body of the board of directors consisting solely of independent, disinterested directors. A company that receives this exception of the omission to seek the shareholders' approval must mail shareholders no later than ten days before the issuance. Additionally, companies may also comply with the 20% limitation in this rule by placing a "cap" on the number of shares that can be issued in the transaction, such that the issuance 20% of shares will be issued first and only the additional shares are subject to shareholder approval (NASDAQ Interpretation Material 5635-2).

To better understand the timing of the process, I search for filings regarding the 20% rule through the SEC EDGAR system. Among available observations that issue more than 20% at a discount, the close and announcement of the private placements generally occur before the shareholder approval process. Then follows a proxy statement filling for an annual meeting

[13]NYSE MKT LLC Section 705 through 713, and NYSE Rule 312 describe the 20% shareholder approval rule and the financial viability exception, and other shareholder approval regulations.

[14]According to SEC News Digest 89-231 and 90-142 regulation, the 20% rule was lowered from 25% to 20% in 1990, before the start of my sample.

(63%) or a special meeting (30%), or a statement relying on the financial viability exception (2%), or filing of approval by written consent of majority shareholders (4%). This timing suggests that "prior" shareholder approval means prior to the actual issuance, not prior to the closing (or the announcement) of the private placement. For a small number of cases, there are proxy statements filed before the announcement of the private placement. I adjust the announcement date to the earliest proxy filing date in these cases for the event study of this paper.[15]

Additional to the 20% rule (NASDAQ Rule 5635(d)), there are three other cases where shareholder approval could be required for both public and private equity issuance: Firstly, equity issuance that are related to acquisition of stock or assets of another company (NASDAQ Rule 5635 (a)). Shareholder approval is required if the issuance is again excess of 20%, or any director, officer or substantial shareholder of the company has 5% or greater interest directly or indirectly in the target of acquisition. Secondly, equity issuance that result in change of control (NASDAQ Rule 5635 (b)). NASDAQ Listing Center clarifies that change of control means an investor with 20% or more shares and the ownership would become the largest position in the company. Finally, equity-based compensation to employees could require shareholder approval (NASDAQ Rule 5635 (c)). NASDAQ Listing Center clarifies that the issuance of common stock to its officers, directors, employees, or consultants, in a private placement at a price less than the market value of the stock is considered a form of "equity compensation" and requires shareholder approval regardless of the fraction issued.[16]

I control for these three cases to focus on the 20% rule (NASDAQ Rule 5635(d)). Notice that the first two rules (NASDAQ Rule 5630 (a) and (b)) are subsumed by the 20% rule in the case of discounted private issuances. Therefore, I control for the first two cases by

[15] According to NASDAQ listing center, proxy statements require sufficient information for shareholders to make a meaningful decision. Proxy statemetns need to disclose the maximum number of shares, maximum dollar amount, maximum discount, and the purpose of the transaction, and the time frame to complete the transaction when investors are not identified. However, companies are regulated not to publicly solicit investors for a private placement, making it difficult to carefully file a proxy statement before identifying an investor and closing a placement.

[16] Manager self-dealing has been studied by Wu (2004) and find that manager participating private placements are issued at higher discounts than in placements managers do not participate.

including an indicator function of use of proceeds stating acquisitions and an indicator function of placements with a single private investor, respectively, to see whether these additional rules affect the managers decision or announcement returns. Finally, I drop cases where private placements are indicated to be offered to managers in the data selection process to control for the third regulation (NASDAQ Rule 5635 (c)) because shareholder approval could be required even when fractions are less than 20% when issued to managers.

2.2. Distribution Discontinuity at the 20% Threshold

The 20% rule is an exchange rule to protect shareholders from being excessively diluted through discounted private placement contracts. Managers, however, are the ones who write private placement contracts and have the power to avoid seeking shareholder approval by issuing less than 20% of existing shares. Therefore, the distribution around the 20% rule would provide evidence whether or not many managers purposely avoid seeking shareholder approval. If managers do not avoid shareholder approval, the distribution would be smooth around the threshold. But if many managers avoid seeking shareholder approval, observations would be clustered just below the 20% threshold, creating a distribution discontinuity.

Figure 1 presents the distribution of common equity private issuances. The x-axis represents the fraction of equity placed relative to existing shares, and the y-axis represents the amount of premium/discount. We can observe the uneven number of observations in discounted issuances that are above the 20% threshold; issuances are clustered just below the 20% threshold, while the number of observations drops dramatically after the threshold is reached.

To further study this discontinuity, I look at the cumulative distribution function (CDF) and the histogram for discounted equity issuance for fraction of equity placed from 10% to 30% in Figure 2. The CDF shows a steady increase below the 20% threshold, and displays a wedge around the 20% threshold. Above the 20% threshold, the rate of increase in the CDF flattens out, suggesting that there is an even, but relatively small number of observations after the threshold. The histogram also shows a distribution discontinuity at the 20% threshold. The

bar just below the 20% threshold is especially high, with about 7% of the observations in that particular bin.

In sum, the figures graphically present the distribution discontinuity that will be used as an empirical identification for the rest of this paper. I first discuss the empirical strategy and testable hypotheses using this distribution discontinuity framework before presenting empirical testing results.

3. Testing Principal-agent Conflict by Distribution Discontinuity

3.1. Empirical Framework

We have observed a distribution discontinuity in the previous section, which means that managers purposely avoid seeking shareholder approval. Avoiding shareholder approval, however, does not always mean agency problem. In this section, I discuss the research design of the paper and argue that the setting of managers avoiding shareholder approval provides empirical identification to test whether avoiding seeking shareholder approval suggests agency conflict. I use observations that are naturally distributed around the 20% threshold to form a treatment (i.e., observations that issue less than 20%) and control group (i.e., observations that issue more than 20%) to test hypotheses.

Managers are generally argued to have the most accurate information about a company. Hence, it is likely that manager know whether or not their actions maximize shareholder value, and thus whether or not shareholders would approve the action when required. Supporting this argument, Listokin (2008) shows that when the manager-sponsored votes are close to a 50% approval, votes pass overwhelmingly more than the ones that lose. Also, he finds that most manager-sponsored votes pass easily.[17] These results imply that managers acquire highly accurate information about the outcome even before the vote takes place, and that managers

[17] I use the RiskMetrics database from 1997 to 2004 to verify these results. I find that among the 15,916 manager-proposed votes, less than 2% (285) did not pass.

would go through shareholder approval processes only when the proposal is most likely to be approved.

Assuming that managers are well-informed about shareholders' best interests and the cost-benefit structure of a placement, the distribution discontinuity can be interpreted in two ways depending on the assumption made on managers.[18] For a self-interested manager, a distribution discontinuity at the 20% suggests that the placement is not in the best interests of shareholders because such managers would avoid seeking approval expecting that shareholders would not approve the issuance. For a benevolent manager to shareholder, on the other hand, this distribution discontinuity suggests that such managers would avoid shareholder approval in order to maximize shareholder value because they believe shareholders would most likely approve of the placement if required, but they would like to avoid seeking shareholder approval due to certain costs that might occur during the shareholder approval process.

The clustering of observations just below 20% (i.e., the treatment group) would possibly be a mixture of these different types of managers. Some managers might have wanted to issue more than 20%, but reduced the amount because the private placement is not in the best interest of shareholders. Others might have reduced the amount to maximize shareholders' value. Also, some managers might have increased the amount to the maximum amount that does not require shareholder approval even though a smaller amount is optimal for shareholders. Still other managers might have issued just below the threshold, because they think that the fraction below 20% is optimal for shareholders. In any case, the observations that are clustered just below the 20% threshold provide an interesting sample that has potential principal-agent conflict, so the main motivation of their avoidance behavior requires testing.

The control group (i.e., observations that issue more than 20%) also plays an important role in this empirical setting. The significance of the control group is in two-fold. Firstly, the placements of the control group are subject to shareholder approval. Thus, managers in

[18] Myers (1977) and Hart and Moore (1995) provide an example of these two views in theoretical models. Both papers argue that distress can prevent a company to undertake new investment. Argument of Myers (1977), however, is from assuming benevolent managers, while that of Hart and Moore (1995) is from assuming self-interested managers.

the control group can be viewed as confident that the private placement will be approved. Therefore, the control group's private placements are most likely to be in shareholders' best interests. By looking at firms in the control group we can observe how firms with placement in the best interests of shareholders would look like, and how the market would respond to such issuances. Hence, comparing the treatment group to the control group as a benchmark will provide identification for whether or not shareholder approval avoidance behavior suggests principal-agent problems.

Secondly, the treatment group observations are not typical firms that can be compared to traditional size and book-to-market matched firms. These firms issue discounted equity for about 20% of existing shares, diluting shareholders. A manager who takes these extreme measures would argue that the firm is in abnormal circumstances (e.g., distressed and in urgent need for financing) so that they must avoid shareholder approval. Firms in the control group that issue close to the 20% threshold, however, should also be in similar to circumstances as firms in the treatment group. Particularly, firms in the control group issue about 20% of existing shares at a discount, diluting shareholders' equity value at similar or even higher rates. Thus, firms in the control group should be comparable in many aspects to those firms in the treatment group, especially the firms that issue close to the 20% threshold.

To be clear, the empirical approach in this paper is different from the regression discontinuity setting (see Keys, Mukherjee, Seru, and Vig (2010) and Cuñat, Gine, and Guadalupe (2012) for recent examples). The regression discontinuity approach uses the fact that the distribution around a threshold is smooth. The assignment of observations very close above or below the threshold is considered close to random selection which replicates the random assignment of an experiment. Once an observation passes a threshold, the treatments are different on either side of the threshold, creating a natural experimental setting and an inference of a causal relationship of the treatment it-self.

On the contrary, the approach of this paper utilizes the very fact that observations alter the selection of group assignments by changing the contractual terms. This 'identification of

self-selection' creates a group that avoids a specific treatment (shareholder approval) and a group that does not avoid this treatment. Thus, this identification shifts the research question from whether a private placement is in the best interest of shareholders to whether the managers' decision to avoid seeking shareholder approval is in the best interest of shareholders. Overall, the distribution around the 20% rule, announcement day returns, and characteristics of the treatment group with regard to the control group will provide a novel empirical identification to test hypotheses in private placements.

3.2. Main Hypotheses: Misalignment and Costly Approval Hypotheses

I propose the main testable hypotheses regarding the reasons why managers would avoid seeking shareholder approval. I first divide hypotheses into two main categories: the Misalignment Hypotheses (MH) and the Costly Approval Hypotheses (CAH). MH explains why discounted issuance and approval-avoiding behavior of managers is misaligned with the best interests of shareholders. Alternatively, CAH's potential explanations of why managers would avoid seeking shareholder approval are based on costly process. I focus on two costs: timeliness of financing, and shareholders not being sophisticated enough to understand whether a placement is in their own best interests. I first discuss the Misalignment Hypothesis.

Misalignment Hypothesis (MH):

Managers avoid seeking shareholder approval because managers' interests and shareholders' interests are misaligned.

The Misalignment Hypothesis argues that managers avoid seeking approval because of principal-agent conflict of interests. Self-interested managers believe that the private placement is *not* in the best interests of shareholders, so that it would be rejected if shareholder approval is required. But, they may still issue equity even when the issuances do not maximize shareholder value, as argued by Jensen and Meckling (1976) and Jensen (1989). In this case, managers would need to avoid seeking shareholder approval by issuing less than 20%.

The strongest test for MH would be the stock market reactions to the announcement of the private placements. Under MH, firms that gain approval would have higher announcement returns than firms that avoid seeking approval. MH would also predict that the magnitude of the difference would be larger for firms closer to the 20% threshold. On average, firms that avoid seeking approval would have negative stock market responses, while firms that gain approval would have non-negative returns under MH.

Beside the stock market reactions, I use several proxies to test the Misalignment Hypothesis. First, MH would predict managers not being able to justify the placement discounts. Since higher discounts are costly to shareholders, the managers should have a good excuse (e.g., firm being highly distressed). MH predicts that firms that avoid seeking approval would issue at a higher discount after controlling for other characteristics, especially distress.

Second, I proxy for alignment of principal-agent interests by the proportion of shares held by the managers. The cost of issuing discounted equity (e.g., dilution) would impact managers, as it would impact shareholders, if managers hold equity shares. In this case, managers would issue equity only when the benefit is larger than the costs of dilution. Therefore, MH predicts that firms that avoid approval would have less managerial ownership.

Third, I include the proportion of active institutional investors (i.e., institutions classified as investment companies or independent investment advisors) to proxy for better monitoring and corporate governance.[19] MH would predict that firms that avoid approval should have less active institutional investors after controlling for other firm characteristics.

Fourth, I proxy for misalignment by looking at placement investor characteristics. MH predicts that shareholder approval avoiding managers would place the issuance to higher number of buyers because managers would not want concentrated ownership by new equity holders that could possibly challenge managers. Also, managers would choose companies that require less

[19] I follow Brickley, Lease, and Smith (1988), Almazan, Hartzell, and Starks (2005), and Chen, Harford, and Li (2007) by dividing institutional investors into an active group and a non-active group. Chen, Harford, and Li (2007) argue that the total institutional ownership is not a good proxy for better corporate governance because most institutions such as banks and insurance companies do not participate in active monitoring, while investment companies or independent investment advisors do. See Section 7 for further discussion and robustness checks using alternative specifications for institutional ownership.

board representation to prevent active monitoring by new equity holders.[20][21]

Finally, I look at post-placement cash holdings. High (excess) cash reserves suggest that managers inefficiently issued costly placements at too high of a fraction. Having high cash reserves also suggests that managers were overly cautious in lowering the risk of distress at the expense of shareholder dilution. MH would predict that the post-placement cash holdings of firms that avoid seeking shareholder approval would be higher than firms that seek shareholder approval.

Next, two Costly Approval Hypotheses (CAH) follow, which could potentially explain why managers would avoid shareholder approval and still be aligned with shareholders' interests.

Costly Approval Hypothesis 1 (CAH1):

Managers avoid seeking shareholder approval because timely financing is required.

The Costly Approval Hypothesis 1 (CAH1) is related to the timeliness of the issuance. Since many private placement issuing firms are highly distressed and could be out of alternative funding opportunities as argued by Brophy, Ouimet, and Sialm (2009), and Chaplinsky and Haushalter (2010), managers might avoid seeking approval because of the timeliness of financing. Companies could be in urgent need of cash to pay interests and avoid bankruptcy. Companies could also need financing to invest in projects and solve the underinvestment problem, as argued by Hertzel and Smith (1993). Waiting for approval can be costly for shareholders because it might jeopardize the financial viability of a company. Under this hypothesis, we assume managers expect the shareholders to approve the issuance when required, but the approval process could take too much time to go through, and thus avoided.

I note that some regulations weakens this hypothesis. The financial viability exception

[20] Wruck (1989), Hertzel and Smith (1993), and Barclay, Holderness, and Sheehan (2007) discuss and argue the benefits of monitoring by concentrated new investors and investors that gain board positions for private placements.

[21] Additionally, I show results using board characteristics (i.e., CEO also being chairman of the board, and portion of independent directors) as proxies for better governance in Section 7. I do not initially present these additional proxies because data is available for less than 10% of my sample.

(NASDAQ Rule 5635(f)) mentioned in Section II.A weakens this argument, because managers could use the exception to go around the shareholder approval process and still issue more than 20% if it is clear that the delay of financing would jeopardize the financial viability of the company. Also, companies could have issued up to 20% and waited for the approval for shares above 20% (NASDAQ Interpretation Material 5635-2) weakening this hypothesis.

The strongest statistical test for CAH1 (and also for CAH in general) would be stock market reactions to the announcement of the private placement. Under CAH1, avoiding seeking approval is justified by the need for timely financing. The market would respond positively or at least non-negatively to the announcement. Also, the returns should be at similar levels as those of the firms that gain approval, because both groups are maximizing firm value.

Beside the stock market reactions, I test CAH1 to see whether firms that avoid seeking approval are more distressed than the control group by using a measure for distress: the most recent month's distress measure from Campbell, Hilscher, and Szilagyi (2008). Since distressed firms are more likely to avoid seeking approval under CAH1. CAH1 would predict that firms that avoid seeking shareholder approval could be more distressed.

Additionally, I use debt covenants violations,[22] and the use of proceeds related to debt or other specific use of proceeds to proxy for the need for timely financing. Under CAH1, firms that avoid seeking shareholder approval should violate debt covenants more often and state the use of proceeds as debt-related, or state a specific use of proceeds more often than firms that gain approval.

Finally, I look at cash holdings before and after placement. CAH1 predicts that firms that avoid approval would have less cash holdings before the placement and not necessarily more cash holdings after the placement than firms that seek shareholder approval.

Costly Approval Hypothesis 2 (CAH2):

Managers avoid seeking shareholder approval because there are not enough sophisticated

[22] Roberts and Sufi (2009) show that after covenants are triggered, the control rights go to creditors and additional debt financing becomes difficult.

shareholders to correctly approve a placement.

The Costly Approval Hypothesis 2 (CAH2) suggests that managers avoid seeking shareholder approval because there are not enough sophisticated shareholders to understand what is in their own best interests. Under this hypothesis, we assume that managers not only act in the best interests of shareholders, but managers are also concerned that shareholders would falsely vote against their own best interests. Then, managers would avoid seeking shareholder approval in order to avoid the uncertainty of the placement being falsely rejected.

For the test of CAH2, I use the proxy of sophisticated ownership with majority shares (i.e., $I_{Sophisticated\ Ownership>50\%}$), where I define sophisticated ownership by the sum of managerial ownership and institutional shareholders. If a placement maximizes shareholder value, managers who hold equity shares would positively vote for the issuance when required. Also, institutional investors should be sophisticated enough to understand the cost and benefits of a private placement such that they would also vote positively for the placement[23] Especially, the cost of approval under CAH2 would be minimized if these sophisticated investors hold majority shares. Also, the cost of shareholder approval under CAH1 could be minimized because managers can gain shareholder approval by written consent of the majority shareholders without holding a shareholder meeting (NASDAQ Rule 5635 (e)(4)). Therefore, CAH2 would predict that firms that avoid seeking shareholder approval would have less sophisticated investors with majority shares. On the contrary, MH would predict firms that avoid seeking shareholder approval have more sophisticated investors with majority shares because managers would want to avoid sophisticated shareholders to evaluate and possibly reject placements not in their best interests.

Later in Section 7, I discuss and use other alternative specifications for sophisticated ownership

[23] Institutional Shareholder Service Inc. (ISS) explicitly states in their U.S. Proxy Voting Summary Guidelines (http://www.issgovernance.com/files) that private placements should be voted for case by case, taking into consideration dilution, financial issues (e.g., the company's financial conditions, need for capital, use of proceed, etc.), management effort to seek alternative financing, control issues, conflict of interests, and stock market reaction. ISS also explicitly advises shareholders to vote for a private placement if it is expected that the company will file for bankruptcy if the placement is not approved.

in association with ownership variables used to test for MH. I show that the results for CAH2 are robust to alternative specifications of sophisticated ownership, and controlling for sophisticated ownership is important for statistical inference and interpretation of managerial and active institutional ownerships as proxies for better governance. Other possible hypotheses other than the two Costly Approval Hypotheses are discussed in Section 6.

4. Data and Summary Statistics

I use four main data sources for the analysis of this paper. I use COMPUSTAT for quarterly accounting data. For stock market data, I use the CRSP monthly database for market size and financial ratios, and CRSP daily stock returns for event studies and identifying timely changes in shares outstanding.

