

When Shareholder Approval Matters: 20 Percent Rule for Privately Issued Equity

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Abstract

This paper empirically studies agency conflict by using a shareholder approval rule governing private placements. NASDAQ and other exchanges require shareholder approval for discounted, placements that make up more than 20% of existing shares. I document a distribution discontinuity around the threshold and identify many managers who avoid approval by keeping the fraction of new shares just below 20%. Shareholder avoiding firms have negative and 4.32% lower announcement day abnormal returns than firms that gain approval. Moreover, shareholder avoiding firms are less distressed and issue at higher discounts. Overall, my findings are consistent with managerial entrenchment.

KEYWORDS: Private Placements, Shareholder Approval, Managerial Entrenchment

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I Introduction

Classic corporate theory suggests conflicting views about distress and equity issuance depending on the assumption made on managers. Assuming benevolent managers to shareholders, Myers (1977) suggests that it is difficult to issue equity under distress because value transfer to creditors (i.e., the debt overhang problem). Managers should issue equity only when the expected cost is less than the expected benefits for shareholders. Assuming self-interested managers, on the other hand, Jensen and Meckling (1976) and Jensen (1989) suggest managers would take actions to issue equity even when these actions do not maximize shareholder value. The cost of issuing discounted equity (i.e., dilution) would have limited effect on managers while the private benefits of issuing equity would be high to the manager.¹

Although distress and equity issuance have been important settings for principle-agent conflict in theoretical models, it has been difficult to explicitly show agency conflict empirically. As such, the empirical literature find conflicting views on the main motivation for private placements which have been argued to be financing of last resort.² The difficulty in sorting out the motivation for private placements is that most benefits (e.g., decrease of distress cost and solving the underinvestment problem) are difficult to measure while only some costs are measurable (e.g., dilution from issuance discounts) making it difficult to weigh the benefits against the costs. To overcome this measurement problem, I use the managers' decision facing a shareholder approval governing private placements as a novel identification to show possible disagreement between principle-agent more directly.

NASDAQ and other exchanges require shareholder approval for discounted, privately is-

¹Aghion and Bolton (1992) and Dewatripont and Tirole (1994) provide arguments that managers have both private and monetary incentives to continue funding negative NPV projects. In distressed situations, Grossman and Hart (1982) and Gilson (1989) argue that the risks of bankruptcy and employment loss can lead to severe personal losses including the loss of private benefits, reputation, and specialized human capital.

²Hertzel and Smith (1993) argue that private placements could be the solution to the underinvestment problem. Brophy, Ouimet, and Sialm (2009), and Chaplinsky and Haushalter (2010) describe the distressed nature of firms that issue discounted equity and conclude private placements as a last resort financing. On the other hand, Barclay, Holderness, and Sheehan (2007) and Wu (2004) argue the managerial entrenchment aspects of private placements.

sued equity that make up more than 20% of existing equity shares. Studying the discounted issuance observations around the threshold, I find a clustering just before the threshold, and a clear decrease in the number of observations after the 20% threshold. I also test the distribution discontinuity finding that the clustering at the 20% threshold is statistically unlikely to happen by simple chance. This distribution discontinuity at the 20% threshold is evidence of managers writing private placement contracts to avoid shareholder approval and suggests potential principal-agency disagreement. To the best of my knowledge, this is the first paper to document and use the distribution discontinuity at the 20% threshold.³

Assuming managers have highly accurate information about the likelihood of a voting outcome,⁴ managers would avoid shareholder approval mainly for two possible reasons. First, managers may avoid shareholder approval when discounted issuances are misaligned with shareholders' best interest (the "managerial entrenchment hypothesis"). Self-interested managers would issue equity by avoiding shareholder approval even when the issuance does not maximize shareholder value. Since managers know shareholders would not approve such issuances, managers would avoid approval by issuing less than 20%. Second, managers would possibly avoid approval if the approval process itself is too costly for shareholders (the "costly approval hypothesis"). Although managers believe shareholders would approve the issuance, managers would avoid approval in order to maximize shareholder value. Managers would avoid shareholder approval if timeliness of financing is required due to extreme distress or important investment opportunities. Also, managers might avoid approval because shareholders are not sophisticated enough to understand the benefits of the issuance.

To test the managerial entrenchment and costly approval hypotheses, I use the two groups

³Arena and Ferris (2007) investigate the impact of shareholder approval in board appointments related to private placement. Their paper identifies shareholder approval of board appointments by examining press releases, 8-K filings, and proxy statements rather than use the 20% rule and distribution discontinuity for all private placements.

⁴Listokin (2008) compare the distribution of manager proposed voting results and shareholder proposed voting results finding that managers have highly accurate information of the vote outcome even before the actual vote.

that naturally form around the 20% threshold as treatment and control group. The misalignment hypothesis would predict that the clustering observation close to, but not more than the 20% threshold identifies issuances that are less likely to be in the best interest of shareholders. The observations over the 20% threshold are the ones that are subject to shareholder approval process and therefore more likely to be aligned with shareholders' interests. On the other hand, the costly approval hypothesis would predict that both groups would both be in the best interest of shareholders and the decision to avoid approval is simply due to various costs of achieving shareholder approval itself.

The strongest test of the entrenchment and costly approval hypotheses is the market response to the announcement of the issuances. If avoiding approval is aligned with shareholders' interests, the market would not respond differently to whether shareholder approval is required or not. If avoiding approval is misaligned with shareholders' interests the market would respond negatively to the issuance. Using announcement day abnormal returns, I find the approval group (i.e., discounted issuance of fraction from 20% to 40%) has non-negative abnormal returns of 2.50 (t -stat = 1.66), which is consistent with equity issuance optimizing shareholder value despite issuance discount. However, the group that avoids shareholder approval (i.e., discounted issuance of fraction from 17.5% to 20%) has negative announcement day returns of -1.82 (t -stat = -2.66). The mean difference in the returns is statistically significant for various sample ranges centered around the 20% thresholds and also discount-adjusted returns. These return patterns suggest that the market values the shareholder approval avoiding issuances negatively and thus consistent with the managerial entrenchment hypothesis.

To further test the managerial entrenchment and costly approval hypotheses, I compare firm and issuance characteristics of the shareholder approval group and the avoidance group. Using a logit regression model on the decision to issue less than 20% (i.e., avoid shareholder approval,) I do not find support for the costly approval hypotheses. Firms that avoid approval are less distressed and issue at higher discounts than firms that gain shareholder approval. Also,

firms that avoid approval have more institutional investors making the investors sophisticated enough to understand the costs and benefit of the issuance.

Further focusing on the shareholder avoidance group sample, I find that the market responses negatively only to the issuances that firms do not seem to have a good reason for issuing at a discount (e.g., less distressed, issue at higher discounts, and do not state the use of proceeds.) These results imply that the negative market response to avoid shareholder approval is driven by those firm observations that do not seem to require costly discounted issuance further supporting the managerial entrenchment hypothesis.