For private issuance data, I use Sagient Research's PlacementTracker database, which is the primary source for private placements.[24] The database includes shares outstanding, type of equity placed, warrants attached, closing day of the contract, and use of proceeds. I match all types of private placement observations with the CRSP/COMPUSTAT database from January 1995 to December 2010. Then, I use only common equity issuances that would not have potential problems in calculating the fraction of issuance and discounts, to determine where the 20% shareholder approval rule applies. See Appendix A for further details on data selection and calculation of the fraction of equity placed.

My sample includes both completed and cancelled private placements. However, I find only 2 cases where the private placements were stated to be cancelled after the announcement of the placement that issued more than 20%. This is consistent with Listokin (2008) that finds that most manager-sponsored votes pass easily[25]. Even in these two cases, however, the private placement were not cancelled because shareholders rejected the private placements, but because

[24]See Brophy, Ouimet, and Sialm (2009) and Chaplinsky and Haushalter (2010) for more details on data and specific contractual terms.

[25]I use the RiskMetrics database from 1997 to 2004 to verify these results. I find that among the 15,916 manager-proposed votes, less than 2% (285) did not pass.

of other circumstantial reasons. These results confirm that managers have a very good sense of when shareholder will pass or not pass a discounted private placement.

In order to be included in the sample, firms need to be listed on NASDAQ, NYSE, and NYSE MKT. I also require firms to have enough daily returns to allow estimation of the 3-day cumulative abnormal returns (CAR), for event studies on the announcement day of issuance. Each observations should also have book-to-market ratio measure, market equity size, and accounting variables to form the distress measure of Campbell, Hilscher, and Szilagyi (2008), which will be the distress measure for this paper.[26] Definitions and detailed derivations of each variable used in the distress measure can be found in Appendix B.

Additionally, I use Thomson Reuters data to match holding information for the private placement issuers. Institutional ownership (13f) and manager ownership (12s) information are aggregated for each firm for each quarter. Insider shares include direct ownership by CEOs, CFOs, and COOs. I also use debt covenants violation data from Amir Sufi's website, which is also at a quarterly frequency. I assume there are zero institutional holdings, zero managerial shares, or no covenant violations if data are not observed for firms in the sample. I collect board information from both Corporate Library and Risk Metrics database, and G-Index from Investor Responsibility Research Center (IRRC), which only provide limited coverage of observations.

Table 1 presents summary statistics of discounted common equity issuance, their issuer, and investor characteristics. Column (1) summarizes the full discounted sample of issuance fractions from 0% to 40%. The data span the period from January 1995 to June 2010 with 2,466 observations. I initially focus on column (1) with all discounted placements. Then, I report mean statistics of samples of 17.5% to 22.5%, 15% to 25% and 10% to 30% below and above 20%, which will be the three sample ranges used throughout the paper. Column (2) to (7) summarize the samples below (even columns) and above (odd columns) the 20% threshold.

[26]I use the distress measure from Campbell, Hilscher, and Szilagyi (2008), because it is known to be the state-of-art measure that is estimated on the most recent data. The model combines both accounting and market variables, and uses quarterly data that would be more timely than other measures that use annual frequencies. The predictability is documented to outperform other distress measures. I get very similar results when using a more traditional measure of Ohlson (1980) O-score.

Due to the fact that my paper uses the identification of managers' self-selection to issue less than 20%, it is important to understand which variables are comparable and which variables differ below and above the 20% threshold. Therefore, I present statistical significance of the difference are presented in columns denoted by (2)-(3), (3)-(5), and (6)-(7).

Firstly, the table summarizes general firm characteristics. The mean size of market equity (winsorized above and below at the 1% level) is $294 million and market-to-book ratio (*MB*) is on average 3.61, which means that firms on average are small growth firms. The difference below and above 20% are both economically and statistically insignificant, suggesting firms are comparable by a typical size and market-to-book matching. *TLMTA*, *NIMTAAVG*, and *CASHMTA* are total liabilities, geometrically decreasing average of quarterly net income, and cash plus short-term investments, respectively, over market equity plus total liabilities. Mean leverage (*TLMTA*) is 21.91%, and mean earnings (*NIMTAAVG*) is negative -2.43%, suggesting that the average placement firms loose money. Cash holdings (*CASHMTA*) average around 9.4%. Firms that issue more than 20% seem to have worse earnings performance while leverage and cash holdings are very similar below and above the 20% threshold.

Secondly, the table summarizes variables that are related to distress. *CHS*, which is the distress measure from Campbell, Hilscher, and Szilagyi (2008) averages -6.70. This average number is equal to an average annual financial failure rate (i.e., delisting or receiving a credit rating D) of 1.47% or a monthly rate of 0.12%. According to Table VI of Campbell, Hilscher, and Szilagyi (2008), this average default rate corresponds to the top distress quartile of all firms traded on the market.[27] These statistics confirm that firms that issue privately are generally distressed. Distress_{High} is an indicator functions that is one if the firm is in the highest distress quartile of the full sampled observations. The differences in distress level by *CHS* and Distress_{High} are statistically significant for all sample ranges, suggesting that firms that avoid approval are less distressed. Debt covenant ($I_{Covenant\ Violation}$) are violated for about 6% of the sample.

[27] Park (2013) also shows that about half of common equity private placements are distributed in the top two distress decile portfolios.

Thirdly, the table presents variables related to the ownership structure. Managerial Ownerships averages 2.88% while Active Institutional Ownership (i.e., institutions classified as independent investment advisors or investment companies) averages 3.31. Passive Institutional Ownership (i.e., the ownership by non-active institutions) averages 13.22%. Institutional Ownership is the sum of active and passive institutional investors, and the Sophisticated Ownership is the sum of managerial and institutional investors. Looking at the difference between firms that issue below and above 20%, firms that issue less than 20% have about 7% more passive institutional investors. We can also observe that most of the difference in Sophisticated Ownership and Institutional Ownership differences are also driven by the 7% difference in passive institutional ownership. Also, institutional investors with majority shares ($I_{Inst.\ Ownership > 50\%}$) and sophisticated investors with majority shares ($I_{Sophisticated\ Ownership > 50\%}$) are higher for firms that issue less than 20% throughout all sample ranges. These results suggest that firms that issue less than 20% have more sophisticated ownership which is mainly driven by the difference in passive institutional ownership.

Fourthly, the table summarizes variables related to the placement characteristics. Discount is the difference in issuance price relative to the price on the day previous to the close of the placement contract which averages 15%. Fraction placed is the amount issued calculated to apply the 20% rule. Use of proceeds is divided into debt-related, acquisition, and specific use, which are denoted by indicator functions I_{Debt}, $I_{Acquisition}$, and $I_{Specific}$, respectively. Other than the fraction placed, which is different by sample construction, difference in other placement characteristics are statistically insignificant in all sample ranges, suggesting that the contracting terms are comparable below and above 20% in a univariate comparison.

Fifthly, the table summarizes variables related to buyer characteristics. Number of Buyers averages 7.22 for the full sample. When looking at the sample for the 17.5% to 20% the average number of investors increase to 10.88%, while the sample of 20% to 22.5% is 5.74%. Also, when looking at the portion of placements with a single investor ($I_{One\ Buyer}$), firms that issue less than 20% have only 21% single investors, while about 35% of the firms that issue more than

20% have a single investor. Board representation by investors ($I_{Board\ Representation}$) and strategic alliance between the investor and the placement company ($I_{Strategic\ Alliance}$) occurs for a small number of placements (less than 4%) for all samples, and the difference below and above the 20% threshold are all statistically insignificant.

Finally, the table summarizes board characteristics and governance index with only limited availability. Chairman of the board of directors also being the CEO ($I_{CEO-Chairman}$) occurs for about 34% of the full sample, while CEO-Chairman duality doesn't occur for matched firms with fractions above 20% and less than 25%. The portion of independent directors is about 60% for the full sample, and also for all subsamples. G-Index matches even less observations with only 202 matches. The index averages 8.60 and the differences are statistically insignificant due to a very small number of observations matches. These board characteristics and G-Index variables are only used in Section 7 due to their limited data availability.

In sum, firms in the sample are small, growth firms that are relatively distressed. A quick univariate mean difference test suggests that firms that issue below and above the 20% are comparable in size, market-to-book, leverage, cash holdings, placement characteristics, use of proceeds, board representation, and alliance with investors, suggesting the firms that issue more than 20% are generally a good control group for firms that issue less than 20%. On the other hand, firms that issue less than 20% have less negative earnings, lower distress levels, higher number of investors, and more CEOs that are chairman of the board than firms that issue more than 20%. These univariate differences initially suggest a rejection of Costly Approval Hypotheses. The following Empirical Result Section formally tests the discontinuity at the 20% threshold, and tests hypotheses in a better controlled multivariate setting.

5. Empirical Results

5.1. Test of Distribution Discontinuity

I start the empirical results section by formally testing the distribution discontinuity around the 20% approval rule, which has been observed graphically in an earlier section. I measure the extent of the distribution discontinuity using techniques in the regression discontinuity literature (e.g., see Keys, Mukherjee, Seru, and Vig (2010)). I count the number of discounted common equity private placements and estimate the equation using a flexible seventh-order polynomials on each side of the 20% threshold.

$$Y_i = \alpha + \beta I_{fraction \geqq 20\%} + \theta I_{fraction < 20\%} f(Fraction(i)) + \delta I_{fraction \geqq 20\%} f(Fraction(i)) + \epsilon_i, \quad (1)$$

where Y_i is the number of observations for each bin and the $f(Fraction(i))$ is a seventh-order polynomial on each side of the distribution discontinuity. I vary the range of the estimation centered on 20% (i.e., 0% to 40%, 10% to 30%, 15% to 25%, and 17.5% to 22.5%) as well as the bin width to count the number of observations (i.e., 0.1% and 0.25%). The data are re-centered so that $Fraction$ (20%) corresponds to 0, and thus the cutoffs of the polynomials are evaluated at 0 just above and below the threshold. This allows β to be interpreted as the discontinuity at 20%.

Figure 3 plots the estimated results for the case of 0.1% width bins for different ranges. For all different ranges a clear discontinuity can be observed by the estimates on each side of the 20% threshold. For a closer range (i.e., 17.5% to 22.5% and 15% to 25%) to the threshold, the estimates reach the number of observations in the 19.9% bin. For a wider range (i.e., 10% to 30% and 0% to 40%), on the other hand, the estimations underestimate the number of observations for bins that approach the 20% threshold from the left. This is due to the sudden increase of observations that cannot be predicted even with a smooth seventh-order polynomials binding at different points in a wider range.

Table 2 shows the results of the test of distribution discontinuity. For all ranges and bin

widths the sign for β is negative and statistically significant at the 1% level. As observed from Figure 3, the magnitude of β becomes larger as the range becomes smaller because the polynomials predict the number of observations in the bin just below the 20% threshold more accurately. This is also the case for the 0.25% width bin estimates. The estimates are twice as big as for the 0.1% bin because of the increase of the bin width. The magnitude also increases as the range becomes smaller.

I conduct a final permutation test of the distribution discontinuity by treating every value of a discontinuity as a potential discontinuity from the range of 0% to 40%, excluding the bottom and top 1%.[28] After estimating the βs for each 0.1% fraction, I use the distribution to test whether the estimate of β at 20% can be the mean of the 380 possible discontinuities. The permutation test gives a t-statistic of -127.93, confirming that the distribution discontinuity at the 20% threshold is extremely unlikely to happen by simple chance. Moreover, the estimate of β is the largest absolute value among all 380 discontinuity points, with the largest t-statistic.

The distribution discontinuity shows us that managers are aware of the shareholder approval rule and many managers purposely avoid seeking shareholder approval when issuing discounted equity. Since the distribution discontinuity is established, the rest of the paper can focuses on testing the main motivation for why these managers avoid the shareholder approval process by using observations which form below and above the 20% threshold.

5.2. Announcement Day Returns and Dilution by Shareholder Approval

This section presents the main results of the paper by looking at announcement day returns and cost of dilution by shareholder approval. The strongest test of the Misalignment Hypothesis (MH) and Costly Approval Hypotheses (CAH) is the market response to the announcement of private placements. If avoidance behavior is motivated by misalignment of principal-agent interests, firms that avoid seeking approval should have negative, and lower returns than the ones that do not. If avoidance of seeking shareholder approval is in the best interests of

[28] I exclude the bottom and top 1% because a seventh order polynomial would be predicted on less than 10 observations making the estimates extremely unreliable.

shareholder value, on the other hand, firms that avoid seeking approval should have non-negative market responses similar to the ones that gain shareholder approval.

To calculate abnormal returns on the announcement day, I use market-adjusted returns due to the fact that previous literature on private placements show systematic price movements before the private placements that could cause possible biases by using previous period estimation of coefficients on factors over the pre-announcement period. I note, however, I find similar results adjusting returns by the market model, Fama and French 3-factor model, and Carhart (1997) 4-factor model[29] After coefficients are estimated, daily abnormal return is calculated as follows:

$$AR_{i,t} = R_{i,t} - R_{M,\ t}, \tag{2}$$

and the 3-day Cumulative Abnormal Return (CAR) is calculated as the sum of the three abnormal returns (AR) ± 1 day of the announcement day.[30]

One concern with interpreting the negative announcement day returns as misalignment of interests is that managers could be selling overpriced equity to benefit shareholders and the negative announcement day returns might be the result of revealing the true value of the company.[31] Since the equity is sold at a discount, however, hypotheses could be better sorted better by studying announcement day returns after adjusting for discounts. Therefore, I also use dilution (discount placement multiplied by the fraction of equity placed) and discount-adjusted returns to study the cost and benefits associated with the discounted placement in detail additional to the announcement day CARs. I follow Wruck (1989), and Hertzel and Smith (1993) to adjust returns by

[29] A detailed description of how I find the announcement days can be found in Appendix C.

[30] I require at least 15 trading day returns during the estimation period and at least one trade during the announcement day window for the placement to be included in the sample. I adjust returns for delisting biases documented in Shumway (1997), and Shumway and Warther (1999), if a company delists during the accumulation window.

[31] However, this Market Timing Hypothesis is later discussed and rejected in the Alternative Hypothesis Section.

$$Discount - adjusted\ CAR_{i,t} = [1/(1-\alpha)]CAR_{i,t} + [\alpha/(1-\alpha)]Discount_{i,t}, \quad (3)$$

where α is the fraction of equity placed. Discount-adjusted CARs can be interpreted as the additional market value generated by the private placement after considering the changes in equity value due to dilution.

Table 3 presents announcement day returns and dilution by fraction of equity placed. Panel A first looks at mean announcement 3-day CARs, dilution, and discount-adjusted CARs in bins created centered on the 20% shareholder approval threshold. The first four columns present bins formed from 20% and below, while the next four columns present bins formed from 20% and above. In the first row, the announcement day CARs exhibit mean negative abnormal returns that are statistically significant at the 5% level for all bins formed below the 20% threshold in the first four columns. In particular, the magnitude of mean CARs become larger as the bins are formed for ranges closer to the 20% threshold (i.e., -0.34 [t-stat $= -1.26$] for the 0% to 20% bin to -1.30% [t-stat $= -1.90$] in the 17.5% to 20% bin.) These results suggest that the action of issuing discounted equity without shareholder approval affect shareholder value negatively, consistent with MH.

Observations for bins of fractions larger than 20%, on the other hand, have positive announcement day abnormal returns. Mean CARs for the bin formed closest to the 20% threshold have positive statistically significant returns of 3.07% (t-stat = 2.13). The non-negative returns for observations that issue more than 20% show that once shareholder approval is required, the market welcomes the private placement and the placement does not decrease market value. These returns confirm that the market evaluates approval-seeking private placements to be in the best interests of shareholders. As the bin range increases for firms that issue more than 20%, the mean of the returns decreases in magnitude but the t-statistics increases, achieving statistical significance at the 1% level. This result suggests that approval-seeking firms increase firm value. In turn, the weaker significant mean CAR of bin 20% to 22.5% seem to be a result

of having weak power of test for only including 82 observations in the sample. This return pattern suggests that firms that issue closest to the 20% threshold should be most comparable as a control group, I need to balance the sample size when forming the sample closer to 20% because of weak statistical power.

In the next two rows, I look at dilution and discount-adjusted CARs to study the costs and benefits of the placement to understand the pattern in announcement day returns. In the second row of Panel A, dilution increases monotonically from 1.52% to 3.06% for the first four rows, and increase monotonically from 2.73% to 4.05% for the last four rows. The increase in dilution results from taking averages of dilution of placements that issue at higher fractions. In the third row of Panel A, we can see that all discount-adjusted CARs are positive, but statistically significant only for bins formed above 20%. The magnitudes of discount-adjusted CARs do not vary much within bins formed above 20%, and within bins formed below 20%. These results suggest that even when shareholder approval is avoided, a certain benefit does occur. This benefit makes showing agency problems in distress generally difficult because managers will argue that shareholders will benefit from issuing equity.

The question still remain, however, whether this benefit can outweigh the costs of issuing equity in order to show agency problems. Comparing discount-adjusted CARs to the cost of dilution in the previous row, discount-adjusted CARs are larger than dilution only for firms that issue more than 20%. These cost-benefit patterns suggests that approval-seeking placements generate enough benefit to outweigh the cost, while the benefits are outweighed by the costs for firms that issue less than 20%, generating the negative CARs observed in the first row. These patterns of CARs, dilution, discount-adjusted CARs are consistent with MH and are inconsistent with CAH. Also, notice that the increasing dilution pattern in the second row combined with the break in discount-adjusted CARs for observations above the 20% threshold generate the pattern observed in announcement day CARs in the first row: CARs decrease from column one to four, jump from four to five, and decrease from five to eight, generating a larger difference in returns for bins formed closer to the 20% threshold.

In the next panel, I test the difference in returns and dilution between the firms that issue below 20% (i.e., treatment group) and above 20% (i.e., control group). Panel B presents the mean differences (issuing below 20% minus issuing above 20%) of announcement day CARs, dilution and discount-adjusted CARs. Samples are created from 0% to 40%, 2.5% to 37.5%, and so on by reducing the sample range 2.5% below and above the 20% threshold. The first row shows that all differences in CARs are negative and statistically significant. The magnitude increases from −2.85% (t-stat = −3.43) for the 0% to 40% fraction bin to −4.37% (t-stat = −2.75) for the 17.5% to 22.5% fraction bin as the sample gets closer to the threshold. Thus, approval-avoiding placements are interpreted as less aligned with shareholders' best interests by the market, consistent with MH but not CAH.

The second row of Panel B shows that the mean difference in dilution starts by a statistically significantly difference of −2.52% (t-stat = −12.46) for the 0% to 40% sample, but decreases in magnitude as the samples are formed closer to the 20% threshold as for the reason discussed earlier in Panel A. Eventually, for bins formed closer to the 20% threshold, the difference in dilution is statistically insignificant −0.29% (t-stat = −1.39) for range of 15% to 25% bin, and 0.33% (t-stat = 1.26) for range 17.5%% to 22.5%. This dilution pattern suggests that the empirical strategy of comparing firms close to the 20% threshold is valid in terms of controlling for the cost of dilution.

The third row shows that the differences in the discount-adjusted CARs are all negative and statistically significant. These differences do not show much variation in magnitude over different sample ranges. This pattern in differences of discount-adjusted CAR combined with the decreasing differences of cost of dilution drive the increasing announcement day CARs in the first row as argued in Panel A. Thus, the difference in announcement day CARs close to the 20% threshold is driven by the difference in the benefits (discount-adjusted CAR) generated by the issuance rather than the costs of dilution.[32]

[32] Using a closer range of 19% to 21%, I find that the mean difference in CAR is −5.39% (t-stat = −2.17), difference in dilution is 0.53 (t-stat = 1.49), and difference in dilution-adjusted CAR is 5.79 (t-stat = −1.90). These patterns suggest that the results found in Table 3 are robust even for observation very close to the 20% threshold.

Overall, the patterns of announcement day *CAR*s, dilution, and discount-adjusted *CAR*s above and below the 20% approval threshold presented in Table 3 suggest that approved private issuances benefit shareholders more than firms that avoid seeking approval. These results are consistent with MH and inconsistent with CAH.

5.3. Logit Analysis on the Decision to Avoid Seeking Approval

In this section, I further investigate the firm and issuance characteristics to test whether avoiding shareholder approval is evidence of costly shareholder approval, or principal-agent conflict. I use a logit regression to predict the decision to avoid seeking shareholder approval ($I_{\text{Fraction}<20\%}$). For the explanatory variables, I include variables that could test the Costly Approval Hypotheses (CAH) or Misalignment Hypothesis (MH) that were described earlier in the Main Hypotheses Section and Data Section.

First, I include variables that could test whether or not the need for timely financing is required (CAH1).[33] I use the distress measure, *CHS,* from Campbell, Hilscher, and Szilagyi (2008) (higher *CHS* indicates higher levels of distress). Because the distress measure might have non-linear features, I also use the indicator function of Distress_{High}, which is one if the firms are in the highest distress quartile of the sample, as a substitute variable for the distress measure. I also include an indicator function of debt covenants being triggered ($I_{Covenant\ Violation}$). Additionally, indicator functions I_{Debt} and $I_{Specific}$ are included, which are one if the stated use of proceeds includes debt or a specific use, respectively. CAH1 predicts that these variables would have positive coefficients.

Second, I include a variable to test whether there are enough sophisticated shareholders to correctly approve a placement (CAH2). I use an indicator function of sophisticated ownership with majority shares, denoted by $I_{Sophisticated\ Ownership>50\%}$, that is one if the sum of institutional ownership and managerial shares is more than 50% of existing shares. CAH2 predicts negative

[33] I do not include variables that are included in constructing the distress measure such as size, market-to-book, leverage, cash holdings, and earnings due to possible multicollinearity problems. However, including these variables generally do not result in statistical significance or do not affect the results of other coefficients.

coefficients for $I_{Sophisticated\ Ownership>50\%}$.

Third, I include variables that could test misalignment of interests (MH). I use variables of placement discounts, managerial ownership, and active institutional ownership and number of placement investors. MH predicts positive coefficients for discounts and number of buyers, and negative coefficients for managerial and active institutional ownership.

Finally, I include variables that could affect the decision of issuing less than 20%. I include indicator functions of the buyer gaining a board position to control for possible monitoring effects, the buyer being in a strategic relation with the placement company and the buyer being a single investor to control for possible change-of-control placements (NASDAQ Rule 5630 (b)), and use of proceeds for acquisition (NASDAQ Rule 5630 (a)). Although the 20% rule subsumes change-of-control and acquisition related private placements for the discounted sample as discussed in Section 2, I control for these cases to see whether avoidance might be due to other regulations rather than the 20% rule.

Table 4 presents the empirical results. I initially run the logit regression on the sample closest to the 20% threshold of 17.5% to 22.5% in regressions (1) and (2). I use a wider sample range of 15% to 25% in regressions (3) and (4), and 10% to 30% for regressions (5) and (6). The odd number regressions use the distress measure, *CHS*, while the even number regressions include Distress_{High} instead of *CHS*.

I first look at regression (1) and (2). The first five variables test CAH1. In regression (1), *CHS* has a statistically significant negative coefficient (-0.54 [t-stat $= -3.55$]). In regression (2), I find that Distress_{High} also has a statistically significant coefficient of -0.82 (t-stat $= -2.77$), suggesting that the significance of *CHS* is not due to possible nonlinearity in the distress measure. These coefficients suggest that firms that avoid shareholder approval consist

of firms that are relatively less distressed than firms that seek approval, thus rejecting CAH1.[34] $I_{Covenant\ Violation}$, I_{Debt}, and $I_{Specific}$ have statistically insignificant coefficients not supporting CAH1.

Next, I test CAH2 by looking at sophisticated ownership. I find a positive and statistically significant coefficient for $I_{Sophisticated\ Ownership>50\%}$ of 1.78 (t-stat = 2.05) in regression (1) and 1.74 (t-stat = 2.02) in regression (2). This positive coefficient suggests that firms that avoid seeking shareholder approval have higher chance of having sophisticated investors owning more than majority shares than approval-seeking firms. This result is the opposite of the predictions of CAH2. This coefficient suggests that managers avoid seeking shareholder approval, *not* because shareholders are less sophisticated, *but* because shareholders are more sophisticated, understanding that the private placement is not in their own best interests. Therefore, the results reject CAH2, and rather reinforce MH.

Last, I look at variables that could test MH. I first look at issuance discounts. The coefficient for discount is 3.35 (t-stat = 2.42) in regression (1) and 2.98 (t-stat = 2.18) in regression (2), both statistically significant at the 5% level. These coefficients suggest that firms that avoid approval issue at higher discounts than firms that seek approval consistent with MH. In Table 3, however, we have seen statistically that dilution was not significantly different below and above the 20% threshold, in the sample of 17.5% to 22.5%. Hence, the statistical significant coefficient on placement discounts must be driven by other variables in the logit regression. In particular, the coefficient for discount becomes less statistically significant (2.28 [t-stat = 1.75]) when *CHS* and Distress_{High} are not included in regressions (1) and (2). These statistical significance patterns suggest that controlling for the level of distress is important for the interpretation

[34] Private placement firms that avoid approval are less distressed in a *relative* sense compared to private placement firms that gain approval. Firms that issue privately can be considered somewhat distressed in general when viewed in the cross-section of all traded firms, as mentioned in the Data section. The quartile cutoff point for private placements used for Distress_{High} is higher than the average distressed firms of the top 10 to 5 percentile of the cross-section of all firms according to Table VI of Campbell, Hilscher, and Szilagyi (2008). Using a higher cutoff point for Distress_{High} (i.e., top 10 percentile and 5 percentile) also results in statistical significant coefficients in regressions (2), (4), and (6).

of placement discounts. More specifically, controlling for distress is important because more distressed firms would be able to justify higher discounts, while investors would also ask for higher discounts for investing in a highly distressed company.[35] The interpretation of the coefficients on discounts in conjunction with distress is that firms that avoid seeking approval issue at higher discounts (i.e., higher costs), considering that they are relatively less distressed (i.e., less benefits) than firms that seek approval. Thus, the interpretation is consistent with the predictions of MH.

In addition to placement discounts, the coefficients for managerial ownership are negative and statistically significant at the 10% level with coefficients of -0.03 (t-stat $= -1.74$) in regression (1) and -0.03 (t-stat $= -1.79$) in regression (2).[36] On the other hand, active institutional ownership has statistically insignificant coefficients. The coefficients on managerial ownership suggest that managers that share the cost of dilution less (i.e., less managerial ownership) avoid seeking shareholder approval more often. Therefore, self-interested managers, would be less aligned with shareholders' best interests when avoid seeking approval, which is consistent with MH. Also, the coefficient for the number of placement investors is positive (0.77 [t-stat $= 2.97$]). This suggests that managers issue to a larger number of investors when avoiding shareholder approval avoiding monitoring and challenges from placement investors. Also, notice that gathering more investors would take more time to coordinate higher number of investors, rejecting CAH1.

Overall, regressions (1) and (2) reject predictions of CAH1 and CAH2, by showing that approval-avoiding firms are less distressed, and have higher sophisticated ownership, than approval-seeking firms, respectively. Also the regressions support MH by showing that approval-avoiding firms issue at higher discounts and have lower managerial ownership than firms that seek

[35] Chaplinsky and Haushalter (2010) suggest that firm discount increase as issuer risk increase and financing choices becomes limited. Confirming this conjecture, the correlation between discount and *CHS* is positive 0.26, and the correlation between discount and Distress_{High} is positive 0.18.

[36] Notice that these results are also after controlling for the contribution that managerial ownership and active institutional ownership have on lowering the cost of falsely disapproving a placement in $I_{Sophisticated\ Ownership > 50\%}$. Controlling for sophisticated ownership is important for a clear interpretation of managerial and active institutional ownership as proxies for better governance as argued in MH. See Section 7 for further discussions, results, and additional variables that could proxy for better governance.

approval.

Among control variables, we can observe that the use of proceeds related to acquisition is negative and statistically significant. This suggests that firms that avoid approval do not avoid approval due to the acquisition rule. Once firms need to gain shareholder approval by issuing more than 20%, firms state the use of proceeds as acquisition more often. Also, coefficients on the single investor indicator are not statistically significant although the univariate difference was statistically significant in Table 1. This insignificance is due to including the number of buyers in the regression. Firms that avoid approval have change of control placements, but this is in line with firms avoiding approval to place to a larger number of investors.

Next, I rerun the logit regressions using a wider sample range. Regressions (3) and (4) expand the sample range from 15% to 20%, and regressions (5) and (6) expand the sample from 10% to 30%. In all four regressions, firms that avoid seeking approval are still less distressed, and have more sophisticated ownership with majority shares than firms that gain approval. The magnitude of the coefficients for *CHS,* Distress_{High},and $I_{Sophisticated\ Ownership>50\%}$, Managerial Ownership, and Number of Buyers, however, are smaller in the wider sample ranges. Moreover, the coefficients for discount, managerial ownership, and number of buyers are smaller and are statistically insignificant in the wider ranges. These results show that firms closer to below and above the 20% threshold have larger differences in level of distress, sophisticated ownership, discounts, managerial ownership, and number of buyers, while the placement fractions are comparable. Thus, the observations clustered right below the threshold have less justification to avoid approval than firms further below the threshold.

Additionally, there is a negative statistically significant coefficients for I_{Debt} (-0.66 [t-stat $= -1.92$]) in regression (4). This coefficient suggests that firms that avoid seeking approval have less debt-related use of proceeds than firms that gain approval, which is opposite the prediction of CAH2. I do not, however, find statistically significant coefficient on I_{Debt} in any other regression. Since the statistical significance for I_{Debt} is also insignificant in regressions (5) and (6), the coefficient in regression (3) seems to be a sample-specific result, rather than

a power of test issue. Therefore, I do not put much weight on the interpretation of I_{Debt} in regress (3).

In sum, Table 4 does not find support for CAH. The lower distress level of firms that avoid seeking shareholder approval rejects CAH1, and the higher sophisticated ownership with majority shares of the firms that avoid seeking approval rejects CAH2 throughout all sample ranges. On the other hand, firms that avoid seeking approval issue at a higher discount after controlling for distress, have less managerial ownership in the sample closest to the 20% threshold, and have higher number of buyers, consistent with MH. The results from the logit regression combined with the announcement day return difference found in the previous section support MH and reject predictions of CAH. In conclusion, managers seem to avoid seeking shareholder approval *not* because the cost of approval is high, *but* because the placements are not in the best interests of shareholders.

5.4. Delisting Rates

In this section, I look at post-issuance delisting rates to augment the results of less distressed firms avoiding shareholder approval more often, shown in the previous section. Following Chaplinsky and Haushalter (2010), I use post-issuance delisting rates to proxy for the relative level of distress at the time of issuance. Since the private placements and other events could affect the ex-post delisting, post-placement delisting rate is not ideal to proxy for the level of distress at the time of the private placement issuance. However, if one assumes that the effect of preventing delisting by firms that seek approval is at least as effective as those firms that avoid seeking approval, comparing post-placement delisting rate of firms close to the 20% threshold should be a good proxy to measure the relative ex ante measure of default risk. As discussed in the empirical approach section of the paper, my identification comes from the comparison of the treatment and control group.[37]

Table 5 presents the delisting rates. Panel A presents delisting due to performance reasons

[37] See Campbell, Hilscher, and Szilagyi (2008) for the rate of bankruptcy and financial failure per year.

defined by Shumway (1997) and Shumway and Warther (1999). Looking at the sample range of 17.5% to 22.5%, I find that firms that avoid seeking approval delist within the first six months at a rate less than 1%, while firms that seek approval delist at a higher 4.88% rate. The difference is statistically significant at the 1% level, suggesting that firms that gain approval are more distressed than firms that avoid seeking approval. For one year after the issuance, 3.21% of the firms that avoid seeking approval delist, and 9.76% of firms that gain approval delist. Again, the difference is statistically significant at the 10% level. As discussed in the empirical approach section of the paper, my identification comes from the comparison of the treatment and control group. A 3.21% one-year delisting rate of firms that avoid seeking approval is still a high delisting rate considering that the average cross-sectional annual financial failure rate (i.e., delisting or receiving a credit rating D) is less than 2%.[38]. The control group of firms that seek approval have a delisting rate that is even higher close to 12%. Finally, two years after the issuance, 8.57% of firms that avoid seeking approval delist, while 19.51% of firms that gain approval delist. The difference is again statistically significant for this period. When expanding the sample from 15% to 25% and from 10% to 30%, I find similar numbers with higher t-statistics and statistically significant differences for all sample periods.[39]

Next, Panel B presents delisting due to reasons other than performance, which are mainly by mergers and acquisitions. The first row of Panel B shows that there are only non-performance delisiting within 6 months for the sample of 10% to 20%. The non-performance delisting increases for longer horizons, but the differences below and above 20% are all statistically insignificant. Not having many non-performance related delistings within 6 months and the insignificant differences in delisting suggests that other reasons, such as mergers, do not seem to largely affect the results of the decision to avoid seeking shareholder approval and their negative announcement day returns.

[38]See Campbell, Hilscher, and Szilagyi (2008) for the rate of bankruptcy and financial failure per year.

[39]Notice that firms that seek approval issue at a higher fractions than firms that avoid seeking approval. If there is any difference in the effect of the placements, firms that seek approval should be able to lower the probability of delisting more than firms that avoid seeking approval. Yet, I find that firms that seek approval still delist more often than approval-avoiding firms. This suggests that the estimated difference of delisting actually underestimates the difference in distress at the time of placement, making my conclusion even stronger.

Overall, the rate of delisting corroborates the results found in the logit regressions: firms that avoid seeking approval are less distressed than approval-seeking firms, rejecting CAH1. In order for the costly approval due to timely financing (CAH1) to be justified, firms that avoid seeking approval need to be more distressed than this control group. Nevertheless, I find the opposite results: firms that avoid seeking approval are less distressed, which leads to the rejection of CAH1.

5.5. Discount-Adjusted Announcement Day Returns

This section further explores discount-adjusted announcement day returns from the private placements below and above the 20% threshold. Earlier in Table 3, I show that the cost (i.e., dilution) occurring for firms that issue below and above the 20% threshold are similar. Announcement day return differences result from the benefits (i.e., discount-adjusted returns) of the private placements. In particular, the discount-adjusted CAR is higher for firms that issue more than 20%. In this section, I explore where these differences in discount-adjusted returns. I rely on the literature that attempts to explain the positive announcement day returns of private placements. Wruck (1989) posits the 'monitoring hypothesis' that the positive announcement day returns of private placement are due to investors providing monitoring through board positions and concentrated ownership. Hertzel and Smith (1993), on the other hand, explain the positive announcement day returns by the 'certification hypothesis', such that placement discounts are related to the information costs, and discounts is a form of compensation for placement investors in producing information and certifying the placement.

I run regressions of ordinary least square regression of discount-adjusted announcement returns of firms on the decision to issue less than 20% both with ($I^{\perp}_{Fraction(i)\geq 20}$) and without ($I_{Fraction(i)<20}$) Heckman selection correction. I use the logit regression (2) of Table 4 for the first-stage selection model for the Heckman selection correction. Results are presented in Table 6. Observations with fraction of equity placed between 17.5% and 20% are used for regressions (1) and (2), between 15% and 20% are used for regressions (3) and (4), and between 10% and

20% for regressions (5) and (6). Odd number regressions use non-correction indicator function ($I_{Fraction(i)<20}$) and even number regressions use self-selection corrected selection ($I^{\perp}_{Fraction(i)<20}$). All other explanatory variables used in the logit regression Table 4 are included.

In regression (1), three variables are statistically significant. We observe that the decision to issue less than 20% ($I_{Fraction(i)<20}$) have statistically significant low returns (-5.41 [t-stat = -2.69]) as observed earlier in Table 3. Additionally, firms that issue at higher discount have higher returns. This positive relationship between discounts and discount-adjusted returns is consistent with the certification hypothesis. Also, placement investors with board representation contribute to the higher announcement day return as suggested by the monitoring hypothesis.

However, the relationship between distress and returns are statistically insignificant (2.73 [t-stat = 1.50]). This insignificant coefficient is inconsistent with previous studies (see, for example, Hertzel and Smith (1993)) that provide evidence suggesting that firms facing greater financial distress have higher announcement period stock returns. Also, another concern is that it is not clear whether the statistically significant coefficient of $I_{Fraction(i)<20}$ and the statistically insignificant regression of Distress_{High} are merely due to self-selection of mangers choosing to issue less than 20% when firms are less distressed as observed earlier. Therefore, I run a regression with Heckman self-selection correction in regression (2)

In regression (2), we can observe that the coefficient for $I^{\perp}_{Fraction(i)<20}$ is still statistically significant with slightly smaller coefficients and t-statistics (-5.08 [t-stat = -2.57]) than regression (1). We can observe that the coefficient for Distress_{High} became statistically significant (3.48 [t-stat = 1.87]). Other coefficients have the same statistical significance as in regression (1). These results suggest that the self-selection of less distressed firm managers issuing less than 20% is partially explain some of their lower returns. A large part of the difference in announcement day returns, however, is still not explained by simple selection correction.

Other regressions for the wider sample range have similar results, but the coefficient for distress is statistically significant, even when self-selection is not corrected. The statistical significances for distress increase when self-selection correction is included. Additionally, stating

a specific use of proceeds is also important for having higher discount-adjusted announcement day returns. Notice that other variables including indicator functions of strategic investors, single investor, and use of proceeds related to acquisition is not statistically significant in any of the regressions. These results suggest that strategic placements, change of control placement, and acquisition related placements do not largely affect the discount-adjusted returns.

To further understand how the market might respond differently for firms avoid approval and the firms that seek approval, I rerun regressions for the two groups *separately* in Table 7: the avoidance group (i.e., placements with fractions less than 20%) are presented in regression (1) through (3), and the approval seeking group (i.e., placements with fractions more than 20%) are presented in regression (4) through (6).

For all regressions, we can observe a positive statistically significant relationship between board representation and discount-adjusted returns. These results are consistent with the monitoring effect being persistently important for placements as suggested by Wruck (1989). However, board representation by placement investors are found by less than 3% of the sample as shown in Table 1. The low number of board representation suggests that the monitoring effect exists, but is not the main source of explaining the difference in announcement day returns by each group. The coefficient for Distress_{High} is statistically positive in only regression (3) and (5). Together with the persistent positive coefficient in the previous table, the results suggest that the positive relationship between discount-adjusted and distress is mainly driven by the wedge in distress levels below and above the 20%, rather than the spread distress levels within each group.

Now, I focus on the differences between these regressions on the groups that avoid approval and the group that seeks approval. First, focusing on the avoidance group in the first three regressions, the coefficient for the indicator function of firms that state a specific use of proceeds are statistically significant at the 10% level for all regression, suggesting that market is not clear about the purpose of the costly private placement when firms avoid shareholder approval, and it is important to state what the use of proceeds is. Additionally, the coefficient for a single

investor that issue less than 20% is significantly negative (-4.13 [t-stat $= -1.83$]) when avoiding approval in regression (1). This result suggests that the market reacts negatively when managers seem to avoid approval where the placement could result in change in control. However, this result is statistically insignificant for regressions (2) and (3), limiting the generalization of this result.