This paper contributes to the private placement literature by introducing the the shareholder approval rule. Wruck (1989), Hertz and Smith (1993), and others document the positive announcement returns of private placements and propose the monitoring hypothesis and certification of equity undervaluation hypothesis to justify the positive returns. On the other hand, Barclay, Holderness, and Sheehan (2007) argue that other characteristics except the short-run returns are consistent with managerial entrenchment. I find that the positive announcement day returns for firms that go through shareholder approval are consistent with the certification hypothesis. However, most of the other discounted issuance less than 20% are on average consistent with managerial entrenchment hypothesis. The mean positive announcement day returns of private placement are the result of averaging returns from different regions of the samples (i.e., discounted issuance below 20%, discounted issuance above 20%, and premium issuances.) I show that without acknowledging the break in the 20% threshold regressions could be misspecified.

Finally, this paper contributes to the empirical literature of agency problems in distress and equity issuance. Jung, Kim, and Stulz (1996) show that equity issuances by firms with poor growth prospects reflect agency problems and that stock prices react negatively to new equity issuances. Using the example of L.A. Gear, DeAngelo, DeAngelo, and Wruck (2002) illustrate how asset liquidity can give managers substantial operating discretion during financial distress

by liquidating assets to fund losses. More recently, Gormley and Matsa (2011) finds that firms respond to liability risk by acquiring unrelated business with relatively high operating cash flows. They find that these acquisitions are motivated by managers' personal exposure to firm's risk by showing negative announcement returns. My paper is different from these papers in that I focus on private placements using a much larger sample distribution. I also show more explicitly how managers alter contracts to avoid shareholder approval and identify a sample with a shareholder interest aligned control group to test agency conflict in a possible distressed situations.

The remainder of the paper is organized as follows. Section **II** introduces the shareholder approval regulation describes the data. Section **III** discusses the empirical framework and testable hypotheses. Section **IV** describes the empirical results and Section **V** discusses other potential hypotheses. Section **VI** concludes.

II Shareholder Approval Rule and Data Distribution

A. 20% Shareholder Approval Rule

A private placement is a private issuance by a publicly traded equity invested by a limited group of accredited investors. Private placements include both registered direct (RD) issuances and private investment in public equity (PIPE). What separates private placements from traditional public offering is the speed that funds can be raised and the pricing of the equity issuance. The typical private placement deals take two to four weeks compared to the lengthy process of a public offering. While public offerings are offered close to the market price, private placements are typically traded at a discount averaging from 15% to 30% which is dilutive to the existing shareholders. Because of the dilutive nature of private placements, NASDAQ, NYSE and NYSE Amex Equities have corporate governance listing regulations of private placements.

NASDAQ listing rule 5635 (previously 4350) states the regulations regarding shareholder

approval of listed firms which include regulations of acquisition of stock of director, officer or substantial shareholder change of control and equity compensation etc. In particular, Rule 5635(d) requires issuers to obtain prior approval of its shareholders when the issuance or potential issuance is at a price equal to or less than the greater of book or market value equals 20% or more of common shares or 20% or more of the voting power outstanding before the issuance.⁵ The shareholder approval regulation does not apply to public offerings.⁶

An exception to shareholder approval rule is made when a delay in equity financing would seriously jeopardize the financial viability of the firm (the “financial viability exception”). This financial viability rule needs to be approved by the audit committee or a comparable body of the board of directors comprised solely of independent, disinterested directors. A company that receives the exception must mail shareholders not later than ten days before the issuance of the omission to seek the shareholder approval.

Appendix A describes additional details on how NASDAQ determines discounted shares and fraction of equity issued. The data used in this paper follows the NASDAQ guideline as close as possible.

B. Data and Private Placement Distribution

I use four main data sources for the analysis of this paper. I use COMPUSTAT (CRSP/COMPUSTAT Merged) quarterly accounting data. For stock market data, I use CRSP monthly database for market size and accounting ratios and CRSP daily stock returns for event studies and to identify changes in shares outstanding.

⁵According to SEC News Digest 89-231 and 90-142 regulation the 20% rule was lowered from 25% to 20% in 1990 which is before the start of my sample.

⁶There are two other cases where shareholder approval is required: private placement that result in change-in-control and private placements to managers. NASDAQ clarifies that the change-in-control means issuance to a single investor more than 20%. If equity is placed to a single buyer for more than 20% a shareholder approval would be triggered for both premium and discounted issuances. For discounted issuances, the 20% shareholder approval rule would subsume the change-in-control regulation. Finally, sales of private placements to a director, officer or substantial security holder of the company will be considered as a form of equity compensation. Therefore, private placements to managers would require shareholder approval even when fraction of equity issuances is less than 20%. I drop these cases when forming the sample.

For private issuance data, I use Sagient research's PlacementTracker database which is the primary source for private placements.⁷ The database includes shares outstanding, type of equity placed and warrants attached, closing day of the contract and use of proceeds. I match all types of private placement observations with CRSP/COMPUSTAT data base from January 1995 to December 2010. Then, I only use common equity issuance (including the ones with warrants) that would not have potential problems in determining the fraction of issuance and discounts to apply the 20% shareholder approval rule. See Appendix A for further details on data selection and calculating the fraction of equity placed.

In order to be included in the sample, firms need to be listed on NYSE, NASDAQ and AMEX and I also require firm to have enough daily returns to estimate the 3-day cumulative abnormal returns (CAR) to conduct event studies on the announcement day of issuance. Each observations should also have a book-to-market ratio measure, size, and accounting variables to form the distress measure of Campbell, Hilscher, and Szilagyi (2008) which will be the distress measure for this paper.⁸ Definitions and detailed derivations of each variable can be found in Appendix B.

Additionally, I use Thomson Reuters data to match holding information for the private placement issuers. Institutional holdings (13f) and manager shares (12s) information are aggregated for each firm each quarter. Insider shares include both direct and indirect shares of CEOs, CFOs and COOs. I also use debt covenants violation data from Amir Sufi's website which is also in quarterly frequency. I assume there are zero institutional holdings, managerial shares, or no covenant violation if data is not observed for firms in the sample.

Table I presents summary statistics for discounted private placements of fraction placed less

⁷see Brophy, Ouimet, and Sialm (2009), Chaplinsky and Haushalter (2010) for more detail on data and contractual terms.

⁸I 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 that combines both accounting and market variables, and uses quarterly data that should be more timely than other measures that use annual frequencies. The predictability is documented to outperform other distress measures. However, I get very similar results using a more tradition measure of Ohlson (1980) *O*-score.

than 40%. This will be the main sample of the paper. The data spans from January 1995 to June 2010 with 2,452 observations. Mean discount is 15% and mean fraction of equity placed is 13%. Debt related use of proceeds are about 9% and 36% of the observations state a specific use of proceeds including debt.

I also present measures related to distress. The distress measure of Campbell, Hilscher, and Szilagyi (2008) averages -6.67. This average number is equal to an average annual default rate of 1.5% and a monthly rate of 0.13%. According to Table VI of Campbell, Hilscher, and Szilagyi (2008), this average corresponds to the top distress quartile of all firms traded on the market.⁹ This confirms that in general firms that issue privately are relatively distressed. *CASHMTA* is cash and short-term investments divided by market equity and total liabilities. The average *CASHMTA* is 9%. *BURN* is the geometrically decreasing average of net income (*NIMTAAVG* is defined detail in Appendix B) divided by *CASHMTA* when *NIMTAAVG* is negative, and zero otherwise. The interpretation is that higher the *BURN* the more time left before cash will run out because of net losses. About 6% of the firms have covenant violations at the time of private placements.