Second, the group that seeks shareholder approval (i.e., placements with fractions more than 20%) has different results. The coefficients for sophisticated ownership with majority shares are statistically significant for regression (5) and (6). This result suggests that when existing shareholders approve (or expect to approve) a discounted placement, it signals to the market and the investors that the benefit (i.e., discount-adjusted returns) is large enough to overcome the cost (i.e., dilution) for existing shareholders. Thus, shareholder approval certifies that the true price is at least as high as the current market price and the quality of the certification improves as existing ownership is more sophisticated.

Also, the coefficient for discount is statistically significant for discounts in regression (4) and (5) consistent with certification effects of placement investors as argued by Hertzel and Smith (1993). These results suggest that the benefits (i.e., high discount-adjusted announcement returns) of firms that gain approval are driven by certification effects from both existing and new shareholders when firms seek shareholder approval.

In sum, Table 6 and Table 7 show that after adjusting for dilution, announcement day returns respond negatively to the decision to issue less than 20% with or without selection correction. For firms that avoid approval stating specific use of proceeds are important, suggesting that the market is not clear about the use of proceeds when shareholder approval is avoided. For firms that gain approval, on the other hand, stating the use of proceed is less important. Rather, the quality of existing shareholders, and the discount amount is important, and suggests certification effect for firms that seek approval. Thus, firms that avoid seeking shareholder approval seem not to have enough benefits for shareholders to gain certification. Therefore, managers avoiding shareholder approval leads to the negative announcement day returns when

the benefit is not clear enough to gain approval, consistent with MH.

Barclay, Holderness, and Sheehan (2007) argue that many other firm and issuance characteristics are consistent with 'managerial entrenchment hypothesis', with an exception of the positive announcement day returns. But I show that even the positive announcement day returns could be misleading in representing private placements complementing the weakness of the 'managerial entrenchment hypothesis.' I find that firms that issue at a discount less than 20% have negative announcement day returns and firms that issue above 20% have positive announcement day returns (consistent with the 'certification hypothesis').[40] Hence, my findings suggest that the well-known positive announcement day returns of private placement could be the result of averaging effect of the returns from these different regions of the sample.

5.6. Cash Holdings Before and After Placement

This section studies cash holdings of firms that avoid shareholder approval and firms that seek shareholder approval. In the previous section, we observed that firms that do not state the specific use of proceeds have lower discount-adjusted returns when firms avoid seeking shareholder approval. The question remains whether managers efficiently use the proceeds from the placement and whether the placement was necessary in the first place. High (excess) cash reserves suggest that managers issued costly placements at too high of a fraction, and suggests that managers were overly cautious in lowering the risk of distress at the expense of shareholder dilution. MH would predict that the post-placement cash holdings of firms that avoid seeking shareholder approval would be higher than firms that seek shareholder approval. This exercise is motivated by the cash holdings and pro forma cash holdings exercise of DeAngelo, DeAngelo, and Stulz (2010) in understanding the need for a seasoned equity offerings.

Notice that one might argue that high cash holdings could be the result of market timing and cash piling as argued in Kim and Weisbach (2008). However, the discounts in private placements prevent companies to easily sell overpriced equity because shareholders benefit from the market

[40] I also find a strong monitoring effect by private placement which the investor acquires a board position.

timing strategy only when the true price is even less than discounted price. See the Alternative Hypothesis Section for further discussion and rejection of the Market Timing Hypothesis.

Table 8 presents actual and pro forma ratios of cash holdings before and after private placements. Cash holdings are measured by *CASHMTA*, which is constructed by cash plus short-term investments over market equity plus total liabilities. Panel A presents actual *CASHMTA* and Panel B presents excess *CASHMTA* for 1 quarter before, and 4 and 8 quarters after the private placement. Following DeAngelo, DeAngelo, and Stulz (2010), excess *CASHMTA* is measured by actual *CASHMTA* minus normal *CASHMTA*. Normal *CASHMTA* is estimated by first sorting all CRSP/COMPUSTAT firms into nine groups based on three equal sized groups based on book assets and three equal book-to-market ratios. Within each nine groups, normal *CASHMTA* is measured for the two-digit standard industrial classification as the median ratio among all firms in the industry for the given quarter. Panel C presents pro forma *CASHMTA* for 4 quarters after placement and percent of pro forma *CASHMTA* that is negative. Pro forma *CASHMTA* is the *CASHMTA* assuming that the company does not receive gross proceeds from the private placements given that other finance decisions are unchanged.

First in Panel A, I find that firms issue less than 20% have higher cash holdings than firms that issue more than 20%, 4 quarters after the placement, while they have insignificantly different cash holdings 1 quarter prior to the placement for all sample ranges. The difference for the 8 quarters after the placement is significant for samples of 17.5% to 22.5% and 15% to 25%, but statistically insignificant for the wider 10% to 30% sample. Second, excess cash holdings in Panel B presents similar results as Panel A. Firms that issue less than 20% have higher excess cash holdings than firms that issue more than 20%, while the difference in pre-placement excess cash holdings are insignificant. Additionally, I find that the excess cash for firms that avoid approval is highly positive (5.45 [t-stat = 4.99]) while firms that issue more than 20% have insignificant excess cash holdings (1.24 [t-stat = 1.02]) 4 quarters after placement. This suggests that managers that avoid approval are overly cautious about lowering the risk of distress, consistent with MH.

Finally, Panel C finds that the mean pro forma cash holdings is positive, firms with negative pro forma cash holding is less or equal to half the observations for firms that avoid seeking shareholder approval, while firms that seek approval have negative mean pro forma cash holdings and more than half the firms have negative pro forma cash holdings for all sample ranges. These results suggest that an average and median firm that avoids approval would not have run out of cash even without the proceeds from the placements, while firms that gain approval would have. This result not only supports MH, but rejects CAH1. The differences are statistically insignificant for the sample of 17.5% to 22.5%, but are statistically significant for the larger samples.

Overall, the cash holding results suggests that firms that avoid seeking shareholder approval issue costly private placements, but do not efficiently use the gross proceeds after the placement. These results also suggest that firms that cluster just below the 20% threshold are not by firms that needed cash more than 20%, but decreased the amount to avoid approval. Rather, it suggest that firms clustered below 20% are firms that should have issued fewer shares, but increased the fraction to the maximum amount that does not require shareholder approval and further diluting shareholders. The cash holding results coupled with stock market reactions and characteristic of firms that avoid seeking approval compared to approval seeking firms are all consistent with the Misalignment Hypothesis.

6. Alternative Hypotheses

In this section, I discuss alternative hypotheses that might be able to explain managers' behavior regarding seeking shareholder approval.

Market Timing Hypothesis:

Managers avoid seeking shareholder approval to keep information private in order to sell overpriced equity.

The Market Timing Hypothesis posits that managers avoid seeking approval so that a manager can sell equity at a level that is higher than its true price as argued by Baker and Wurgler (2002). Seeking approval could possibly trigger information leakage about the bad state of the company and make it difficult to sell equity even at a discounted price. Managers would avoid seeking approval to keep information about the true price of equity.[41] Additionally, the excess cash holdings after the placement of firms that avoid seeking shareholder approval documented in the previous section seem to be initially consistent with this hypothesis. However, the discount in private placements makes the Market Timing Hypothesis to be tested against the discounted price rather than the current market price as in seasoned equity offerings. Thus, discount-adjusted returns need to be studied to verify whether managers are selling overpriced equity.

The Market Timing Hypothesis offers predictions about pre-announcement returns, announcement day returns, and long-run returns. Firstly and most importantly, discount-adjusted announcement day returns should be negative for firms that avoid seeking approval. If managers are selling discounted equity, the true price should be even lower than the issuance price. Therefore, after the announcement of the private placement, the true price will be revealed, and the discount-adjusted returns should be negative if managers are selling overpriced equity.

Secondly, pre-announcement day returns should be lower for firms that gain approval, since the concern is firms that seek approval might allow information leakage about the true price of the firm, compared to firms that avoid seeking approval. Therefore, pre-announcement day returns should be lower for firms that seek approval, compared to firms that avoid seeking it.

Finally, long-run returns should be lower for firms that avoid seeking approval than for the ones that gain approval if there is underreaction to the information release. If the market does not realize the true price (which is lower than the discounted price) during the announcement period, firms that avoid seeking approval should have lower long-run returns than firms that gain approval. This is because firms that gain approval should already have realized the true

[41] In Appendix C, I discuss how I find announcement days for this paper and the validity of the public announcement date of the private placement as an event study date.

price at the announcement of the private placement, while firms that avoid seeking approval are slowly realizing the true price. Therefore, post-announcement returns should be lower for firms that avoid seeking approval.

The first prediction can be tested by revisiting discount-adjusted returns in Panel A of Table 3. Discount-adjusted returns are positive for all bins that issue less than 20%. Returns for all bins formed below the 20% threshold are positive and statistically significant. These results show that firms that avoid seeking approval issue at a price that is not necessarily higher than the market value price after the issuance. In unreported results, discount-adjusted returns for firms that issue less than 20% is not negative even for longer horizons up to six months. These results are inconsistent with the first prediction of the Market Timing Hypothesis, and also suggest that the piling of cash by firms that issue less than 20% is not the result of selling overpriced equity. Rather, it is the result of selling equity at a discount, diluting shareholders.

The second and third predictions can be tested by looking at the pre-announcement and post-announcement returns. Table 9 presents the difference in cumulative abnormal returns (issuing below 20% minus issuing above 20%) for different periods. Panel A presents pre-announcement CARs, and Panel B presents post-announcement CARs. All differences are negative for the one-month (-30, -2) pre-announcement returns, but only the sample issued from 0% to 40% fraction is statistically significant. These negative differences suggest that there could have been a positive leakage of information for firms that gain approval, opposite the second prediction of the Market Timing Hypothesis. For the one-week (-7, -2) pre-announcement returns, none of the returns are significant. There are some differences in returns that are positive near the 20% threshold, but none are statistically significant. These findings are inconsistent with the second prediction of the Market Timing Hypothesis.

The third prediction can be tested by examining post-announcement returns in Panel B. I present one-week (+2, +7), one-month (+2, +30), half-year (+2, +180), and one-year (+2, +365) CARs. Again, all return differences except for the one month 12.5% to 27.5% sample are statistically insignificant. In particular, all but two CARs have t-statistics smaller than one.

These results do not generally support the third prediction of the Market Timing Hypothesis which predicts negative return differences. Thus, none of the Market Timing Hypothesis predictions are well supported.

Monetary Costs Hypothesis:

Managers avoid seeking shareholder approval because of the monetary costs of the process.

One direct cost of obtaining shareholder approval is the monetary cost of the shareholder approval process. For example, contacting and opening a special meeting could be expensive, although a meeting is not required for approval. The Monetary Costs Hypothesis posits that managers avoid seeking shareholder approval because of these monetary costs that might occur through the shareholder approval process.

This argument is not well supported when considering the pattern of announcement day return of private placements. Assuming other benefits and costs are similar for firms just below and above the 20% threshold, the monetary cost should apply only to firms that issue above the 20% threshold. Firms that avoid seeking approval save monetary costs and should have higher returns than firms that seek approval. In Table 3, however, firms that issue above the 20% threshold have positive announcement returns, while firms that gain approval have lower negative returns. This return pattern shows that monetary cost alone cannot be the reason why managers avoid seeking shareholder approval.

Another argument could be that returns are lower for firms that avoid seeking approval because managers are unable to issue at the optimal fraction that maximizes shareholder value, in order to avoid high monetary costs. If managers still need to issue equity, they will choose equity value decrease, over the even higher monetary costs of shareholder approval. A quick approximation of the announcement day return effect, however, show that the monetary costs have to be extremely large to justify the announcement day return of firms that avoid seeking approval. The average market equity size of a company in the sample just below 20% is $148 million in Table 1. In Table 3, the negative announcement day return for firms that avoid

approval is 1.30%, which would approximate to an average devaluation of $1.92 million. If one considers the return difference from firms that gain approval, the return difference between firms that avoid seeking approval is more than 4.50%. This return difference would amount to a devaluation of $6.66 million. The total monetary cost of seeking approval needs to be larger than these numbers (i.e., $1.92 million or $6.66 million) on average to justify managers' behavior of avoiding seeking shareholder approval, because it is cheaper to issue at a suboptimal amount, rather than going through the approval process and paying the monetary cost of approval. Since it seems difficult to argue that the monetary cost would come even close to these estimates, the Monetary Cost Hypothesis is not well supported.

Fiduciary Duties Hypothesis:

Managers avoid seeking shareholder approval because of their fiduciary duties to creditors.

Like the Misalignment Hypothesis, Fiduciary Duties Hypothesis argues that private placement is misaligned with shareholders, but it suggests that managers are motivated by their fiduciary duties to creditors, rather than by their own private benefit. When in the proximity of distress, equity issuance would decrease distress cost and thus benefit creditors. However, equity holders would not always approve of such action because of the value transfer from equity holders to creditors (i.e., debt overhang problem), creating the equity–debt conflict. For example, Becker and Stromberg (2012) study a legal ruling changing corporate fiduciary duties limiting managers' incentives to take actions that favor equity over debt for distressed firms. Affected distressed firms respond by increasing equity issuance and reducing risk. It is possible that managers avoid seeking shareholder approval and issue privately to satisfy fiduciary duties to debt holders that equity holders would not approve of. As a result, shareholder value would decrease but debt value would increase enough to so as maintain or increase total firm value (i.e., sum of the market values of debt and equity).

Ideally, announcement day returns for debt and equity would help measure the total firm value created from the private placement. It is, however, difficult to measure how much

creditors benefit from the private placement because only sparse market debt data are available for firms that issue privately in my database. As an alternative, I test the Fiduciary Duty Hypothesis by looking at equity market returns and firm characteristics as in the previous sections. The Fiduciary Duties Hypothesis predictions are combinatory predictions of the Misalignment Hypothesis and Costly Approval Hypothesis 1.

Market response of equity is predicted to have similar patterns as in MH, because fiduciary duties to creditors are still misaligned with equity holders' best interests. On the other hand, debt value needs to increase enough to overcome the decrease in equity value, which could be tested by looking at whether firms are more distressed or in need of immediate financing when avoiding seeking approval, similar to the predictions of CAH1. The Fiduciary Duties Hypothesis would predict that managers would avoid seeking approval more often when firms are more distressed, have less cash holdings, and mention debt-related use of proceeds more often, and debt covenants are triggered. Most notably, among these variables, debt covenant violations should strongly affect managers' action towards creditors. Roberts and Sufi (2009) show that after covenants are triggered, the control rights go to creditors and the firm's financial policy would be more aligned towards creditors. Therefore, managers would avoid seeking approval more often when debt covenants are violated.

The market prediction of MH, supported in earlier sections, also supports half of the predictions of the Fiduciary Duties Hypothesis. The predictions of CAH1, however, was not supported in previous sections, suggesting that the Fiduciary Duties Hypothesis should also be rejected. The debt of distressed firms would benefit more from the private placements, giving managers a good reason to take the side of debt holders. I find, however, that firms that are less distressed are more likely to avoid seeking approval as shown in Table 4. Moreover, I do not find support for the effect of covenant violations. The signs of the coefficients for debt covenants are mixed depending on the sample range, and all coefficients are statistically insignificant as shown in Table 4. In all, the predictions of the Fiduciary Duties Hypothesis are not well supported by data.

Uncertainty Hypothesis:

Managers avoid seeking shareholder approval because of uncertainty in the prospects of the company.

The Uncertainty Hypothesis posits that managers may avoid seeking approval because of uncertainty in the company's current or future prospects. Uncertainty can make it difficult for even sophisticated shareholders to discern whether or not a private placement is in their best interests. Since managers do not want to risk the chance of the shareholder approval being rejected, managers might avoid seeking approval. The Uncertainty Hypothesis is similar to CAH2 in that the managers avoid seeking approval because of the possibility that the approval is falsely rejected even though the private placement is in the best interests of shareholders.

I test the hypothesis by using the volatility in stock prices prior to the private placement as the proxy for uncertainty in the prospects of the company. I use $SIGMA$, which is the annualized 3-month daily return standard deviation stock volatility.[42] Replacing CHS in regressions (1), (3), and (5) of Table 4 by $SIGMA$ results in statistically significant coefficients of -1.42 (t-stat $= -3.15$), -1.01 (t-stat $= -3.15$), and -0.83 (t-stat $= -3.50$), respectively.[43] These results suggest that equity of firms that avoid seeking approval are less volatile than firms that gain approval. The uncertainty is higher for the latter firms. This result is the opposite of the predictions of the Uncertainty Hypothesis, which leads to the rejection of the hypothesis.

7. Robustness Check: Logit Regression

In this section, I check robustness of the logit regression presented in Table 4. In particular, I discuss the pros and cons of using different specifications for sophisticated ownership, and

[42] See Appendix B for the detailed definition of the measure.

[43] I replace the CHS distress measure by $SIGMA$ in the regressions because $SIGMA$ is included in the distress measure and can cause multicollinearity issues. Including both $SIGMA$ and CHS in all three regressions result in negative but statistically insignificant coefficients for $SIGMA$, while CHS has negative and statistically significant coefficients as before.

rerun the logit regressions using these specifications. I also look at dispersion in institutional ownership and board characteristics as robustness check.

7.1. Alternative Specifications for Sophisticated Ownership

I first discuss three concerns that might arise on the specification of ownership variables used to test Costly Approval Hypothesis 2 (CAH2) and Misalignment Hypothesis (MH). The first concern is that ownership variables might have multicollinearity issues. Managerial and active institutional ownership variables were used to test MH, while sophisticated investors (sum of managerial and institutional ownership) holding more than majority shares ($I_{Sophisticated\ Ownership>50\%}$) variable was used to test CAH2. Including these variables in the same regression might cause multicollinearity problems.[44] I argue, however, that not controlling for sophisticated ownership makes the interpretation of managerial and active institutional ownership unclear as proxies for only better governance. This is because higher (lower) managerial and active institutional ownership would also contribute to higher (lower) sophisticated ownership, decreasing the cost of falsely rejecting a value increasing placement. Thus, higher (lower) managerial or active institutional ownership of firms that avoid seeking approval can be interpreted as rejecting (accepting) both MH and CAH2 at the same time. In terms of statistical estimation, if either MH or CAH2 is true and the other is false, the prediction of one hypothesis can be countered by the rejection of the other hypothesis, resulting in insignificant coefficients. Therefore, controlling for sophisticated ownership is important for the statistical inference and interpretation of managerial and active institutional ownership despite possible multicollinearity issues.

The second concern is that sophisticated ownership might be interpreted as a proxy for better corporate governance (MH), rather than for CAH2. Most of sophisticated ownership consists of institutional investors,[45] and institutional investors might be argued as a proxy for better

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[44] $I_{Sophisticated\ Ownership>50\%}$ has a correlation of 0.21 with managerial ownership and 0.39 with active institutional ownership.

[45] The average sophisticated ownership is 19.35%, consisting of 16.55% institutional ownership, and 2.81% managerial ownership in Table 1.

corporate governance.[46] In this case, simply using sophisticated ownership without including managerial or active institutional ownership would make the interpretation of sophisticated ownership unclear: more sophisticated ownership for firms that avoid seeking approval can be interpreted as better governance (rejection of MH), while it could also be interpreted as decreasing the cost of false disapproval (rejection of CAH2). Controlling for managerial and active institutional ownership, however, would make other sophisticated investors interpreted as investors who are passive in improving governance, but still sophisticated enough to correctly vote for value increasing placements. Therefore, controlling for managerial and active institutional investors also provides a cleaner interpretation of sophisticated ownership as a proxy for CAH2.

The final concern is that a continuous variable might be a better specification than the originally used threshold variable, $I_{Sophisticated\ Ownership > 50\%}$. I use $I_{Sophisticated\ Ownership > 50\%}$ to test CAH2 in the original specification because it seems to be a cleaner measure than sophisticated ownership for two reasons. Firstly, the discrete variable, $I_{Sophisticated\ Ownership > 50\%}$ should make a clear difference for the cost argued in CAH2, because it would eliminate the chance of false rejection of a placement even when all unsophisticated shareholders vote incorrectly. Secondly, the indicator function and the threshold at 50% would decrease the chance of possible multicollinearity with managerial and active institutional ownership variables as discussed in the first concern.[47] On the other hand, using a continuous variable instead of $I_{Sophisticated\ Ownership > 50\%}$ also has its benefits. A continuous variable as a proxy for CAH2 would help increase the variation in decrease of the cost related to CAH2, while it would also help increase the control for the incremental contribution that managerial and active institutional ownership makes on the sophisticated ownership. I show the results of substituting $I_{Sophisticated\ Ownership > 50\%}$ in turn with $I_{Inst.\ Ownership > 50\%}$, sophisticated ownership, institutional ownership, and non-active institutional ownership to show the effect of using alternative specifications to address these

[46] See Chen, Harford, and Li (2007) for a survey of papers that argue that total institutional investors do, or do not exert influence on managers. Chen, Harford, and Li (2007) argue that total institutional ownership is not a good proxy to measure better governance, consistent with the argument in my paper.

[47] Replacing $I_{Sophisticated\ Ownership > 50\%}$ with sophisticated ownership increases the correlation with managerial ownership from 0.21 to 0.31, and increases the correlation with active institutional ownership from 0.39 to 0.53.

three concerns.

I rerun the logit regressions predicting privately issued equity avoiding seeking shareholder approval by issuing less than 20% of existing shares as in Table 4. I include all variables as in regression (1), but only report coefficient for $I_{Sophisticated\ Ownership>50\%}$, managerial ownership, active institutional ownership, and additional alternative specifications. The results are reported in Table 10. Regression (1) is the baseline regression which is the same as regression (1) of Table 4. In regression (2), I replace $I_{Sophisticated\ Ownership>50\%}$ with the portion of institutional ownership with majority shares ($I_{Inst.\ Ownership>50\%}$), which does not control the contribution that managerial ownership makes on lowering the cost argued in CAH2. The coefficient on managerial ownership becomes statistically insignificant, while the coefficient for $I_{Inst.\ Ownership>50\%}$ is still statistically significant at the 10% level, rejecting CAH2. The statistical insignificance results from not properly controlling sophisticated ownership, as argued in the first concern.

In regression (3), I replace $I_{Sophisticated\ Ownership>50\%}$ with the continuous variable, sophisticated ownership. We observe that sophisticated ownership has statistically significant coefficient of 0.06 (t-stat $= 3.54$), while both managerial and active institutional ownerships have statistically significant negative coefficients. This result makes the argument for MH even stronger than that of regression (1). This stronger result could be viewed as a result of better controlling for the contribution towards sophisticated ownership using a continuous variable. But, one might also argue that this statistical significance is a result of multicollinearity as discussed as the concern of using a continuous variable. Therefore, I report the conservative result of using $I_{Sophisticated\ Ownership>50\%}$ in the original logit regression in Table 4.

In regressions (4) and (5), I replace sophisticated ownership with institutional ownership (i.e., sophisticated ownership excluding managerial ownership) and non-active institutional ownership (i.e., institutional ownership excluding active institutional ownership), respectively. In regression (4), we observe that managerial ownership becomes statistically insignificant, while active institutional ownership and institutional ownership are still statistically significant. Moreover, the negative coefficient of active institutional ownership also becomes statistically

insignificant, in regression (5). As discussed in the first discussion, these patterns show that properly controlling for the contribution made towards decreasing the chance of falsely disapproving a placement, is important for the statistical estimation of managerial and active institutional ownership coefficients.

The coefficient for non-active institutional ownership is still statistically significant at the 1% level (0.06 [t-stat = 3.54]) in regression (5). This coefficient and its t-statistic are the same as those of sophisticated and institutional ownership in regression (3) and (4), respectively.[48] Thus, the positive coefficient for sophisticated and institutional ownership is driven mainly by non-active institutional investors. Therefore, the second concern of sophisticated ownership as a proxy for better governance is not justified, and CAH2 is robustly rejected.

Overall, regressions (1) through (5) show that controlling for decrease in the cost associated with CAH2 is important for the statistical inference and interpretation of managerial or active institutional ownership as proxies for better corporate governance. Also, the regressions show that sophisticated investors is correctly a proxy for CAH2, rather than a proxy for better governance. Finally, using the continuous variable of sophisticated ownership instead of the discrete variable ($I_{Sophisticated\ Ownership>50\%}$) makes my results even stronger, but suffers from possible multicollinearity issues.

7.2. Institutional Ownership Dispersion

Next, I include variables that could be relevant for testing whether the investor dispersion could affect the decision to avoid seeking shareholder approval. Contacting and convincing too many institutional investors for approval could be a difficult task for managers. Therefore, I proxy for this difficulty by using the Herfindahl-Hirschman Index of institutional ownership (Inst. Ownership HHI) to estimate investor dispersion.[49] I include sophisticated shares to

[48]Non-active institutional investors have a correlation of 0.95 with institutional investors, while active-institutional investors have a correlation of 0.57 with institutional ownership. Sophisticated ownership, institutional ownership, and non-active institutional ownership cannot be included in the same logit regression due to multicollinearity.

[49]Replacing institutional ownership HHI by the number of institutional investors also results in statistically insignificant coefficients of -0.01 (t-stat = -0.65).

control for the voting power of sophisticated ownership. This hypothesis would predict negative coefficients for both institutional ownership HHI. I find statistically insignificant coefficients of -0.20 (t-stat $= -0.34$) for institutional ownership HHI in regression (6). This result shows that investors are not necessarily too disperse that firms need to avoid seeking approval.

7.3. Liminted Sample: Board Characteristics and G-Inde

Last, I include board of director characteristics and G-Index to proxy for better corporate governance using the limited sample. In particular, I include an indicator function ($I_{CEO-Chairman}$) that is one if the CEO is also the chairman of the board of directors, and zero otherwise. I also include the portion of independent directors on the board of directors.[50] MH predicts a positive coefficient for $I_{CEO-Chairman}$ and negative coefficients for the portion of independent directors. However, data availability is a problem for this specification. I can match less than 15% of the original sample observations with board information, although I have merged databases from both Corporate Library and Risk Metrics database. I could only run the logit regression for the wider range from 10% to 30%, because for smaller ranges all matched observations of CEO being chairmen are distributed below the 20% threshold, perfectly predicting avoidance. In any case, the coefficient for $I_{CEO-Chairman}$ is positive and statistically significant at the 10% level for the 10% to 30% sample in regression (7). This result suggests that firms that avoid seeking shareholder approval have weaker corporate governance, thus consistent with MH. The sample size, however, is reduced from 1,390 observations to 177, making it difficult to generalize the results to the original sample level.

I include the Governance Index (G-Index) as a proxy for better governance in regression (8). I have even less matches (91 observations) than board characteristics, and the coefficient for the G-Index is statististically insignificant. Again, it is difficult to generalize these results to the original sample level.

[50] Core, Holthausen, and Larcker (1999) and Goyal and Park (2002) provide examples where CEO being the chairman of the board indicates bad governance. Weisbach (1988) and Brickley, Coles, and Terry (1994) provide examples where more independent board indicates better corporate governance.

8. Conclusion

This paper provides empirical evidence that many firms that issue privately may have motivations that are not in the best interests of shareholders. This paper uses the 20% rule as a novel identification to study agency problem in private placements. The paper finds that many managers avoid seeking shareholder approval by manipulating the issuance fraction to be just below the threshold. Using the two groups that form around the threshold, I further find that both announcement day return patterns and firm characteristics are consistent with the Misalignment Hypothesis that states that managers avoid seeking approval due to misalignment of interests with shareholders.

As for future research, the paper leaves open the question of whether the 20% threshold in the United States is too high compared to other countries. Most European and Asian companies require rights offerings before the manager seeks outside funding that might dilute existing shareholders. Although the speedy procedure of private issuances in the United States has its benefits, my paper suggests that the high threshold required for shareholder approval may have been abused by many managers.

References

Aghion, P., P. Bolton, 1992. An Incomplete Contracts Approach to Financial Contracting. The Review of Economic Studies 59(3), 473–494.

Almazan, A., J. C. Hartzell, L. T. Starks, 2005. Active Institutional Shareholders and Costs of Monitoring: Evidence from Executive Compensation. Financial Management 34(4), 5–34.

Arena, M. P., S. P. Ferris, 2007. When managers bypass shareholder approval of board appointments: Evidence from the private security market. Journal of Corporate Finance 13(4), 485–510.

Baker, M., J. Wurgler, 2002. Market Timing and Capital Structure. Journal of Finance 57(1), 1–32.

Barclay, M. J., C. G. Holderness, D. P. Sheehan, 2007. Private placements and managerial entrenchment. Journal of Corporate Finance 13(4), 461–484.

Becker, B., P. Stromberg, 2012. Fiduciary Duties and Equity-debtholder Conflicts. Review of Financial Studies 25(6), 1931–1969.

Brickley, J. A., J. L. Coles, R. L. Terry, 1994. Outside directors and the adoption of poison pills. Journal of Financial Economics 35(3), 371 – 390.

Brickley, J. A., R. C. Lease, C. J. Smith, 1988. Ownership structure and voting on antitakeover amendments. Journal of Financial Economics 20(1-2), 267–291.

Brophy, D. J., P. P. Ouimet, C. Sialm, 2009. Hedge Funds as Investors of Last Resort?. Review of Financial Studies 22(2), 541–574.

Campbell, J. Y., J. Hilscher, J. Szilagyi, 2008. In Search of Distress Risk. Journal of Finance 63(6), 2899–2939.

Carhart, M. M., 1997. On Persistence in Mutual Fund Performance. Journal of Finance 52(1), 57–82.

Chaplinsky, S., D. Haushalter, 2010. Financing under extreme risk: Contract terms and returns to private investments in public equity. Review of Financial Studies 23(7), 2789–2820.

Chen, X., J. Harford, K. Li, 2007. Monitoring: Which institutions matter?. Journal of Financial Economics 86(2), 279–305.

Cohen, R. B., C. Polk, T. Vuolteenaho, 2003. The value spread. Journal of Finance 58(2), 609–642.

Core, J. E., R. W. Holthausen, D. F. Larcker, 1999. Corporate governance, chief executive officer compensation, and firm performance. Journal of Financial Economics 51(3), 371 – 406.

Cuñat, V., M. Gine, M. Guadalupe, 2012. The Vote Is Cast: The Effect of Corporate Governance on Shareholder Value. The Journal of Finance 67(5), 1943–1977.

DeAngelo, H., L. DeAngelo, R. M. Stulz, 2010. Seasoned equity offerings, market timing, and the corporate lifecycle. Journal of Financial Economics 95(3), 275–295.

DeAngelo, H., L. DeAngelo, K. H. Wruck, 2002. Asset liquidity, debt covenants, and managerial discretion in financial distress: The collapse of L.A. Gear. Journal of Financial Economics 64(1), 3–34.

Dewatripont, M., J. Tirole, 1994. A Theory of Debt and Equity: Diversity of Securities and Manager-Shareholder Congruence. The Quarterly Journal of Economics 109(4), 1027–1054.

Gilson, S. C., 1989. Management turnover and financial distress. Journal of Financial Economics 25(2), 241–262.

Gompers, P., J. Ishii, A. Metrick, 2003. Corporate governance and equity prices. The Quarterly Journal of Economics 118(1), 107–155.

Gormley, T. A., D. A. Matsa, 2011. Growing Out of Trouble? Corporate Responses to Liability Risk. Review of Financial Studies 24(8), 2781–2821.

Goyal, V. K., C. W. Park, 2002. Board leadership structure and {CEO} turnover. Journal of Corporate Finance 8(1), 49 – 66.

Grossman, S. J., O. D. Hart, 1982. Corporate Financial Structure and Managerial Incentives. in J. J. McCall (ed.): *Economics of Information and Uncertainty* (University of Chicago Press), 107–140.

Hart, O., J. Moore, 1995. Debt and Seniority: An Analysis of the Role of Hard Claims in Constraining Management. American Economic Review 85(3), 567–85.

Hertzel, M. G., R. L. Smith, 1993. Market discounts and shareholder gains for placing equity privately. Journal of Finance 48(2), 459–485.

Jensen, M. C., 1989. Eclipse of the Public Corporation. Harvard Business Review 67(October 1989), 61–74.

Jensen, M. C., W. H. Meckling, 1976. Theory of the firm: Managerial behavior, agency costs and ownership structure. Journal of Financial Economics 3(4), 305–360.

Jung, K., Y.-C. Kim, R. M. Stulz, 1996. Timing, investment opportunities, managerial discretion, and the security issue decision. Journal of Financial Economics 42(2), 159–185.

Keys, B. J., T. Mukherjee, A. Seru, V. Vig, 2010. Did Securitization Lead to Lax Screening? Evidence from Subprime Loans. The Quarterly Journal of Economics 125(1), 307–362.

Kim, W., M. S. Weisbach, 2008. Motivations for public equity offers: An international perspective. Journal of Financial Economics 87(2), 281–307.

Listokin, Y., 2008. Management Always Wins the Close Ones. American Law and Economics Review 10(2), 159–184.

Myers, S. C., 1977. Determinants of corporate borrowing. Journal of Financial Economics 5(2), 147–175.

Ohlson, J. A., 1980. Financial ratios and the probabilistic prediction of bankruptcy. Journal of Accounting Research 18(1), 109–131.

Park, J. L., 2013. Equity issuance and returns to distressed firms. Working paper. Korea University, Seoul.

Roberts, M. R., A. Sufi, 2009. Control Rights and Capital Structure: An Empirical Investigation. Journal of Finance 64(4), 1657–1695.

Shumway, T., 1997. The delisting bias in CRSP Data. Journal of Finance 52(1), 327–340.

Shumway, T., V. A. Warther, 1999. The delisting bias in CRSP's Nasdaq data and its implications for the size Effect. Journal of Finance 54(6), 2361–2379.

Weisbach, M. S., 1988. Outside directors and CEO turnover. Journal of Financial Economics 20(0), 431 – 460.

Wruck, K. H., 1989. Equity ownership concentration and firm value: Evidence from private equity financings. Journal of Financial Economics 23(1), 3–28.

Wu, Y., 2004. The choice of equity-selling mechanisms. Journal of Financial Economics 74(1), 93–119.

Table 1: Summary Statistics

The table presents summary statistics of discounted common equity issuance, their issuer, and investor characteristics. Column (1) summarizes the full discounted sample of issuance fractions from 0% to 40%. Column (2) to (7) summarize the samples below (even columns) and above (odd columns) the 20% threshold from 17.5% to 22.5%, 15% to 25%, and 10% to 30% issuance fraction. Size is market equity measured in 100 millions of dollars winsorized above and below at the 1% level, and *MB* is the market-to-book measure. *TLMTA, NIMTAAVG,* and *CASHMTA* are total liabilities, geometrically decreasing average of quarterly net income, and cash plus short-term investments, respectively, over market equity plus total liabilities. *CHS* is the distress measure from Campbell, Hilscher, and Szilagyi (2008). Distress$_{High}$ is an indicator functions that is one if the firm is in the highest distress quartile, and zero otherwise. $I_{Covenant\ Violation}$ is an indicator function that is one if debt covenants are triggered, and zero otherwise. Managerial Ownerships is the proportion of managerial ownership. Active Inst. Ownership is the institutional ownership by active institutions (i.e., institutions classified as independent investment advisors or investment companies) and Passive Inst. Ownership is the ownership by non-active institutions. Inst. Ownership and Sophisticated Ownership are the proportion of institutional ownership (both active and passive), and managerial plus institutional ownerships, respectively. $I_{Inst.\ Ownership>50\%}$ and $I_{Sophisticated\ Ownership>50\%}$ are indicator functions that are one if Inst. Ownership and Sophisticated Ownership are, respectively, more than 50% of existing shares. Discount is the difference in issuance price relative to the price on the day previous to the close of the placement contract. Fraction placed is the amount issued calculated to apply the 20% rule. Use of proceeds is divided into debt-related, acquisition, and specific use, which are denoted by indicator functions I_{Debt}, $I_{Acquisition}$, and $I_{Specific}$, respectively. Number of Buyers is the number of investors in the private placement. $I_{One\ Buyer}$ is an indicator function that is one if the number of buyers is one, and zero otherwise. $I_{Board\ Representation}$ is an indicator function that is one if the placement investors achieve a board representation, and zero otherwise. $I_{Strategic\ Alliance}$ is an indicator function that is one if the private placement is part of a strategic alliance between the investor and the placement company. $I_{CEO-Chairman}$ is an indicator function that is one if the chairman of the board of directors is also the CEO of the company, and zero otherwise. Independent Directors is the proportion of independent directors on the board of directors. *G*-Index is the governance index from Gompers, Ishii, and Metrick (2003). The mean differences of characteristics below and above the 20% fraction are presented with statistical significance at the 10%, 5%, and 1% levels which are denoted by *, **, and ***, respectively.