The ownership structure is summarized by institutional and managerial ownership. Institutional ownership on average comprises 12.18% of the ownership structure while only 2.76% of the shares are owned by management. The market-to-book ratio (MB) is one average 3.59 and the size of market equity is 410 million dollars which means firms on general are small growth firms.

I now look at the distribution of private placements by the fraction of equity placed and the discount amount. 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 premium/discount. I drop observations placed above the 40% fraction. We can observe the uneven number of observation in the discounted issuances above the 20% threshold. Moreover,

⁹Park (2012) also shows that about half of the common equity private placements are distributed in the top two distress decile portfolios.

issuances are clustered just before the 20% threshold while the number of observations drops dramatically after the threshold.

To further observe the discontinuity, I look at the cumulative distribution function (CDF) and the histogram for discounted equity issuance in Figure 2 for fraction of equity placed from 10% to 30%. The CDF shows a steady increase before the 20% threshold, and displays a wedge around the 20% threshold. After the 20% threshold, the rate of increase in the CDF flattens out suggesting that there is an even but decrease in observations after the threshold. The histogram graphically also show a distribution discontinuity at the 20% threshold. Especially the bar just below the 20% threshold is especially high displaying about 6% of the observations in that bar. I formally test the distribution discontinuity in the empirical result section.

This distribution discontinuity identifies managers who avoid seeking shareholder approval when issuing discounted equity. This suggests that issuing discounted equity might not be in the best interest of existing shareholders. Further discussion of the empirical approach and discussion of testable hypotheses will follow in the next section.

III Empirical Framework and Hypotheses

A. Empirical Framework

Testing managerial entrenchment for firms that issue discounted equity is not an easy task. Managers would defend an issuance by different arguments including reasons of underinvestment and distress. As such, Hertz and Smith (1993) argue that private placements could be the solution to the underinvestment problem. More recently, Chaplinsky and Haushalter (2010) describe the positive association with issuance discount and the distressed nature of the firm.

However, the distress situation is exactly when agency problems are argued to exacerbate.¹⁰

¹⁰Grossman and Hart (1982) and Gilson (1989) argue that the risks of bankruptcy and employment loss can lead to severe personal losses including the loss of private benefits, reputation, and specialized human capital.

The difficulty in separating managerial entrenchment from alternative explanations is that it is difficult to identify which actions are aligned with shareholders interest and which are not. For private placements, most benefits are difficult to measure while only some costs such as dilution are measurable. This identification problem makes it difficult to directly study whether an issuance is aligned with shareholders' interest. To bypass the measurement problem, I use the managers' decision facing the 20% shareholder approval rule to identify observations that are more likely to be misaligned with shareholder's interest.

Since managers would have the most accurate information about the firm, managers would know best which actions are in the interest of shareholders. Hence, it is likely that managers have highly accurate information on whether shareholders would approve of a private placement or not. Supporting this argument, Listokin (2008) shows that most manager-sponsored votes pass easily and when the vote is close to a small margin, votes pass overwhelmingly more than the ones that lose by a small margin. This implies that managers acquire highly accurate information about the outcome even before the vote takes place. This suggests that managers would go through a shareholder approval only when the manager is confident enough that the proposal would be approved.

If managers act in shareholders' best interest and shareholder approval is not costly (in a broad sense,) managers would simply choose the optimal amount to maximize shareholders value. Managers would not care about the shareholder approval threshold because any action in shareholders' best interest would most likely be approved. We would observe a smooth distribution around the 20% threshold. However, if managers believe that shareholders would not approve of the private placement or shareholder approval itself is too costly, then managers would avoid approval by altering the contract and the distribution will be discontinuous around the threshold as we observed in the previous section.

Firms that are clustered just below the 20% are located there because of the shareholder approval regulation. The amount that would optimize shareholder value excluding the cost

of shareholder approval could be more than 20%. Managers might have reduced the amount because of gaining shareholder approval is too costly. Alternatively, the amount that would optimize shareholder value could possibly be less than 20%. However, managers might have increased the amount to the maximum amount that would not require shareholder approval and reduce shareholder value.

By this argument, the 20% shareholder approval rule and the managers issuing above and below the threshold provides a natural treatment group and control group to test hypotheses. Assuming that the firms that avoid approval and gain approval by a close margin are similar in other characteristics, firms that avoid approval would be our treatment group and firms that gain approval would become the control group. Our control group is important in the sense that managers in the group are confident that the private placement will be approved or already have been approved. Therefore, these private placements can be assumed to be in shareholders' best interest. Firms that avoid approval (i.e., treatment group) will be compared to the control group to test whether the private placement and actions of avoiding shareholder approval is misaligned with shareholders' interest, or still aligned with shareholders' interest.

To be clear, the empirical approach in this paper is different from the regression discontinuity setting.¹¹ 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 a random assignment of an experiment. Once an observation passes a threshold the treatment are different on either side of the threshold creating a natural experiment setting and inference of causal relationship of the treatment. On the contrary, my approach uses the very fact that observations alter the selection of group assignments by changing the contractual terms. This creates a group that avoids a specific treatment (i.e., shareholder approval) and a group that does not avoid approval. Hypotheses

¹¹see Keys, Mukherjee, Seru, and Vig (2010) and Cuñat, Gine, and Guadalupe (2012) for recent examples of the regression discontinuity.

and analysis follow to study why the observations avoid shareholder approval by clustering below the 20% threshold.

B. Managerial Entrenchment and Costly Approval Hypotheses

I test hypotheses using the distribution discontinuity framework. I first divide hypotheses into two main categories: the managerial entrenchment hypotheses (MEH) and the costly approval hypotheses (CAH). The misalignment hypotheses are potential explanations for why discounted issuance and shareholder approval avoiding behavior is misaligned with the best interest of shareholders. Alternatively, the costly approval hypotheses are potential explanations why manager would avoid shareholder approval because shareholder approval is costly. I focus on two costs: timeliness of financing and ignorance of the average shareholder to understand the benefit of the issuance.

I discuss the managerial entrenchment hypothesis and two costly approval hypotheses in detail. First, I discuss the entrenchment hypotheses.

Managerial Entrenchment Hypothesis (MEH)

: Managers avoid approval because managers are self-interested.

The managerial entrenchment hypothesis argues that the managers avoid approval due to principal-agent disagreement. For example, Jung, Kim, and Stulz (1996) show that equity issuances by firms with poor growth prospects reflect agency problems and that stock prices react negatively to new equity issuances. Also, managers are known to attempt to fund negative NPV projects using additional funding rather than terminate the project as shown in DeAngelo, DeAngelo, and Wruck (2002). Through the example of L.A. Gear DeAngelo, DeAngelo, and Wruck (2002) shows that liquid assets can help managers to help turnaround the company, but the more appealing story is that it is difficult to stop a manager to subsidize losing operation.

Even in a situation where the issuance might decrease distress costs, agency problems ex-

acerbate and managerial entrenchment could be the motivation for issuing equity. Grossman and Hart (1982) and Gilson (1989) argue that the risks of bankruptcy and employment loss can lead to severe personal losses including the loss of private benefits, reputation, and specialized human capital. Because of these personal losses Jensen and Meckling (1976) suggest managers would take actions to reduce the likelihood of bankruptcy even when these actions do not maximize shareholder value. While the reduction of distress costs would benefit both manager and shareholders, the dilution of equity shares would mainly affect shareholders. Self-interested managers would therefore want to issue equity even if the issuance would not maximize shareholders value.