Mean \ Range (%)	0–40	17.5%–22.5%			15%–25%			10%–30%		
	Full	<20%	20%≦	Diff	<20%	20%≦	Diff	<20%	20%≦	Diff
	(1)	(2)	(3)	(2)-(3)	(4)	(5)	(4)-(5)	(6)	(7)	(6)-(7)
Firm Characteristics										
Size (100MM)	2.94	1.48	1.66		1.66	1.99		2.19	1.79	
MB	3.61	3.37	3.57		3.45	3.61		3.52	3.57	
TLMTA (%)	21.91	22.75	20.66		22.84	19.82		22.04	20.25	
NIMTAAVG (%)	-2.43	-2.82	-3.70	*	-2.73	-3.49	***	-2.58	-3.70	***
CASHMTA (%)	9.40	12.17	10.66		11.57	10.63		10.41	10.73	
Distress										
CHS	-6.70	−6.67	-6.24	***	-6.64	-6.25	***	-6.69	-6.25	***
$Distress_{High}$	0.25	0.26	0.41	**	0.28	0.42	***	0.24	0.43	***
$I_{Covenant\ Violation}$	0.06	0.08	0.05		0.07	0.06		0.06	0.08	
Ownership Information										
Managerial Ownership (%)	2.88	2.65	3.27		3.11	2.58		2.86	2.33	
Active Inst. Ownership (%)	3.31	3.16	2.84		3.22	2.48		3.13	2.29	***
Passive Inst. Ownership (%)	13.22	14.44	7.48	***	13.80	7.99	***	13.93	7.77	***
Inst. Ownership (%)	16.53	17.60	10.33	***	17.02	10.47	***	17.06	10.06	***
Sophisticated Ownership (%)	19.34	20.09	13.58	***	19.91	12.97	***	19.75	12.46	***
$I_{Inst.\ Ownership>50\%}$	0.07	0.08	0.01	***	0.07	0.01	***	0.08	0.02	***
$I_{Sophisticated\ Ownership>50\%}$	0.09	0.09	0.02	***	0.09	0.02	***	0.09	0.02	***
Placement Characteristics										
Discount	0.15	0.17	0.15		0.17	0.16		0.15	0.16	
Fraction Placed (%)	13.66	19.12	21.21	***	17.74	22.42	***	14.94	24.41	***
I_{Debt}	0.09	0.09	0.10		0.09	0.11		0.09	0.09	
$I_{Specific}$	0.42	0.47	0.45		0.47	0.45		0.47	0.46	
$I_{Acquisition}$	0.05	0.05	0.09		0.06	0.08		0.06	0.06	
Buyer Characteristics										
Number of Buyers	7.22	10.88	5.74	***	10.16	7.41	***	8.81	8.56	
$I_{One\ Buyer}$	0.35	0.21	0.33	**	0.23	0.29		0.26	0.28	
$I_{Board\ Representation}$	0.03	0.01	0.02		0.02	0.03		0.03	0.02	
$I_{Strategic\ Alliance}$	0.04	0.01	0.04		0.01	0.03		0.02	0.03	
Number of Observations	2,466	280	82	362	534	157	691	1,126	266	1,392
Limited Availability										
Board Characteristics										
$I_{CEO-Chairman}$	0.34	0.34	0	***	0.38	0	***	0.36	0.14	***
Independent Directors	0.59	0.60	0.64		0.61	0.58		0.60	0.56	
Number of Observations	391	41	5	46	74	14	88	148	29	177
G-Index	8.60	8.52	10.00		8.69	10.28		8.55	8.73	
Number of Observations	202	23	2	25	35	7	42	76	15	91

Table 2: Distribution Discontinuity at the 20% Threshold

The table reports estimates from ordinary least square regressions that regress the number of observations (Y_i) of discounted privately placed equity in bin i using different equity issuance bin sizes (0.1% and 0.25%) for different ranges (0% to 40%, 10% to 30%, 15% to 25%, and 17.5% to 22.5%). I estimate seventh-order polynomials on either side of the 20% threshold, allowing a discontinuity at 20%. The magnitude of the discontinuity, β, is estimated by the difference in these two smoothed functions evaluated at the cutoff. The data are re-centered such that the 20% threshold corresponds to 0 so that the polynomials are evaluated both at 0 just above and below the 20% threshold. This allows β to be interpreted as the magnitude of the discontinuity compared to the mean, α, which is the estimate for the bin just below the 20% threshold. The permutation test allows for a discontinuity at every 0.1% increment from the 1% to 39% range. The permutation test tests the null hypothesis that the discontinuity at 20% is the mean of the 380 possible discontinuities from the 1% to 39% range. The discounted common equity private placement observations are from PlacementTracker for the period from 1995 to 2010. The statistical significance at the 10%, 5% and 1% levels is denoted by *, **, and ***, respectively, and the t-statistics are presented in parentheses.

$$Y_i = \alpha + \beta I_{fraction \geqq 20\%} + \theta I_{fraction < 20\%} f(Fraction(i)) + \delta I_{fraction \geqq 20\%} f(Fraction(i)) + \epsilon_i$$

Range (%)	Bin Size	$I_{Fraction \geqslant 20\%}(\beta)$	t-statistics	No. Bins	Adj. R^2	Mean (α)
17.5–22.5	0.10	-43.***	(-11.01)	50	0.87	49.01
	0.25	-84.96***	(-8.42)	20	0.87	95.87
15–25	0.10	-43.46***	(-11.15)	100	0.77	47.83
	0.25	-84.39***	(-9.23)	40	0.83	93.69
10–30	0.10	-34.39***	(-11.29)	200	0.74	38.25
	0.25	-72.27***	(-8.85)	80	0.80	81.66
0–40	0.10	-25.42***	(-11.50)	400	0.73	29.13
	0.25	-56.68***	(-9.41)	160	0.83	66.15
Permutation test (t-statistic)						
0–40	0.10		(-127.93)	380		

Table 3: Announcement Day Returns and Dilution by Fraction of Equity Placed

The table presents announcement day returns, dilution, and discount-adjusted announcement day returns of discounted private placement issuing firms by bins of different issuance fraction. The cumulative abnormal return (CAR) is the sum of the ± 1 day announcement abnormal returns where returns are adjusted market returns. Dilution is the placement discount multiplied by the fraction of equity placed. Discount-adjusted CAR is the CAR adjusted for dilution by accounting for the discounts and fraction of equity placed. Panel A presents mean announcement day cumulative abnormal return (CAR), dilution, and discount-adjusted CAR for bins by fractions centered on the 20% shareholder approval threshold. Panel B presents the mean difference of the announcement day CAR, dilution, and discount-adjusted CAR between issuances above and below the 20% threshold. Returns and dilution are presented in percentages. The t-statistics are calculated using robust standard errors clustered at the firm level and the statistical significance at the 10%, 5%, and 1% levels is denoted by *, **, and ***, respectively. The t-statistics are presented in parentheses.

	Panel A. Mean Returns by Fraction of Equity Placed Centered On the 20% Threshold							
Mean \ Range (%)	0–20	10–20	15–20	17.5–20	20–22.5	20–25	20–30	20–40
CAR	-0.34	-0.81**	-1.00*	-1.30*	3.07**	2.73**	2.76***	2.52***
	(-1.26)	(-2.09)	(-1.76)	(-1.90)	(2.13)	(2.36)	(3.08)	(3.13)
Dilution	1.52***	2.17***	2.76***	3.06***	2.73***	3.04***	3.24***	4.05***
	(41.12)	(40.95)	(32.89)	(24.79)	(11.64)	(15.60)	(18.84)	(20.27)
Discount-adjusted *CAR*	1.13***	1.24***	1.60**	1.55*	6.42***	6.38***	6.67***	7.13***
	(3.76)	(2.78)	(2.41)	(1.88)	(3.57)	(4.45)	(6.06)	(6.97)
No. of Obs.	2,060	1,126	534	280	82	157	266	406

	Panel B. Difference in Returns for Issuances Below and Above the 20% Threshold							
Difference \ Range (%)	0–40	2.5–37.5	5–35	7.5–32.5	10–30	12.5–27.5	15–25	17.5–22.5
CAR	-2.85***	-2.58**	-2.67**	-3.30***	-3.57***	-3.39***	-3.73***	-4.37**
	(-3.43)	(-3.10)	(-3.04)	(-3.44)	(-3.67)	(-3.19)	(-2.93)	(-2.75)
Dilution	-2.52***	-2.14***	-1.84***	-1.45***	-1.06***	-0.79***	-0.29	0.33
	(-12.45)	(-11.24)	(-9.85)	(-7.97)	(-6.03)	(-4.08)	(-1.39)	(1.26)
Discount-adjusted *CAR*	-6.00***	-5.30***	-5.09***	-5.46***	-5.44***	-4.91***	-4.78***	-4.87**
	(-5.73)	(-5.08)	(-4.66)	(-4.62)	(-4.60)	(-3.80)	(-3.06)	(-2.48)
No. of Obs.	2,466	2,318	2,058	1,721	1,392	1,041	691	362

Table 4: Logit Regression of Firms Issuing Without Seeking Approval

The table presents the results of logit regressions predicting privately issued equity avoiding seeking shareholder approval by issuing less than 20% of existing shares. The lefthand-side variable is one if the fraction of equity placed is less than 20% (i.e., seeking shareholder approval is avoided), and zero otherwise. Observations with fraction of equity placed between 17.5% and 22.5% are used for regressions (1) and (2), between 15% and 25% for regressions (3) and (4), and between 10% and 30% for regressions (5) and (6). The righthand-side variables include measures of characteristics of the placement firm, investor, and the placement. Distress measure *CHS* is from Campbell, Hilscher, and Szilagyi (2008). Distress_{High} is an indicator function that is one if the firm is in the highest distress quartile, and zero otherwise. $I_{Covenant\ Violation}$ is an indicator function that is one if debt covenants are triggered, and zero otherwise. Debt-related, acquisition, and specific use of proceeds are denoted by indicator functions I_{Debt}, $I_{Acquisition}$, and $I_{Specific}$, respectively. $I_{Sophisticated\ Ownership>50\%}$ is an indicator function that is one if the sum of institutional ownership and managerial ownership is more than 50% of existing shares, and zero otherwise. Discount is the difference in issuance price relative to the day previous to the close of the placement contract. Managerial Ownership is the proportion of managerial ownership, and Active Inst. Ownership is the institutional ownership by active institutions. Number of Buyers is the number of investors in the private placement. $I_{Board\ Representation}$ is an indicator function that is one if the placement investors achieve a board representation and $I_{Strategic\ Alliance}$ is an indicator function that is one if the private placement is part of a strategic alliance between the investor and the placement company. $I_{One\ Buyer}$ is an indicator function that is one if the number of buyers is one. The statistical significance at the 10%, 5%, and 1% levels is denoted by *, **, and ***, respectively, and the *t*-statistics are presented in parentheses.

	$\text{Logit}(I_{\text{Fraction}(i)<20\%}) = \alpha + X_i B + \epsilon_i$					
Range (%)	17.5%–22.5%		15%–25%		10%–30%	
	(1)	(2)	(3)	(4)	(5)	(6)
Distress (*CHS*)	-0.54***		-0.41***		-0.43***	
	(-3.55)		(-4.05)		(-5.76)	
Distress_{High}		-0.82***		-0.64***		-0.81***
		(-2.77)		(-3.15)		(-5.38)
$I_{Covenant\ Violation}$	0.59	0.42	0.42	0.43	-0.03	-0.12
	(0.98)	(0.71)	(0.71)	(1.07)	(-0.12)	(-0.42)
I_{Debt}	-0.69	-0.43	-0.43	-0.66*	-0.25	-0.14
	(-1.31)	(-0.86)	(-0.86)	(-1.92)	(-0.95)	(-0.54)
$I_{Specific}$	-0.03	0.01	0.01	-0.02	-0.02	-0.01
	(-0.11)	(0.03)	(0.03)	(-0.10)	(-0.16)	(-0.06)
$I_{Sophisticated\ Ownership>50\%}$	1.77**	1.72**	1.72**	1.52**	1.34***	1.37***
	(2.04)	(2.00)	(2.00)	(2.35)	(2.77)	(2.86)
Discount	3.35**	2.98**	2.98**	1.58*	0.32	0.20
	(2.42)	(2.18)	(2.18)	(1.73)	(0.50)	(0.31)
Managerial Ownership	-0.03*	-0.03*	-0.03*	-0.00	0.01	0.01
	(-1.74)	(-1.79)	(-1.79)	(-0.24)	(0.48)	(0.58)
Active Inst. Ownership	0.00	0.00	0.00	0.01	0.02	0.02
	(0.08)	(0.05)	(0.05)	(0.48)	(1.06)	(1.18)
No. of Buyers	0.07***	0.07***	0.07***	0.02*	-0.01	-0.01
	(2.97)	(3.16)	(3.16)	(1.81)	(-1.06)	(-0.63)
$I_{Board\ Representation}$	0.26	0.19	0.19	0.03	0.38	0.37
	(0.26)	(0.20)	(0.20)	(0.04)	(0.76)	(0.76)
$I_{Strategic\ Alliance}$	-1.61	-1.62	-1.62	-1.03	-0.67	-0.70
	(-1.59)	(-1.64)	(-1.64)	(-1.54)	(-1.42)	(-1.49)
$I_{One\ Buyer}$	0.12	0.13	0.13	0.05	-0.12	-0.10
	(0.33)	(0.37)	(0.37)	(0.21)	(-0.66)	(-0.54)
$I_{Acquisition}$	-1.20**	-1.09*	-1.09*	-0.78**	-0.45	-0.39
	(-2.11)	(-1.95)	(-1.95)	(-2.04)	(-1.44)	(-1.26)
No. of Obs.	362	362	691	691	1,392	1,392
Pseudo R^2	0.13	0.12	0.06	0.05	0.04	0.04

Table 5: Rate of Delisting Following Private Placements

The table presents the proportion of firms that delist after a private placement. Panel A presents the proportion of delisting due to performance reasons and Panel B presents proportion of delisting due to other reasons. The periods of (0, +180), (0, +365), and (0, +730) denote the period of six months, one year, and two years after the private placement. The table presents the rate of delisting below and above the 20% fraction issued for ranges from 17.5% to 22.5%, 15% to 25%, and 10% to 30%. The mean differences of the rate of delisting below and above the 20% fraction are presented with statistical significance at the 10%, 5%, and 1% levels which are denoted by *, **, and ***, respectively. The t-statistics are calculated using robust standard errors clustered at the firm level and presented in parentheses.

Range (%)	17.5%–22.5%			15%–25%			10%–30%		
	<20%	20%≦	Diff	<20%	20%≦	Diff	<20%	20%≦	Diff
	Panel A. Percentage of Delisting due to Performance Reasons								
(0, +180)	0.36	4.88	-4.52***	0.56	3.82	-3.26**	0.53	3.01	-2.47***
	(1.00)	(2.06)	(-3.12)	(1.73)	(2.50)	(3.19)	(2.45)	(2.92)	(3.65)
(0, +365)	3.21	9.76	-6.54**	2.43	8.92	-6.48***	2.40	6.77	-4.37***
	(3.05)	(2.67)	(-2.48)	(3.64)	(3.65)	(-3.72)	(5.25)	(4.21)	(3.64)
(0, +730)	8.57	19.51	-10.94***	8.43	19.11	-10.68***	9.41	16.92	-7.50***
	(4.91)	(4.27)	(-2.80)	(6.81)	(5.89)	(-3.82)	(9.92)	(7.00)	(-3.55)
	Panel B. Percentage of Delisting due to Reasons Other than Performance								
(0, +180)	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.00	0.26
	(-)	(-)	(-)	(-)	(-)	(-)	(1.73)	(-)	(0.84)
(0, +365)	2.14	2.44	0.30	1.31	3.18	-1.87	1.51	2.25	-0.75
	(2.47)	(1.42)	(0.16)	(2.67)	(2.29)	(-1.58)	(4.15)	(2.49)	(-0.86)
(0, +730)	7.14	3.66	3.48	6.18	6.37	-0.19	5.60	5.26	0.33
	(4.60)	(1.75)	(1.14)	(5.61)	(2.77)	(-0.09)	(7.67)	(3.21)	(0.21)
No. of Obs.	280	82	362	534	157	691	1,126	266	1,392

Table 6: Discount-adjusted Announcement Returns

The table presents the ordinary least square regression of discount-adjusted announcement returns of firms on the decision to issue less than 20% both with ($I^{\perp}_{Fraction(i)<20}$) and without ($I_{Fraction(i)<20}$) Heckman self-selection correction. The first stage selection model is regression (2) of Table 4. Observations with fraction of equity placed between 17.5% and 20% are used for regressions (1) and (2), between 15% and 20% for (3) and (4), and between 10% and 20% for (5) and (6). The lefthand-side variable is the 3-day discount-adjusted announcement day cumulative abnormal return (CAR) in percentages where returns are adjusted market returns. The righthand-side variables include measures of characteristics of the firm and the issuance. Distress$_{High}$ is an indicator function that is one if the firms are in the highest distress quartile. $I_{Covenant\ Violation}$ is an indicator function that is one if debt covenants are triggered. Debt-related, acquisition, and specific use of proceeds are denoted by indicator functions I_{Debt}, $I_{Acquisition}$, and $I_{Specific}$, respectively. $I_{Sophisticated\ Ownership>50\%}$ is an indicator function that is one if the sum of institutional ownership and managerial ownership is more than 50% of existing shares. Discount is the difference in issuance price relative to the day previous to the close of the placement contract. Managerial Ownership is the proportion of managerial ownership, and Active Inst. Ownership is the institutional ownership by active institutions. Number of Buyers is the number of investors in the private placement. $I_{Board\ Representation}$ is an indicator function that is one if the placement investors achieve a board representation and $I_{Strategic\ Alliance}$ is an indicator function that is one if the private placement is part of a strategic alliance between the investor and the placement company. $I_{One\ Buyer}$ is an indicator function that is one if the number of buyers is one. The t-statistics are calculated using robust standard errors clustered at the firm level and are presented in parentheses. The statistical significance at the 10%, 5% and 1% levels is denoted by *, **, and ***, respectively.

	Discount-adjusted $CAR_i = \alpha + X_i B + \epsilon_i$					
Range (%)	17.5%–22.5%		15%–25%		10%–30%	
Self-selection Correction	No	Yes	No	Yes	No	Yes
	(1)	(2)	(3)	(4)	(5)	(6)
$I_{\text{Fraction}(i)<20\%}$	-5.26***		-4.43***		-5.09***	
	(-2.68)		(-2.84)		(-4.34)	
$I^{\perp}_{\text{Fraction}(i)<20\%}$		-5.08**		-4.35***		-5.05***
		(-2.57)		(-2.79)		(-4.31)
Distress$_{High}$	2.73	3.48*	3.90**	4.43**	2.35**	3.05***
	(1.50)	(1.87)	(2.24)	(2.57)	(2.08)	(2.72)
$I_{Covenant\ Violation}$	-3.33	-3.70	-2.72	-2.94	-1.98	-1.88
	(-0.84)	(-0.93)	(-0.97)	(-1.05)	(-1.11)	(-1.05)
I_{Debt}	1.44	1.75	0.31	0.70	0.42	0.53
	(0.65)	(0.79)	(0.16)	(0.37)	(0.35)	(0.45)
$I_{Specific}$	2.53	2.52	2.65*	2.65*	2.02**	2.04**
	(1.55)	(1.54)	(1.85)	(1.85)	(2.11)	(2.13)
$I_{Sophisticated\ Ownership>50\%}$	1.16	0.18	1.44	0.73	1.34	0.74
	(0.52)	(0.08)	(0.80)	(0.41)	(0.99)	(0.55)
Discount	21.62***	19.02**	12.64**	11.55*	8.58**	8.45**
	(2.84)	(2.55)	(2.09)	(1.92)	(2.02)	(1.99)
Managerial Ownership	0.03	0.05	0.10	0.11	0.05	0.04
	(0.27)	(0.53)	(1.20)	(1.22)	(0.71)	(0.65)
Active Inst. Ownership	-0.10	-0.10	-0.05	-0.06	-0.02	-0.03
	(-0.90)	(-0.91)	(-0.68)	(-0.79)	(-0.24)	(-0.37)
No. of Buyers	0.09	0.05	0.06	0.05	0.04	0.04
	(1.24)	(0.74)	(1.31)	(1.01)	(0.98)	(1.07)
$I_{Board\ Representation}$	15.31***	15.17***	15.98***	15.98***	9.52***	9.28***
	(2.82)	(2.80)	(4.03)	(4.02)	(3.65)	(3.56)
$I_{Strategic\ Alliance}$	0.36	2.21	6.44	7.43	3.21	3.79
	(0.08)	(0.49)	(1.37)	(1.58)	(1.33)	(1.57)
$I_{One\ Buyer}$	-1.78	-1.67	-0.24	-0.25	0.50	0.58
	(-0.88)	(-0.82)	(-0.16)	(-0.17)	(0.50)	(0.57)
$I_{Acquisition}$	0.41	1.43	-1.31	-0.80	0.06	0.33
	(0.20)	(0.68)	(-0.74)	(-0.46)	(0.04)	(0.23)
No. of Obs.	362	362	691	691	1,392	1,392
R^2	0.10	0.09	0.07	0.07	0.05	0.05

Table 7: Discount-adjusted Returns by Approval Seeking and Avoidance Group

The table presents the ordinary least square regression of discount-adjusted announcement returns of firms by firms that avoid seeking shareholder approval (i.e., fraction of discounted equity placed less than 20%, column (1) through (3)) and firms that seek shareholder approval (i.e., fraction of discounted equity placed more than 20%, column (4) through (6)). The lefthand-side variable is the 3-day discount-adjusted announcement day cumulative abnormal return (*CAR)* where returns are adjusted market returns. The righthand-side variables include measures of characteristics of the firm and the issuance. Distress$_{High}$ is an indicator function that is one if the firms are in the highest distress quartile. $I_{Covenant\ Violation}$ is an indicator function if debt covenants are triggered. Debt-related, acquisition, and specific use of proceeds are denoted by indicator functions I_{Debt}, $I_{Acquisition}$, and $I_{Specific}$, respectively. $I_{Sophisticated\ Ownership>50\%}$ is an indicator function that is one if the sum of institutional ownership and managerial ownership is more than 50% of existing shares, and zero otherwise. Discount is the difference in issuance price relative to the day previous to the close of the placement contract. Managerial Ownership is the proportion of managerial ownership, and Active Inst. Ownership is the institutional ownership by active institutions. Number of Buyers is the number of investors in the private placement. $I_{Board\ Representation}$ is an indicator function that is one if the placement investors achieve a board representation and $I_{Strategic\ Alliance}$ is an indicator function that is one if the private placement is part of a strategic alliance between the investor and the placement company. $I_{One\ Buyer}$ is an indicator function that is one if the number of buyers is one. The t-statistics are calculated using robust standard errors clustered at the firm level and are presented in parentheses. The statistical significance at the 10%, 5% and 1% levels is denoted by *, **, and ***, respectively.