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

Also, the cost of issuance can be adjusted in the announcement day returns by adjusting for dilution. Since firms that avoid approval cannot justify the issuance discount MEH would predict that these firms would have non-positive discount-adjusted announcement day returns while firms that gain approval would have positive discount-adjusted announcement day returns. The difference should be statistically significant.

Additional to stock market reactions, I use several proxies for shareholder-manager alignment and justification for avoiding shareholder approval to test the managerial entrenchment hypothesis. I proxy managers' alignment of interest to shareholders' by the proportion of shares the managers hold. If manager hold more shares, cost of issuing discounted equity (e.g., dilution) would impact managers as well as shareholders. MEH would predict firms with less managerial shares to avoid shareholder approval more often.

Also, MEH would predict managers not being able to justify the high discounts in the issuance. Since the higher discounts are costly to shareholders, the managers should be more distressed or hold less cash to justify higher discounts. Under the managerial entrenchment hypothesis, the manager would avoid approval when the firm is less distressed and managers would issue at a high discount after adjusting for distress and other characteristics, and do not provide a specific use of proceeds compared to firms that gain approval.

Although avoiding shareholder approval suggests possible disagreement between managers and shareholders, avoiding behavior does not always suggest entrenchment. There are various costs that are associated with the shareholder approval. I focus on the following two costly approval hypotheses (CAH) that could potential explain why manager would avoid shareholder approval.

Costly Approval Hypothesis 1 (CAH1)

: Managers avoid approval because timely financing is required.

The costly approval hypothesis 1 is related to the timeliness of the issuance. Since many private placements issuing firms are highly distressed and are out of alternative funding opportunity as argued by Chaplinsky and Haushalter (2010), managers might avoid approval because of the timeliness of financing. Companies could be in urgent need for cash to pay interests and avoid bankruptcy. Companies could also need financing to invest in an ongoing project and solve the underinvestment problem as argued by Hertz and Smith (1993). Waiting for approval can be costly for shareholders because it might jeopardize the financial viability of a company. Under this hypothesis, managers expect the shareholders to approve the issuance when asked, but the approval process could take too much time to go through and is avoided.¹²

Again, the strongest statistical test to test CAH1 would be the stock market reactions to

¹²The financial viability exception (NASDAQ rule 5635(f)) mentioned in earlier sections weakens this argument because managers could use the exception to go around the shareholder approval and still issue more than 20% if it is clear that the delay and financing would jeopardize the financial viability of the company.

the announcement of the private placement. Under CAH1, avoiding approval is justified by the need for timely financing. The market would respond positively or at least non-negatively to the announcement. Also comparing to firms that gain approval, the returns should be at similar levels as the firms that gain approval because both groups are maximizing firm value.

I test CAH1 by examining whether firms that avoid approval are more distressed or in need of immediate financing. Distressed firms are more likely to avoid approval under CAH1. I use a proxy for distress using the most recent distress measure from Campbell, Hilscher, and Szilagyi (2008). Additionally, I use debt covenants violation¹³, cash holdings, burn rate and the use of proceeds related to debt to proxy for distress and need for timely financing. Under CAH1, firms that avoid approval should have debt covenant violation more often as covenant violation would restrict additional debt financing opportunities. Also, companies would hold less cash holdings, have less time deplete existing cash, and state the use of proceeds as debt related or specific use more often than firms that gain approval.

While most of my analysis focuses on CAH1, I also look at shareholders' sophistication as a possible cost of gaining shareholder approval.

Costly Approval Hypothesis 2 (CAH2)

: Managers avoid approval because shareholders are unsophisticated.

The costly approval hypothesis 2 suggests that shareholders are not sophisticated enough to understand what is in their best interest. Managers not only act in the best interest of shareholders but they know better than shareholders and do not want to risk the chance that shareholders would vote against their own best interest. Therefore, managers would avoid shareholder approval to maximize shareholder interest because shareholders might not be sophisticated enough.

I use the portion of institutional shareholders to proxy for shareholder sophistication. Insti-

¹³Roberts and Sufi (2009) shows that after covenants are triggered the control rights go to creditors and additional debt financing becomes difficult.

tutional Shareholder Service Inc. (ISS)¹⁴ explicitly states private placements should be voted case by case taking dilution, financial issues (e.g., 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 into consideration. ISS also advises to vote for a private placement if it is expected that the company will file for bankruptcy if not approved.

According to these guidelines and assuming institutional investors are more likely to understand the complicated terms of a private placement and know if a private placement is in the equity holders' best interest, it is safe to use the portion of institutional investors as a proxy for shareholder sophistication. Assuming the private placements are indeed aligned with the best interest of shareholders, CAH2 would predict firms that avoid approval would have less institutional investors than firms that gain approval. If firms that avoid approval have more institutional investors CAH2 would be rejected. If CAH2 is rejected the result would support MEH because it would mean that managers purposely avoid approval when institutional shareholders are monitoring the company.

Other alternative hypotheses are discussed in the section **V**.

IV Main Empirical Results

A. Test of Distribution Discontinuity

In this section, I study the distribution around the 20% approval rule to test whether managers avoid gaining shareholder approval when issuing discounted equity by formally testing the distribution discontinuity. I measure the extent of the distribution discontinuity using techniques that are used in the regression discontinuity literature (DiNardo and Lee (2004), Card, Mas, and Rothstein (2008), and Keys, Mukherjee, Seru, and Vig (2010)). I count the

¹⁴see 2012 U.S. Proxy Voting Summary Guidelines (<http://www.issgovernance.com/files>)

number discounted common equity private placements and estimate the equation using a flexible seventh-order polynomials on each side of the 20% threshold.

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

where Y_i is the number of observations for each bin and the $f(Fraction(i))$ is a seventh-order polynomials on either side of the distribution discontinuity. I vary the range of the estimation centered at 20% (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 (0.1% and 0.25%). The data are re-centered so that Fraction=20% corresponds to 0, and thus the cutoff 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 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 of each side of the 20% threshold. For a closer range (17.5% to 22.5% and 15% to 25%) to the threshold, the estimates reaches the number of observation in the 19.9% bin. For a wider range (10% to 30% and 0% to 40%) the estimates underestimates the number of observation for bins that approaches 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 point in a wider range.

Table II shows the results of the test of distribution discontinuity. For all ranges and bin width 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 due to the fact that the polynomials predict the number of observations in bins 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 the case of the 0.1% bin due to the increase of the bin width. The magnitude also increases as the range becomes smaller.

Finally, I conduct a permutation test of the distribution discontinuity by treating every value of a discontinuity a potential discontinuity from the range of 0% to 40% excluding the bottom and top 1%. After estimating the β for each 0.1% fraction, I use the distribution to test whether the estimate at 20% can be the mean of the 380 possible discontinuities. The estimate of β is the largest absolute value among all 380 discontinuity points with the largest t -statistic. The permutation test gives a t -statistic of -128.33 confirming the distribution discontinuity at the 20% threshold.

B. Returns by Shareholder Approval

This section presents the main results of the paper. The strongest test of Managerial Entrenchment Hypothesis (MEH) and Costly Approval Hypothesis (CAH) would be the market responses to the announcement of these issuances. If avoiding shareholder approval is in the best interest of shareholder value, avoiding shareholder approval should have similar market responses to the ones that gain shareholder approval. If avoiding shareholder approval shows misalignment of interests, firms that avoid shareholder approval should have lower returns than the ones that gain shareholder approval.