	Discount-adjusted $CAR_i = \alpha + X_iB + \epsilon_i$					
Range (%)	Avoidance Group			Approval Seeking Group		
	17.5%–20%	15%–20%	10%–20%	20%–22.5%	20%–25%	20%–30%
	(1)	(2)	(3)	(4)	(5)	(6)
Distress$_{High}$	2.12	3.16	2.51*	4.53	6.45*	2.41
	(1.06)	(1.55)	(1.95)	(0.97)	(1.97)	(1.05)
$I_{Covenant\ Violation}$	-4.37	-2.47	-0.90	4.57	-2.33	-4.70
	(-0.94)	(-0.85)	(-0.48)	(0.89)	(-0.28)	(-1.03)
I_{Debt}	1.95	0.70	0.77	-0.05	1.20	-1.22
	(0.86)	(0.35)	(0.62)	(-0.01)	(0.25)	(-0.35)
$I_{Specific}$	3.05*	2.70*	1.69*	4.43	3.64	3.45
	(1.66)	(1.75)	(1.65)	(1.02)	(0.97)	(1.40)
$I_{Sophisticated\ Ownership>50\%}$	-0.10	-0.07	-0.07	18.67	16.44*	19.21***
	(-0.05)	(-0.04)	(-0.05)	(1.19)	(1.90)	(3.26)
Discount	13.63	8.98	7.76	49.72***	28.39**	10.71
	(1.58)	(1.29)	(1.61)	(2.79)	(2.27)	(1.26)
Managerial Ownership	0.01	0.11	0.07	-0.14	0.00	-0.07
	(0.11)	(1.09)	(0.96)	(-0.57)	(0.01)	(-0.50)
Active Inst. Ownership	-0.07	-0.05	0.01	-0.09	-0.05	-0.07
	(-0.63)	(-0.56)	(0.11)	(-0.32)	(-0.25)	(-0.45)
No. of Buyers	0.07	0.07	0.02	0.12	-0.01	0.12
	(0.96)	(1.36)	(0.58)	(0.47)	(-0.06)	(1.05)
$I_{Board\ Representation}$	14.71**	14.47***	7.59***	18.11*	16.75*	15.06**
	(2.29)	(3.39)	(3.07)	(1.70)	(1.85)	(2.06)
$I_{Strategic\ Alliance}$	-1.30	-0.22	0.20	1.73	12.48	7.45
	(-0.44)	(-0.06)	(0.11)	(0.28)	(1.45)	(1.47)
$I_{One\ Buyer}$	-4.13*	-0.74	-0.12	4.35	0.58	2.41
	(-1.83)	(-0.45)	(-0.11)	(0.91)	(0.17)	(0.89)
$I_{Acquisition}$	0.55	-0.51	0.02	-0.69	-1.70	-0.50
	(0.19)	(-0.25)	(0.01)	(-0.19)	(-0.53)	(-0.14)
No. of Obs.	280	534	1,126	82	157	266
R^2	0.09	0.04	0.02	0.17	0.13	0.09

Table 8: Cash Holdings before and after Private Placement

The table presents actual and pro forma ratios of cash holdings before and after private placements. Cash holdings are measured by *CASHMTA*, which is constructed by cash plus short-term investments over market equity plus total liabilities. Panel A presents actual *CASHMTA* and Panel B presents excess *CASHMTA* for 1 quarter before, 4 quarters after, and 8 quarters after the private placement. Excess *CASHMTA* is measured by actual *CASHMTA* minus normal *CASHMTA*. Normal *CASHMTA* is estimated by first sorting all CRSP/COMPUSTAT firms into nine groups based on three equal sized groups based on book assets and three equal book-to-market ratios. Within each nine groups, normal *CASHMTA* is measured for the two-digit standard industrial classification as the median ratio among all firms in the industry for the given quarter. Panel C presents pro forma *CASHMTA* for 4 quarters after placement and percent of pro forma *CASHMTA* that are negative. Pro forma *CASHMTA* is the *CASHMTA* assuming that the company does not receive gross proceeds from the private placements given that other finance decisions are unchanged. The table presents cash holdings below and above the 20% fraction issued for ranges from 17.5% to 22.5%, 15% to 25%, and 10% to 30%. The mean differences of the rate of cash holdings below and above the 20% fraction are presented with statistical significance at the 10%, 5%, and 1% levels which are denoted by *, **, and ***, respectively. The t-statistics are calculated using robust standard errors clustered at the firm level and presented in parentheses.

	17.5%–22.5%			15%-25%			10%-30%		
	<20%	20%≦	Diff	<20%	20%≦	Diff	<20%	20%≦	Diff
	(1)	(2)	(1)-(2)	(3)	(4)	(3)-(4)	(5)	(6)	(5)-(6)
				Panel A. *CASHMTA*					
1 quarter before placement	12.17	10.66	1.51	11.57	10.63	0.94	10.41	10.73	-0.32
	(15.88)	(10.2)	(1.15)	(21.89)	(14.26)	(1.03)	(32.28)	(13.73)	(-0.38)
4 quarters after placement	16.33	11.63	4.71***	15.82	12.48	3.33***	13.76	12.37	1.40*
	(14.67)	(10.73)	(3.03)	(21.29)	(14.10)	(2.82)	(31.10)	(17.81)	(1.70)
8 quarters after placement	17.87	13.27	4.15**	17.18	13.57	3.60**	15.09	14.06	1.03
	(14.08)	(8.09)	(1.96)	(20.08)	(11.81)	(2.52)	(29.76)	(14.05)	(0.92)
				Panel B. Excess *CASHMTA*					
1 quarter before placement	1.28	0.27	1.01	0.68	0.62	0.62	-0.41	0.49	-0.91
	(1.87)	(0.24)	(0.75)	(1.38)	(0.07)	(0.67)	(-1.33)	(0.66)	(-1.12)
4 quarters after placement	5.45	1.24	4.21**	4.93	1.90	3.03**	2.93	2.13	0.81
	(4.99)	(1.02)	(2.57)	(6.86)	(2.01)	(2.56)	(6.67)	(2.98)	(0.96)
8 quarters after placement	6.99	3.33	3.65*	6.29	2.99	3.29**	4.26	3.82	0.44
	(5.81)	(2.01)	(1.78)	(7.59)	(2.68)	(2.38)	(8.54)	(3.96)	(0.41)
				Panel B. Pro forma *CASHMTA*					
4 quarters after placement	2.02	-0.15	2.16	2.78	-0.91	3.69***	2.63	-1.53	4.16***
	(1.93)	(-0.13)	(1.41)	(3.94)	(-0.83)	(2.84)	(6.24)	(-1.58)	(3.94)
% with pro forma *CASHMTA*<0	50.00	54.88	-4.87	46.07	57.32	-11.26**	43.87	57.89	-14.02***
4 quarters after placement	(16.70)	(9.93)	(-0.78)	(21.34)	(1.48)	(-2.35)	(29.65)	(19.09)	(-4.16)
No. of Obs.	280	82	362	534	157	691	1,126	266	1,392

Table 9: Pre-announcement and Post-announcement Day Returns

The table presents mean difference of cumulative abnormal returns (*CARs*) of discounted common equity private placement issuing firms below and above the 20% threshold by bins of different issuance fraction. Panel A presents the mean difference of one-month and one-week pre-announcement day cumulative abnormal returns between issuances below and above the 20% threshold. Panel B presents the mean difference for one-week, one-month, six-month, and one-year post-announcement day *CAR*s between issuances below and above the 20% threshold. The *CAR* is the sum of the abnormal returns where returns are adjusted market returns. Discounted common equity private placement observations are from PlacementTracker. The t-statistics are calculated using robust standard errors clustered at the firm level and are presented in parentheses. The statistical significance at the 10%, 5%, and 1% levels is denoted by *, **, and ***, respectively.

	Mean Difference of *CAR*s for Issuances Below and Above the 20% Threshold							
Range (%)	0–40	2.5–37.5	5–35	7.5–32.5	10–30	12.5–27.5	15–25	17.5–22.5
	Panel A. Pre-announcement *CAR*							
(–30, -2)	-2.94*	-3.05	-2.22	-1.95	-2.07	-1.44	0.06	-2.51
	(-1.74)	(-1.61)	(-1.13)	(-0.94)	(-0.89)	(-0.61)	(0.02)	(-0.71)
(–7, -2)	-0.89	-0.96	-0.82	-0.67	-0.31	0.23	0.73	-0.73
	(-0.96)	(-0.96)	(-0.78)	(-0.59)	(-0.25)	(0.22)	(0.55)	(0.42)
	Panel B. Post-announcement *CAR*							
(+2, +7)	0.07	0.20	0.14	0.14	-0.14	-0.09	-0.37	-0.70
	(0.12)	(0.31)	(0.20)	(0.19)	(-0.18)	(-0.10)	(-0.32)	(-0.47)
(+2, +30)	-1.18	-1.35	-1.00	-2.07	-3.06*	-3.98*	-3.60	-0.92
	(-0.83)	(-0.88)	(-0.64)	(-1.25)	(-1.68)	(-1.91)	(-1.46)	(-0.26)
(+2, +180)	1.31	2.30	1.61	-1.53	-1.50	0.42	1.10	-1.76
	(0.37)	(0.61)	(0.40)	(-0.35)	(-0.32)	(0.08)	(0.19)	(-0.21)
(+2, +365)	-4.37	-0.21	-0.68	-4.28	-4.49	-4.13	-1.59	-3.02
	(-0.90)	(-0.04)	(-0.13)	(-0.77)	(-0.74)	(-0.61)	(-0.21)	(-0.28)
No. of Obs.	2,466	2,318	2,058	1,721	1,392	1,041	691	362

Table 10: Robustness Check: Logit Regression of Firms Issuing Without Seeking Approval

The table presents the results of logit regressions predicting privately issued equity avoiding seeking shareholder approval by issuing less than 20% of existing shares. The lefthand-side variable is one if the fraction of equity placed is less than 20% (i.e., seeking shareholder approval is avoided), and zero otherwise. Observations with fraction of equity placed between 17.5% and 22.5% are used for regressions (1) through (6), and between 10% and 30% for regression (7) and (8). The righthand-side variables include measures of characteristics of the firm and the issuance. Managerial and Inst. Ownerships are the proportion of managerial and institutional ownerships, respectively. Sophisticated Ownership is the sum of managerial and institutional ownerships. $I_{Sophisticated\ Ownership>50\%}$ is an indicator function that is one if Sophisticated Ownership is more than 50% of existing shares, and zero otherwise. Active Inst. Ownership is the institutional ownership by active institutions (i.e., institutions classified as independent investment advisors or investment companies), and Non-active Inst. Ownership is institutional ownership of non-active institutions. $I_{Inst.\ Ownership>50\%}$ is an indicator function that is one if institutional ownership is more than 50%, and zero otherwise. Inst. Ownership HHI is the Herfindahl-Hirschman Index of institutional ownership. $I_{CEO-Chairman}$ is an indicator function that is one if the chairman of the board of directors is also the CEO of the company, and zero otherwise. Independent Directors is the proportion of independent directors on the board of directors. *G*-Index is the governance index from Gompers, Ishii, and Metrick (2003). All other variables in Table 4 Regression (1) are also included in the logit regressions as controls, but not reported in the table. The statistical significance at the 10%, 5%, and 1% levels is denoted by *, **, and ***, respectively, and the *t*-statistics are presented in parentheses.

	$\text{Logit}(I_{\text{Fraction}(i)<20\%,,}) = \alpha + X_i B + \epsilon_i$							
Range (%)	17.5%–22.5%						10%–30%	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$I_{Sophisticated\ Ownership>50\%}$	2.13**							
	(2.18)							
Managerial Ownership	-0.03*	-0.02	-0.07***	-0.01	-0.01	-0.06***	-0.06	0.34
	(-1.88)	(-1.04)	(-3.13)	(-0.53)	(-0.53)	(-2.84)	(-1.58)	(0.67)
Active Inst. Ownership	0.01	0.00	-0.06*	-0.06*	-0.00	-0.06*	-0.03	-0.16*
	(0.19)	(0.10)	(-1.85)	(-1.85)	(-0.08)	(-1.85)	(-0.70)	(-1.82)
$I_{Inst.\ Ownership>50\%}$		2.77**						
		(2.03)						
Sophisticated Ownership			0.06***			0.06***	0.03	0.09***
			(3.54)			(3.26)	(1.48)	(2.60)
Inst. Ownership				0.06***				
				(3.54)				
Non-active Inst. Ownership					0.06***			
					(3.54)			
Inst. Ownership HHI						-0.20		
						(-0.34)		
$I_{CEO-Chairman}$							1.43*	
							(1.95)	
Independent Directors							2.17	
							(1.27)	
G-Index								0.09
								(0.53)
No. of Obs.	362	362	362	362	362	362	177	91
Pseudo R^2	0.13	0.14	0.16	0.16	0.16	0.16	0.25	0.36

Figures

Figure 1: Distribution of Privately Issued Equity

The scatter plot presents common equity issuance by the fraction of equity placed and the premium/discount at issuance. The horizontal axis represents the fraction of newly placed shares to existing shares. The vertical axis represents the premium/discounts of issuance price of the private placement contract compared to market closing price on the day before the private placement contract. Histograms for each 0.25% width are presented toward the left and bottom of the scatter plot in percentages. The common equity issuance data are from the PlacementTracker database for the period from 1995 to 2010.

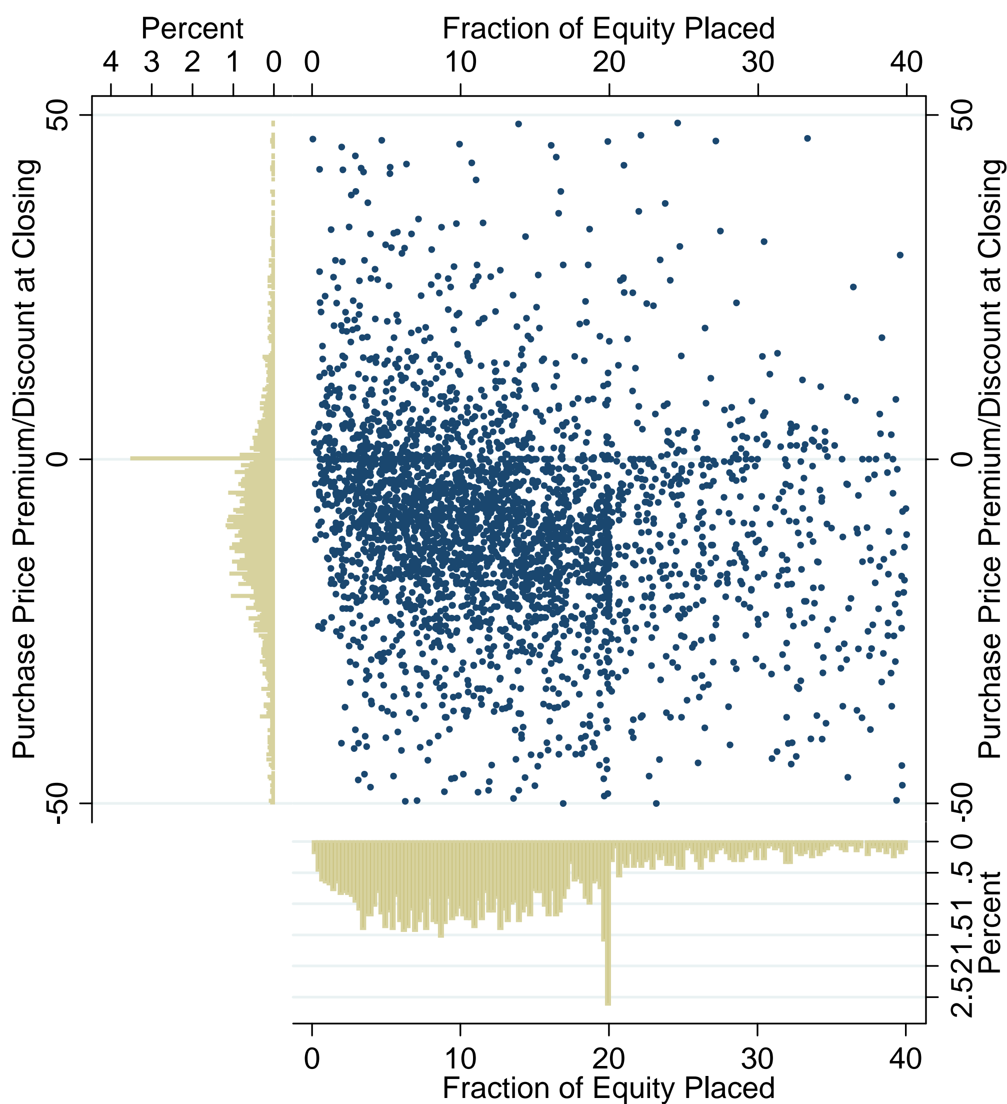


Figure 2: Distribution of Privately Issued Equity by Fraction of Equity Placed

The figure presents the cumulative distribution function and the histogram of discounted common equity issuance by the fraction of newly placed shares to existing shares. Histograms for each 0.25% width are presented in the bottom panel in percentages. The common equity issuance data are from the PlacementTracker database for the period from 1995 to 2010.