To calculate abnormal returns on the announcement day I first estimate coefficients for the Carhart (1997) 4-factor model including the intercept from -245 trading days up to -45 trading days of the announcement of the private placements. Daily abnormal return is calculated as following

$$AR_{i,t} = R_{i,t} - \alpha_i - \beta_{i,m}R_{m,t} - \beta_{i,h}R_{hml,t} - \beta_{i,s}R_{smb,t} - \beta_{i,mom}R_{mom,t}$$

and the 3-day CAR is the sum of the three abnormal returns ± 1 -day of announcement day. A detailed description of how I find the announcement day can be found in the Appendix C. I adjust returns for delisting biases documented in Shumway (1997) and Shumway and Warther (1999) if a company delists during the announcement day window. I require at least 15 trading

day returns during the estimation period and at least one trade during the announcement day window to be included in the sample.

Table III presents returns of discounted common equity issuance by bins of different issuance fractions. Observations are limited to discounted issuance as the ones placed at a premium do not require shareholder approval by the 20% rule at any fraction of issuance. Panel A presents the mean difference of announcement day returns between issuances above and below the 20% threshold. Panel B looks at observations of created centered around the 20% shareholder approval threshold while Panel C looks at observations separately.

Panel A shows the main result of the paper. Samples are created from 0% to 40%, 2.5% to 37.5%, and so on by reducing the sample range 2.5% above and below the 20% sample. All differences of issuing more than 20% and less than 20% are positive and statistically significant. The magnitude generally increases from 2.42 (t -stat = 2.88) for the 0% to 40% fraction bin to 4.32 (t -stat = 2.64) for the 17.5% to 22.5% fraction bin as the sample gets closer and closer to the threshold. This result shows that the market does not value shareholder avoided placements the same as shareholder approved observations which are most likely aligned with shareholders' interest. Thus, shareholder avoided observations are less aligned with shareholders' best interest.

To understand these results better we take a closer look in Panel B. The announcement day returns exhibit a statistically significant negative abnormal return for all bins below the 20% threshold. The 17.5% to 20% fraction bin exhibits returns of -1.82 (t -stat = -2.66) and the 15% to 20% fraction bin exhibits returns of -1.41 (t -stat = -2.44). The returns for bins that include more observations in a wider range have mean returns that is smaller in magnitude but with larger t -statistics showing that more observations help the power of test but the negative returns are concentrated in observations closest to the threshold. These results suggest that the action of issuing discounted equity without shareholder approval seems to affect shareholder value negatively consistent with MEH.

On the other hand, observations for bins of fractions larger than 20% have positive an-

nouncement day abnormal returns. The abnormal return for the 20% to 30% fraction bin is marginally statistically insignificant with positive 2.50 (t -stat = 1.66) percent returns. This bin, however, only includes 85 observations. When including more observations from 20% to 40%, the mean of the returns decreases in magnitude but statistical significance is achieved by having more observations. The positive returns for observations that issue more than 20% shows that once shareholder approval is required, the market welcomes the private placement and expects the action to increase value even more than the dilution. These actions are most likely in the best interest of shareholders. Therefore, these observations could be the control group for the observations that avoid approval.

I look at bins separately without overlapping bins in Panel C. we observe that announcement day return exhibit statistically significant negative abnormal returns only for bins 10 to 15% fraction and 17.5% to 20% fraction bin. The bins above the 20% threshold do not have statistically significant returns without overlapping the bins toward the 20% threshold because there are less observations per bin.

This shows the difficulty in using the threshold event as identification. Theoretically, only observations very close to the thresholds should be used as the control and treatment group. However, this reduces the sample size significantly and the power of test reduces significantly as well making it difficult to get any statistical significance. Throughout the paper I use samples 17.5% to 22.5%, 15% to 25%, and 10% to 30%. Analysis using 17.5% to 22.5% would be most accurate but will have less power. 10% to 30% sample would have more power but the comparison between firms that issue 10% and a firm that issues 30% might be the right comparison.

The patterns of returns below and above the 20% approval threshold suggests that approved private issuances are aligned with existing shareholders' best interest while the ones that avoid approval by issuing below the threshold are not. The difference in returns exemplify the difference of shareholder interest aligned issuance and misaligned issuance. These results

are inconsistent with CAH and consistent with MEH.

Also, notice that firms that issue above the threshold issue larger fractions of equity at a discount yet achieve non-negative market response to the issuance. This suggests that when private discounted issuances are in the best interest of existing shareholders the benefit of issuance outweighs the cost of dilution. However, for firms that avoid approval the benefit seems not to be large enough to overcome the cost of dilution.

This can be seen more clearly by looking at discount-adjusted returns. I follow Hertz and Smith (1993) by adjusting returns to get discount-adjusted abnormal returns by

$$CAR_{i,t,adj} = [1/(1 - \alpha)]CAR_{i,t} + [\alpha/(1 - \alpha)]Discount_{i,t}$$

where α is the fraction of equity placed.

Results are presented in Table IV. The format is the same as Table III but all announcement day CARs are adjusted by discount. The pattern in difference are all statistically significant at the 1% level in Panel A similar to the previous table. Looking at Panel B and C we can observe that discount-adjusted CARs for firms that issue above 20% are all statistically significant at the 1% for both overlapping and non-overlapping bins. This suggests that after considering dilution, there is statistically significant value increase that results from the benefit of the private placement when firms require shareholder approval. This is consistent with the assumption that the sample of private placements with approval are maximizing shareholder value.

On the other hand, firms that avoid approval have positive but statistically insignificant returns for observations close to but not more than 20%. This result together with the previous table that showed negative announcement day returns for firms that avoid approval suggest that when shareholder approval is avoided some benefit might occur but the benefit is not significant and is outweighed by the cost of dilution. Thus, the overall return pattern shown in this section is consistent with managerial entrenchment.

C. Logit Regression on the Decision to Avoid Approval

In this section, I further investigate the characteristics of the firm and issuance to test whether shareholder approval avoidance is evidence of shareholder-manager conflict or costly shareholder approval.

I use a logit regression to predict the decision to avoid shareholder approval ($I_{\text{Fraction}<20\%}$). For the explanatory variables, I include variables that could test whether the decision to avoid shareholder approval is evidence of the Managerial Entrenchment Hypothesis (MEH) or Costly Approval Hypotheses (CAH). In particular, I look at cases where gaining shareholder approval could be too costly that avoiding shareholder approval is optimal for shareholder value. Since distress firms generally issue private placements and timeliness of finance could be important, firms in extreme distress or immediate need of cash would avoid shareholder approval more often under CAH.

I use the distress measures *CHS* from Campbell, Hilscher, and Szilagyi (2008) (higher *CHS* indicate higher levels of distress). To deal with possible non-linearities of the distress measure, I also use indicator functions of Distress_{High} and Distress_{Low} which are which are one if the firms are in the highest and lowest distress quartile of the sample, respectively. I also include cash and short-term investment (*CASHMTA*) to proxy for cash buffers and *BURN* to proxy for timeliness of financing (lower *BURN* indicates less time left). An indicator function ($I_{\text{Covenant Violation}}$) of debt covenants being triggered is included as an indication that other types of debt financing would be difficult and private issuance might be the last resort financing option.

Since firms in distress should generally use the proceeds for dealing with indebtedness or interest payments, I include an indicator function (I_{Debt}) that is one if the use of proceeds includes debt, and zero otherwise. Since timely financing for other reasons could also be important, I also include an indicator function (I_{Specific}) that is one if the use of proceeds states a specific use, and zero otherwise. Firms that avoid approval for timely financing could at least explain better what the proceeds are for. Variables except for *CASHMTA* and *BURN* should

have positive coefficients to be consistent with distress and finance timing being the reason for avoiding approval (CAH1.)

To further test hypotheses, I include variables of discount and ownership structure. I include discounts to test whether firms that avoid shareholder approval issue at higher discounts that cannot be justified. I also include managerial ownership to proxy for manager's interest being aligned with shareholder interest. MEH would predict positive coefficients for discounts and negative coefficient for managerial ownership. Finally to test whether shareholders are not sophisticated enough to understand what is in their best interest and shareholder approval needs to be avoided (CAH2). I include proportion of institutional holdings from Thomson's Reuter's database to proxy for shareholder sophistication. CAH2 would predict negative coefficients for institutional investors. I include book-to-market and size of market equity to control for general firm characteristics.

Empirical results can be found in Table V. I initially run the logit regression on the sample closest to the 20% threshold of 17.5% to 22.5% in regression (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 use indicator functions of Distress_{High} and Distress_{Low} instead of using the distress measure directly.

Regression (1) to (2) looks at the sample of 17.5% to 22.5%. I first look at variables that test CAH1. The *CHS* has a statistically significant coefficient (-0.40 [$t\text{-stat} = -6.00$]). This coefficient suggests that firms that are relatively less distressed issue at a fraction less than 20% without shareholder approval. *CASHMTA*, *BURN*, covenant violation, debt related use of proceeds, and specific use of proceeds all have insignificant coefficients. These results are inconsistent with CAH1 that argues that firms avoid approval because gaining approval is costly due to timely financing.

I test for CAH2 by looking at ownership information. Looking at the coefficient for insti-

tutional ownership, I find a positive coefficient of 0.02 (t -stat = 2.43). This positive coefficient suggests that firms with more sophisticated investors avoid shareholder approval more often. This is not consistent with the predictions of CAH2. Managers do not avoid shareholder approval because shareholders are less sophisticated. They avoid shareholder approval because shareholders are more sophisticated and understand that the private placement is not in shareholders' best interest.

To test for MEH, I look at managerial ownership and issuance discounts. The coefficient for managerial ownership is negative but statistically insignificant of -0.01 (t -stat = -0.77). The sign of the coefficient suggests that firms that avoid approval have less ownership consistent with MEH. I will avoid further interpreting the coefficients further as I do not have statistical significance. The statistical significance could be due to the fact that managerial ownership only comprises 2.76% of ownership in my sample as shown in the summary statistics table. Finally, the coefficients for discount is 3.19 (t -stat = 2.33). This result suggests that the discounts for firms that avoid approval are higher and cannot be justified by other characteristics. This result is consistent with the predictions of MEH. Overall, regression rejects CAH1 and CAH2, and consistent with MEH.

In regression (2), I replace the continuous distress measure with indicator functions of Distress_{High} and Distress_{Low} . I find that Distress_{High} has a statistically significant coefficient of -0.87 (t -stat = -2.88) while Distress_{Low} has a statistically insignificant coefficient while other coefficients have the same sign and statistical significance as regression (1). This shows that the significance of CHS is not a simple result of possible non-linearities in the measure. The negative sign of the coefficient of CHS is driven by firms that are in high distress. Firms that avoid approval have relatively less distressed firms than firms that gain approval which is

inconsistent with CAH1.¹⁵ If firms that avoid approval are mostly due to distress, firms that avoid approval should have relatively more distressed firms than other firms that cannot wait for approval. However, this conjecture of CAH1 is rejected in regression (1) and (2) which show that firms that avoid approval are less distressed and consist of less high distressed firms than firms that gain approval.

Regression (3) and (4) expands the sample range to 15% to 20%. Sign of variables that are significant are the same as regression (1) and (2). Firms that avoid approval are less distressed and have more institutional ownership than firms that gain approval. I lose statistical significance for discount. I interpret the result under the MEH as firms that avoid approval by issuing right below the threshold have higher potential of issuing at discount that are not justifiable than firms that issue further below the threshold. Therefore, when widening the sample size I lose the statistical significance.

Regression (5) has similar results as regression (6). Regression (6) shows an additional statistically significant coefficient for Distress_{Low} of 0.39 ($t\text{-stat} = 1.92$). This suggests that firms that avoid approval not only have less high distressed firms, they also have more low distressed firms suggesting Managerial Entrenchment Hypothesis. I reject CAH again in the wider sample.

In sum, Table V does not find support for the CAH. The distress level rejects CAH1. Higher institutional holdings of the firms that avoid approval reject CAH2. The pattern of distress adjusted discounts is consistent with MEH. The results from the logit regression combined with the announcement day return difference found in the previous section supports MEH. Many managers avoid shareholder approval because of self-interest of the issuance and is not aligned with shareholder's interest.

¹⁵Firms that avoid approval are less distressed in a relative sense compared to firms that gain approval. The cutoff point for Distress_{High} which is the highest quartile of the private placement corresponds to an annual default rate of 3.39% which is higher than average of the 90 to 95 percentile distressed firms of the cross-section of all firms according to Campbell, Hilscher, and Szilagyi (2008). Most of the observations in the sample are can be considered somewhat distressed when viewed in the cross-section of all traded firms.

Finally, I augment the results of the logit regression with the distress measure in the previous table by looking at post-issuance delisting rates. Since the private placements and other events could affect this rate it is not the best way to measure distress at the time of private placements. However, if many observations avoid approval due to distress as argued in CAH1 more firms should eventually default after the issuance than firms that gain approval.

Table VI presents the delisting rate. First looking at the sample of 17.5% to 22.5%, I find that in first 6 months firms that avoid approval delist less than 1% while firms that gain approval delist at a 5% rate. The difference is statistically significant at the 10% level suggesting that firms that gain approval are more distressed than firms that avoid approval. For one year after the issuance, 5% of the firms that avoid approval while 12% of firms that gain approval delist. Again, the difference is statistically significant at the 10% level. Finally, 2 year after the issuance 15% of firms that avoid approval delist while 21% of firms that gain approval delist. The difference is statistical insignificance for this period probably by because of the power of the test is small. When expanding the sample to 15% to 25% and 10% to 30%, I find similar numbers with higher t -statistics with statistical significance for all periods due to more observations in the sample.

Overall, the logit regression and the rate of delisting confirms that it is difficult to argue that firms that avoid approval are so distressed that they had to avoid shareholder compared to firms that gain approval. Since firms that issue private placement are somewhat distressed in general, it is difficult to separate distress and managerial entrenchment in this setting. As discussed in the empirical approach section of the paper, my identification comes from the control group that are also somewhat distressed but still go through shareholder approval and are most likely aligned with shareholders' interest. Firms need to be more distressed than the control group to justify avoiding approval. However, I find the opposite result suggesting managerial entrenchment to be a better description of the reasons firms avoid approval.