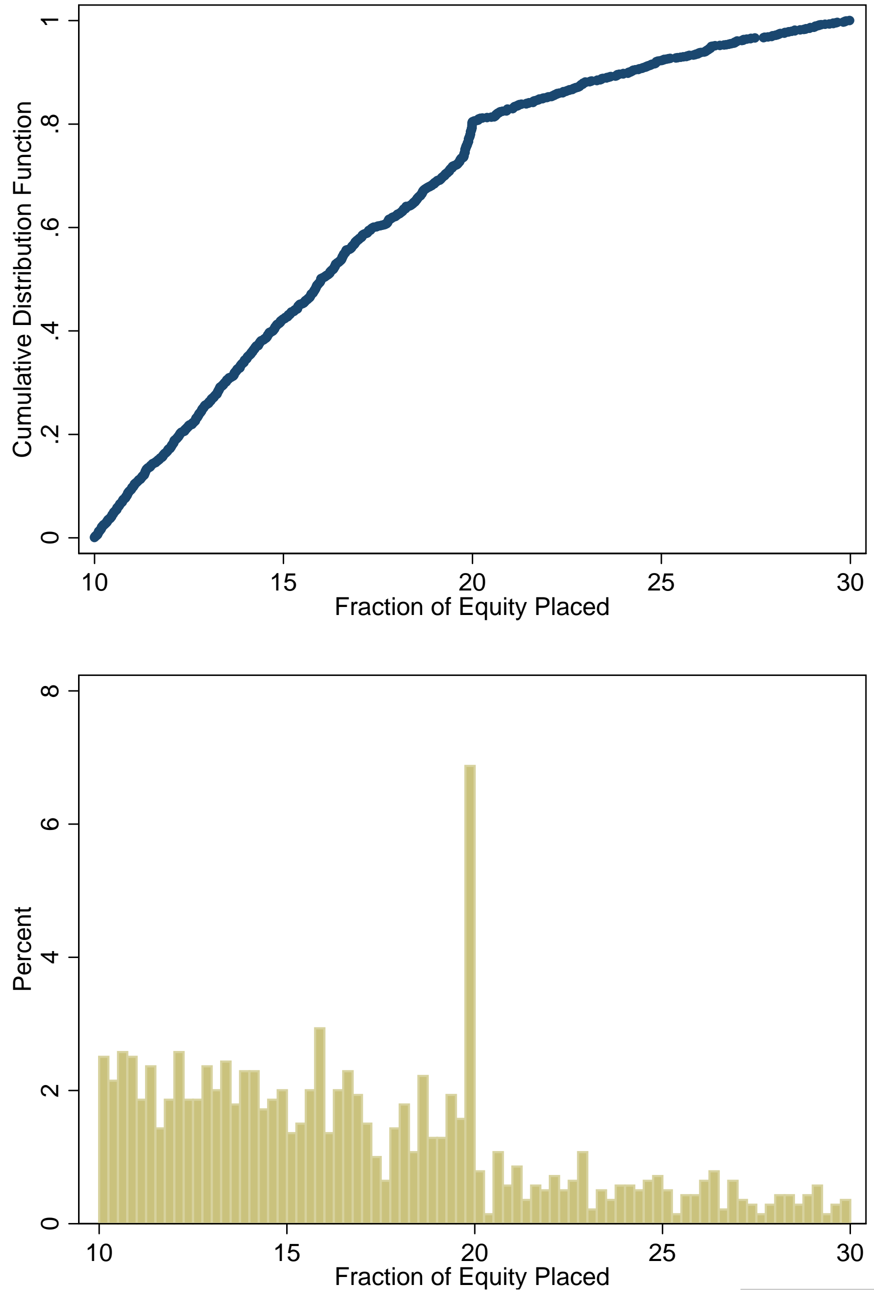
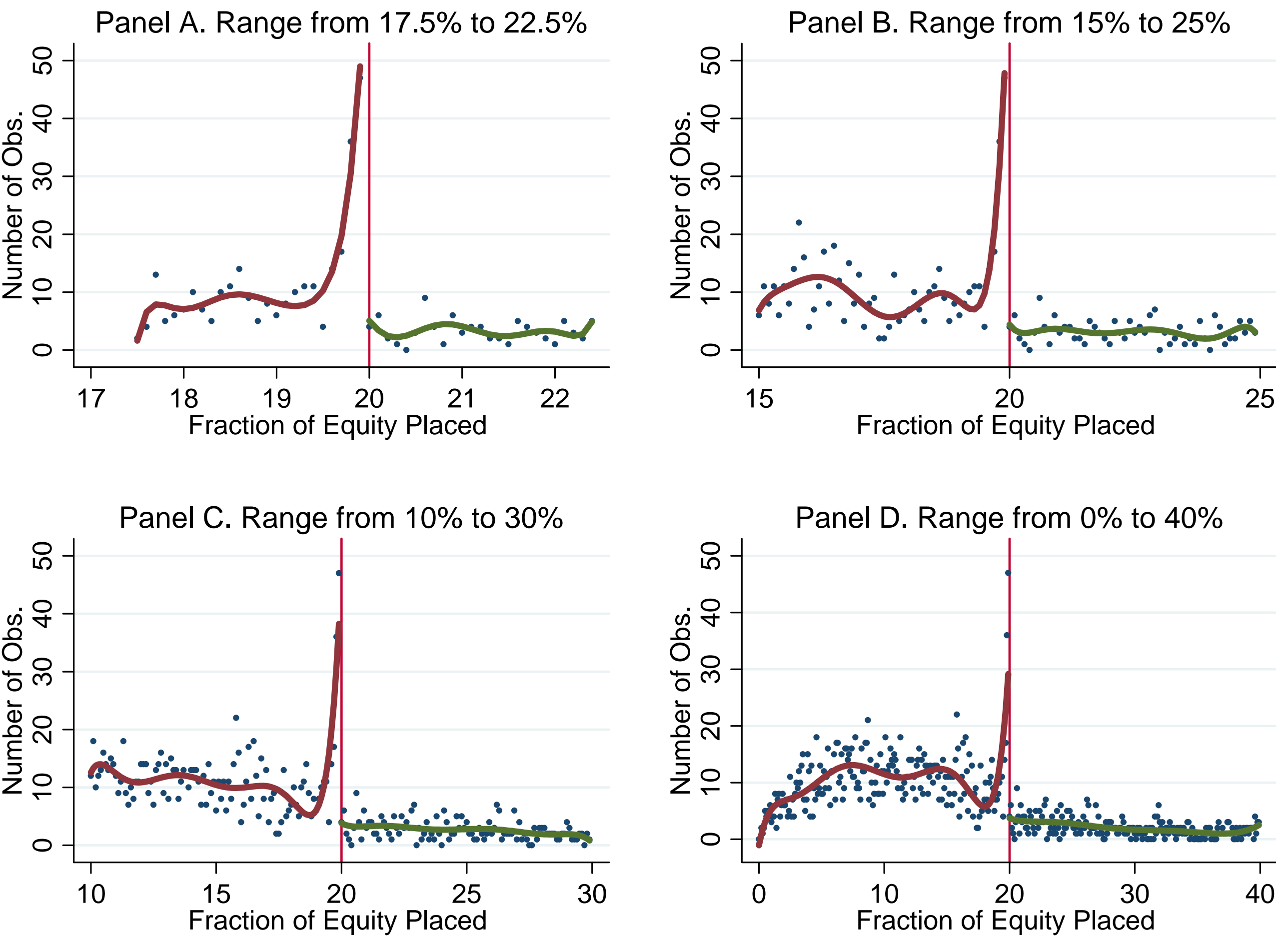


Figure 3: Number of Private Placement Observations by Fraction of Equity Placed

The figure presents the number of discounted privately placed equity by fraction of equity issued. The number of observations are counted in a 0.1% bin for different ranges (17.5% to 22.5% in Panel A, 15% to 25% in Panel B, 10% to 30% in Panel C, and 0% to 40% in Panel D). I plot the estimated distribution using a flexible seventh-order polynomial on either side of the 20% threshold for each range. Data are from the PlacementTracker database for discounted common equity issuance for the period from 1995 to 2010.

$$Y_i = \alpha + \beta I_{fraction \geqq 20\%} + \theta I_{fraction < 20\%} f(Fraction(i)) + \delta I_{fraction \geqq 20\%} f(Fraction(i)) + \epsilon_i$$



Appendices

A. Data Selection and Equity Issuance Fraction

To match the PlacementTracker database with unique permnos, I first match all types of private placements with the trading symbol at closing and the current six-digit cusip to the CRSP database each year-month from January 1995 to December 2010. I keep permno matches if the observations match either symbol or cusip, or if the observations have matches with both that agree. When I have multiple matches from either symbol or cusip, I use the permno that agrees with both, or the permno that matches the symbol. When I have multiple permnos that do not agree, I use the smallest permno. Finally, I recheck all matches by comparing company names from PlacementTracker against the matched company name from CRSP.

For the purposes of this study, I keep only common equity issuances, including the ones that have attached warrants (5,118 observations). The Frequently Asked Question ("FAQ") section on the NASDAQ website clarifies different situations in applying the shareholder approval rule and caculating the number of shares placed at a discount.

The treatment of warrants and aggregation of transactions are important in determining the number of shares placed at a discount. I follow the guidelines provided by NASDAQ to calculate the discount amount and the shares placed. Premiums and discounts are calculated relative to market price at closing. NASDAQ historically assigns a value of $0.125 over the warrant's exercise price to compare to market price. I include shares of warrants that can be exercised at less than $0.125 above the closing price.

NASDAQ might also look back six months to aggregate similar transactions to determine whether the 20% threshold has been triggered. But timing alone is not necessarily a determining factor, and there is no definitive time period as to whether transactions are aggregated. Generally, if there are no other linkage factors present, transactions more than six months apart would not be aggregated. Other considerations in the aggregation of issuances include whether the

company was already planning the subsequent transaction, and commonality of investors, contingencies between the issuances or transactions, commonality as to the use of the proceeds. When transactions are aggregated, the calculation of fraction of shares issued is based on the total shares outstanding on the closing of the first issuance.

Following this procedure, I aggregate discounted common equity shares that have been placed in the past six months to calculate the total shares of equity placed when the fraction placed is less than 20%. However, I use the non-aggregated fraction placed when calculating discount-adjusted abnormal returns. I drop common equity issuances with past discounted convertibles or preferred shares placed at sample selection because of the possibility of aggregation and the difficulty of calculating the aggregate fraction of equity placed from the convertibles (339 observations). Keeping these observations does not affect the main results of the paper.

To calculate the fraction of equity placed, I find the shares outstanding at the time of closing using the CRSP-adjusted COMPUSTAT quarterly database. I first use the number of shares outstanding from the COMPUSTAT quarterly database. I adjust the shares outstanding if there is an update in the number of shares from the CRSP daily database after the COMPUSTAT report date and before the closing.

Since many issuances are at fractions very close to the 20% threshold, there are possible errors due to additional shares placed between the last filing and the closing date. To be careful, I compare the calculated CRSP-adjusted COMPUSTAT shares outstanding with PlacementTracker. PlacementTracker collects shares outstanding data from the company's most recent 10-K or 10-Q file prior to the closing date. I also look at the first shares outstanding change from CRSP after the issuance and subtract the shares issued to generate shares outstanding before the issuance. I use the CRSP-adjusted COMPUSTAT quarterly database for the reported shares outstanding and calculation of fraction of equity placed. I then drop observations if the shareholder approval categorization in terms of the 20% threshold does not agree with the categorization calculated by PlacementTracker or CRSP share change (567 observations). Again, these observations do not affect my main results.

Additionally, I drop observations that PlacementTracker indicates as including secondary offerings, because these issuances do not count toward newly issued equity (29 observations). NASDAQ might require shareholder approval of private placements to insiders (NASDAQ Rule 5635 (c)). Therefore, I also drop shareholder approved issuances with issuance fraction below 20% (45 observations) and manager participating issuances (215 observations). These screens are for cautionary purposes and do not affect the main results of the paper.

I also drop observations that do not have CRSP/COMPUSTAT data to calculate accounting ratios for the distress measure (348 observations), observations that do not have ownership information (62 observations) and firms that issue more than 40% of existing shares (277 observations).

I end up with 3,253 total observations; among which 2,466 observations are discounted placements which are used for the analysis of my paper. Within the 2,466 observations I use subgroups by fraction of placement of 10% to 30% (1,392 observations), 15% to 25% (691 observations) and 17.5% to 22.5% (362 observations).

B. Constructing the *CHS* Measure

This section discusses the construction of the Campbell, Hilscher, and Szilagyi (2008) distress measure. The explanatory variables included in the measure are constructed as follows:

$$\begin{aligned}
NIMTA_{it} &= \frac{Net\ Income_{it}}{(ME_{it}+Total\ Liability_{it})} \\
TLMTA_{it} &= \frac{Total\ Liability_{it}}{(ME_{it}+Total\ Liability_{it})} \\
CASHMTA_{it} &= \frac{Cash\ and\ Short\text{-}term\ Investments_{it}}{(ME_{it}+Total\ Liability_{it})} \\
RSIZE_{it} &= \log\left(\frac{ME_{it}}{Total\ S\&P500\ Market\ Value_{it}}\right) \\
EXRET_{it} &= \log(1+R_{it}) - \log(1+R_{S\&P500,t}) \\
MB_{it} &= \frac{ME_{it}}{BE_{it}},
\end{aligned}$$

where ME_{it} is price times shares outstanding and book equity (BE_{it}) is initially constructed as Cohen, Polk, and Vuolteenaho (2003) have done. Following Campbell, Hilscher, and Szilagyi

(2008), I then adjust book equity by adding the 10% difference between market and book equity. For firms that still have negative values for book equity, I assign positive values of $1 to ensure that they are in the right tail of market-to-book distribution rather than in the left tail. The volatility measure is the annualized 3-month return standard deviation, calculated by

$$SIGMA_{i,t-1,t-3} = \left(252 \times \frac{1}{N-1} \sum_{k \in \{t-1,t-2,t-3\}} r_{i,k}^2\right)^{1/2}$$

$SIGMA$ is coded as missing if less than five nonzero observations exist over the 3-month period. In this case, it is replaced with its cross-sectional mean. Campbell, Hilscher, and Szilagyi (2008) construct a geometrically decreasing average of $NIMTA$ and $EXRET$,

$$\begin{aligned} NIMTAAVG_{t-1,t-12} &= \frac{1-\phi^3}{1-\phi^{12}}\left(NIMTA_{t-1,t-3} + ... + \phi^9 NIMTA_{t-10,t-12}\right) \\ EXRETAVG_{t-1,t-12} &= \frac{1-\phi}{1-\phi^{12}} EXRET_{t-1} + ... + \phi^{11} NIMTA_{t-12}, \end{aligned}$$

where the coefficient $\phi = 2^{-\frac{1}{3}}$. When the variables are missing, past $NIMTA$ and $EXRET$ are also replaced with the cross-sectional means in calculating the average measures $NIMTAAVG$ and $EXRETAVG$. However, the distress measure requires leverage, profitability, excess return, and market capitalization to be valid. All explanatory variables are cross-sectionally winsorized above and below the 5% level in order to eliminate outliers, except for $PRICE$ (where the value is winsorized above $15). I use the coefficients of the logit model that predicts the 12-month-ahead financial failure as Campbell, Hilscher, and Szilagyi (2008). The distress measure is constructed as follows:

$$\begin{aligned} CHS = & -20.26 NIMTAAVG + 1.42 TLMTA - 7.13 EXRETAVG + 1.41 SIGMA \\ & -0.045 RSIZE - 2.13 CASHMTA + 0.075 MB - 0.058 PRICE - 9.16, \end{aligned}$$

C. Searching Announcement Days

Finding the announcement day for private placements is critical for this paper, because it is the first day that information about the terms of the issuance is publicly announced.

Generally, the proceeds, price of issuance, and use of proceeds are announced. This information is important in evaluating whether or not the issuance requires shareholder approval. The closing day is also important because the evaluation of whether the issuance is at a premium or discount is relative to the market price at closing. The PlacementTracker (PT) defines the closing day as either the date when the purchase agreement/subscription agreement for the transaction was signed by both parties and/or the date when the actual funding of the private placement took place, depending on what information was provided by the company in its public filing. On the other hand, PT defines the announcement day ("PT announcement day") as the date when the transaction was first announced to the public. This is usually taken from the initial press release but can also be taken from SEC filings.

PT starts to rigorously document the announcement dates only after 2003, while closing dates are available for all observations. Since many announcement dates are missing before 2003, I search announcement dates for all observations. Out of 5,118 common equity issuance observations from the PT database, 2,973 have PT announcement days. To have a better picture of the relative distribution of announcement dates, I compare PT announcement day to PT closing days. Out of 2,973 observations, 1,043 are on the closing day, 612 are on the day after the closing day, 29 are on the day before the closing day. Out of 2,973 observations, 2,058 are within three days of the closing day, 2,363 are within five days, and 2,812 are within 30 days.[51]

Based on this distribution of announcement and closing dates from PT, I refine the announcement dates by searching all news article sources in the LexisNexis database for public announcements. I need to either use additional screens for the searches when using a wider window, or search without any additional screens using a narrow window because there are too many articles for each company. I use a mix of these search methods in three steps to search and refine announcement days for this paper.

[51] All numbers in this section are from the original PlacementTracker database for common equity issuance only. Observations are required to have variables from CRSP and COMPUSTAT to be included in the final sample for this paper.

First, I search within one month before and after the closing day for all observations. If overlapping windows exist for firms with multiple issuances, I search up to the midpoint of each issuance. Since the search window is relatively wide, I restrict my searches with ("private" or "PIPE") and ("issue" or "offer" or "placement") in the same paragraph to make the search manageable. I find 3,040 announcement dates out of the initial 5,118.

Second, I redo the search within two days before and after the PT announcement days for observations for which I did not initially find an announcement date or for which the initially searched announcement date is after the announcement date given by PT. I search without any word screens other than the company name since I use a narrower search window. Out of 1,493 observations, I find 1,180 announcement dates. These announcement days were not found in the initial search because the announcement did not use the words that match the screens used in the first step. Many articles refer to a private placement as simply an investment, offering, funding, selling common equity, etc., and sometimes even refer to private placements as public offerings.

Finally, I redo the search within two days before and after the closing day for observations for which I have not yet found an announcement day or for which the PT announcement day is after the closing date. I find 467 out of 3,215 observations. Most of the observations I do not find have announcements outside of this ± 2-day window. After these three searches, I use the earliest date as the refined announcement date. I end up with 4,271 announcement days out of the 5,118 observations.

Next, I compare the relative distribution of searched announcement dates to PT announcement days and closing day to see if it is reasonable to fill in missing announcement days with the PT provided announcement day or closing day. For firms with PT announcement days, 90% of the searched announcement date are within one day of the given announcement day from PT. In comparing announcement dates to closing dates, I find that for 4,271 searched announcement dates found, 1,381 are on the PT closing date, 2,651 are within one day of the closing date, 2,827 are within two days of the closing date, and 3,504 is within five days of the closing date.

These distributions suggest that PT announcement and closing day is a good estimation of the announcement day. Of 847 observations for which I do not find an announcement date, I replace 215 observations with the PT announcement day. To maximize observations, I use the closing day as the announcement day for the 632 observations that do not have even PT announcement days. Having more observations helps identify distribution discontinuity, and the above distribution shows that announcements are centered on the closing date. Not filling in the announcement dates with the closing dates reduces the power of the tests but does not affect the main results of the paper. Also, expanding the announcement day cumulative abnormal return 3-day window to a 5-day window makes my main results even stronger.

To better understand the timing of the process and validity of announcement dates, I search for available filings regarding the 20% rule through EDGAR system. I find that the close of the private placements and the announcement of the placements generally occur first. Then quickly follows either a proxy statement for an annual meeting or a special meeting, or a financial viability exception, or approval by written consent of majority shareholders. The timing suggests that "prior" shareholder approval means prior to the actual issuance, not prior to the closing (or the announcement) of the private placement. For a small number of cases, there are proxy statements reported before the announcement of the private placement occurs. I adjust my announcement date to the earliest proxy statement date in these cases.[52]

As discussed in section 6 and Table 9, looking at the difference in pre-announcement and post-announcement day returns of firms that gain and avoid seeking approval does not result in significant difference closer to the 20% threshold. This non-result suggests three possibilities. First, approval happens after the announcement of the private placement and is a non-event because everyone expects the placement to be approved.[53] This seems to be the most likely

[52]According to NASDAQ listing center, proxy statements require sufficient information for shareholders to make a meaningful decision. However, if the investors are yet to be identified or specific terms are yet to be decided, NASDAQ may consider the use of a generic proxy statement if the company discloses the maximum number of shares, maximum dollar amount, maximum discount, and the purpose of the transaction, and the time frame to complete the transaction - generally within three months.

[53]Using the RiskMetrics database from 1997 to 2004, I find that among the 15,916 manager-proposed votes, less than 2% (285) did not pass.

scenario. Second, approval happens before the announcement of the private placement, but the approval is not publicly known. Finally, the approval happens before the announcement and is publicly known, but the approval is a non-event until the private placement is publicly announced because of the uncertainty of closing of the private placement contract. In any of these three cases, the announcement day of the private placement is a valid date for the event study of this paper.