D. Announcement Day Returns of Firms that Issue without Approval

In this section, I link the announcement day returns of firms that issue without shareholder approval to characteristics of the firm and issuance. In section *B.*, I show that firms that avoid approval have negative announcement day returns. In section *C.*, I show that firms that avoid approval do not have a good reason to avoid approval. In this section, I try to see if the low announcement day returns of firms that avoid approval are particularly stronger for firms that are not justified by other reasons to avoid shareholder approval.

Table VII presents the results. The table presents the ordinary least square regression of announcement day 3-day CAR on the variables used in the previous logit regression. I initially run the regression on the sample closest to the 20% threshold of 17.5% to 20% in regression (1) and (2). I use a wider sample range of 15% to 20% in regressions (3) and (4), and 10% to 20% for regressions (5) and (6). The odd number regressions use the distress measure, *CHS*, while the even number regressions use indicator functions of Distress_{High} and Distress_{Low} instead of using the distress measure directly.

In regression (1) and (2), we observe that all variables are statistically insignificant but the coefficient for specific use of proceeds. The coefficient is 2.90 ($t\text{-stat} = 1.98$) in regression (1) and 2.91 ($t\text{-stat} = 1.95$) in regression (2). This result suggests that the returns of firms that avoid approval are higher when the company at least states a specific use of proceeds. Other firms that do not state specific use of proceeds have lower returns.

In regression (3) and (4), the announcement day returns have a statistically significant positive correlation with the *CHS* and Distress_{High} , respectively. The coefficient for *CHS* is 1.45 ($t\text{-stat} = 1.80$) in regression (3) and the coefficient for Distress_{High} is 1.45 ($t\text{-stat} = 1.80$). This result suggests that when firms do avoid approval and are indeed distressed, the announcement day returns is higher than when the firms avoid approval and are not distressed. The statistical significance of the indicator function of specific use of proceeds is now insignificant. This insignificance can be the result of stating use of proceeds is more important for returns when

firms are avoiding the approval by issuing closer to the 20% threshold.

In regression (5) and (4), the announcement day returns again have a statistically significant positive correlation with the CHS and Distress_{High} . The statistical significance is at the 1% level for CHS with coefficients of 1.25 ($t\text{-stat} = 2.67$) in regression (5) and statistical significance is at the 5% level for the coefficient for Distress_{High} is 2.79 ($t\text{-stat} = 2.26$). Compared to regression (3) and (4) the statistical significance increased due to more observations and stronger power of the test. The weak power might be the reason the coefficients for distress is insignificant in regression (1) and (2).

Additionally, discounts have statistical significance coefficients of -9.46 ($t\text{-stat} = -2.25$) in regression (5) and 9.42 ($-t\text{-stat} = -2.25$) in regression (6). Firms that avoid approval have lower returns when firms issue at a higher discount. This is consistent to what we have seen in discount-adjusted returns in Table IV. Firms that avoid approval do not benefit enough from the private placement to justify the high discounts.

Overall, the statistical significant coefficients of the table are consistent with previous conclusions. The negative abnormal returns of firms that avoid shareholder approval is stronger in firms that are less distressed, do not state specific use of proceeds and issue at higher discounts. To see this more clearly, I split the companies that issue without approval by the statistical significant coefficients of Table VII to look at the signs and statistical significance of announcement day returns. I split the sample into lowest distress quartile and highest quartile. Also, I split the sample into companies that state specific use of proceeds and the ones that do not. Finally, I split the sample into companies that issue in the lowest discount quartile and highest quartile of all discounted issuances.

Table VIII presents the mean announcement day returns of the subgroups of the companies that issue without approval. The first row uses the range of 17.5% to 20%, the second row uses the larger sample of 15% to 20%, and the third row looks at the largest sample of 10% to 20%. In the first row, when the avoidance group is divided by distress, firms that are in

the highest distress quartile bin have negative but statistically insignificant returns of -0.32 (t -stat = -0.19). However, firms that are in the lowest distress quartile bin have a statistically significant negative return of -2.37 (t -stat = -2.4). This shows that when shareholder approval is avoided, the market responds negatively to discounted issuance if firms do not seem distressed.

When looking at issuance with project specific use of proceeds and ones without. Firms that state specific use of proceeds have negative but statistically insignificant returns for announcement day returns of 1.23 (t -stat = 0.26). Firms that do not state a project for the use of proceeds, however, have negative but statistically significant returns (-3.00 [t -stat = -2.94]). The results are weaker for discounts.

I achieve weaker results when looking at issuance with higher discounts. Firms that have issuance discounts less than 15% have negative but statistically insignificant returns for announcement day returns of 1.23 (t -stat = 0.26). Firms that have discounts more than 15%, however, have negative statistically insignificant returns (-1.89 [t -stat = -1.14]).

The results are similar for the larger samples of 15% to 20% and 10% to 20% with stronger statistical power. Companies that are in lower distress, do not state a specific use of proceeds, and issue at higher discounts have negative and statistically significant returns. Returns are statistically insignificant for high distress firms, firms that do not state a specific use of proceeds, and issue at higher discounts. Companies in the 10% to 20% sample that state specific use of proceeds have negative returns of -1.11 (t -stat = -1.97) which is the only exception.

Overall, this section shows that when shareholder approval is avoided the negative market responses are stronger in cases that the issuances do not seem to be in the best interest of shareholders (i.e., less distressed, do not state specific use of proceeds, higher discounts). This analysis of the low returns is consistent with the Managerial Entrenchment Hypothesis of firms avoiding shareholder approval.

E. Implication: Full Sample Announcement Day Returns

In this section, I look at the implication of the shareholder approval rule on the positive announcement day returns of private placements. I add the common equity issuance observations that are issued at a premium additional to the discounted issuance sample that is used for the rest of the paper. I denote this sample as the “full sample.” The total sample size increases from 2,484 to 3,276.

Wruck (1989), Hertz and Smith (1993), and others document the positive announcement returns of private placements. This is in contrast to the negative announcement day returns of public equity issuances which generally have negative announcement day returns. Wruck (1989) proposes that the monitoring effect of the new shareholders explain the positive announcement day returns by looking at identities of new investors and new board positions. Hertz and Smith (1993), on the other hand, suggest a certification hypothesis arguing that firms that issue private placements have positive announcement day returns because information about the undervaluation is released through the private placement.

However, Wu (2004) and Barclay, Holderness, and Sheehan (2007) suggest the managerial entrenchment aspect of private placements by looking at discounts given to managers and the post-issue events of private placements. Especially, Barclay, Holderness, and Sheehan (2007) compare different hypothesis and find most empirical results are consistent with entrenchment except for the positive short-run returns. Although the goal of this paper is not to sort out these different hypotheses, I study the announcement day returns by different regions to show that the positive announcement day returns are not inconsistent to managerial entrenchment. Since the distribution around the shareholder approval region of 20% region has not been recognized before, it would be interesting to go back and investigate these returns by distribution of issuance premium (negative discount) and the fraction of equity placed using the full sample.

Figure 4 presents the full sample returns in Panel A and the distribution of returns by different regions of premium and the 20% fraction of equity placed in Panel B. In Panel A,

I first show that the mean ± 1 announcement day abnormal CARs are positive for the full sample (0.78 [t -stat = 2.81]) as the literature documents. This positive abnormal return is statistically significant at the 1% level.

By looking at the sub regions in Panel B, I find that the positive announcement day returns are found in shareholder approved discounted issuances and issuances at a premium. The discounted issuances with fraction of equity placed less than 20% have negative statistically significant returns of -0.90 (t -stat = -3.33). The return pattern for firms that issue at a discount has been shown earlier in Table III. The positive announcement returns of firms that issue at a premium is not surprising as these issuance would add value to existing shareholders and most likely signal undervaluation of the equity consistent to the certification hypothesis.

This shows that the positive announcement day returns is the result of averaging issuance that are placed at a premium, discounted issuance less than the 20% threshold, and discounted issuance above the 20% threshold. It is difficult to argue, however, that the positive announcement day returns are representative of all private placements. About two thirds of the sample is issued at a discount and less than 20% and better represents the private placements. These issuances have negative returns and are consistent with the managerial entrenchment hypothesis. Issuance at a premium or issuance of more than 20% are more consistent with the predictions of the certification or monitoring hypothesis.

To formalize the argument, we turn to a regression analysis with variables related to premium/discount, fraction of equity placed and shareholder approval. We know that once controlling for the shareholder approval region (i.e., discounted issuance of fraction above 20%) returns are negatively correlated to the fraction of equity placed. Additionally, there are proportionately more observations placed at a premium when issuing more than 20% of shares because the shareholder approval region not having many observations (See Figure 1).

Table IX presents the ordinary least square regressions of announcement day abnormal returns. Regression (1) to (3) uses the sample of discounted common equity issuances. The

sample contains up to the 40% fraction of equity placed. Regression (4) to (8) uses the full sample including the ones placed at a premium. Explanatory variables include fraction of equity placed, premium (negative discount) of the issuance to the closing day price, and interaction of the fraction of equity placed and premium. This interaction term will control for the dilution occurring for existing shareholders. To control for issuances at a premium (negative discount), I also use an indicator function $I_{Premium}$ to include for regressions (4) to (8) this will also be used to interact with premium and fraction of equity placed. Finally, I include an indicator function $I_{Approval}$ which is 1 if issuances are at a discount and placed more than 20%, and zero otherwise.

First, looking at the discounted issuance sample in regression (1) we observe that the fraction of equity placed is positively related to the announcement day returns (5.97 [t -stat = 1.56]). This result is consistent with the certification hypothesis that larger fractions placed are related to higher certification of worth of the equity. However, we know that firms that are placed more than 20% have higher returns than the ones that issue less than 20%. Including $I_{Approval}$ in the regression shows that the positive coefficient of fraction placed flips signs to -6.91 (t -stat = -1.38). Also, the coefficient of $I_{Approval}$ is statistically significant at 3.73 (t -stat = 3.37). This suggest that the positive relationship found with the announcement day return with fraction of equity placed is mostly due to the shareholder approval region.

In regression (3), we include the interaction term which should control for dilution. Including the interaction term makes the coefficient for fraction placed statistically significant at -12.26 (t -stat = -2.10). The premium (discount) amount is also negatively related to the announcement day returns. The coefficient of $I_{Approval}$ is statistically significant at 3.62 (t -stat = 3.62) confirming previous regressions.

The next 5 regressions use the full sample of both discounted and premium issuances. Regression (4) includes fraction placed and premium. Both coefficients are statistically significant. Fraction placed has a coefficient of 13.18 (t -stat = 3.45) where premium has a positive coefficient

of 13.11 (t -stat = 4.07). The positive sign on the fraction placed could again be interpreted as evidence supporting the certification hypothesis while including the spread in the premium would increase as we include both premium and discounted issuances in the sample. Regression (5) includes the interaction term but the results are the same as (4).

Including $I_{Approval}$ to the regression makes the statistical significance of the premium discount insignificant but the coefficient of fraction placed is still statistical significance at 15.27 (t -stat = 2.92). However, since we know that the relation between fraction placed and announcement day return is negative for discounted issuances from regression (3), I conjecture that this positive relation is mainly coming from positive issuances and the shareholder approval region.

Regression (7) and (8) investigates the relationship between announcement day returns, dilution and shareholder approval. Including an indicator function for premium issuances and the interaction of premium, fraction placed, and $I_{Premium}$ in regression (7), I find that the interaction term is statistically significant 2.00 (t -stat = 2.53). The coefficient for fraction placed is now statistically insignificant of 6.33 (t -stat = 1.40). Finally, I include all variables in regression (8). The coefficient for fraction placed becomes statistically insignificant of 0.02 (t -stat = 0.51). Instead, $I_{Approval}$ and the interaction of premium, fraction placed, and $I_{Premium}$ become statistically significant of 2.88 (t -stat = 2.44) and 2.00 (t -stat = 2.52)..

The premium issuances are placed above market value. Existing shareholders would benefit from these issuances and it is not surprising that the market responds positively to these issuances. The more equity issued at a premium would equity value would increase more for existing shareholders. These premium issuances and the shareholder approval region together make the fraction placed positively correlated to announcement day returns. The discounted issuance controlling for the approval region has negative relationship between fraction placed and announcement day return consistent with the dilution of placement.

The positive coefficient for shareholder approval is consistent with the certification hypothe-

sis or monitoring hypothesis. However, it is not certification or monitoring of an outside investor that matters in my paper. It is the certification or monitoring of existing shareholders. Other than the shareholder approval region, the announcement day returns are generally explained by the value addition by premium issuance. Thus, the distribution of the positive announcement day return is better understood.

This section looks at the full sample of announcement day returns. It shows that the distribution of observations as well as the distribution of return is fragmented in a way that is consistent with shareholder approval having positive impact on returns and the gain from premium issuance is important in explaining stock return responses to private placements. Without separating the distribution of issuance at the shareholder approval region the results could be misleading. The firms in the discounted equity issuance region that issue less than 20% do not have positive announcement day returns.

V Discussion of Alternative Hypotheses

In this section, I discuss other alternative hypotheses that might explain the shareholder approval avoiding behavior.

Monetary Costs Hypothesis

: Managers avoid approval because of monetary costs.

One direct cost of obtaining shareholder approval could be the monetary cost of gaining approval. Contacting shareholders and opening a special meeting could be costly. Monetary Costs Hypothesis posits that manager would possibly avoid shareholder approval due to these costs.

This argument is not well supported when thinking about the pattern of announcement day returns of private placements. The monetary cost should occur only to firms that issue above the 20% threshold. Firms that avoid approval save the monetary costs of approval suggesting

that firms that avoid approval should have higher returns than firms that gain approval when only considering the additional monetary cost. However, firms that issue more than the 20% threshold have positive announcement returns while firms that gain approval have lower negative returns in Table III. This return pattern shows that monetary cost alone cannot be the reason managers avoid shareholder approval.

Perhaps the returns are lower for firms that avoid approval due to not being able to issue at the optimal fraction in order to avoid the cost related to shareholder approval. A quick approximation of the announcement day return effect can show that the monetary costs have to be extremely large to justify the ex-post return difference for avoiding approval. The average market equity size of a company in the sample is 450 million dollars. The negative announcement day return for firms that avoid approval is more than 1.5% which would approximate to a devaluation of 6.7 million dollars on average. If one looks at the return difference of firms that gain approval, the return difference for firms that avoid approval is more than 4.5%. This would amount to a devaluation of 20.25 million dollars.

Monetary cost of gaining approval needs to be larger than these numbers (i.e., 6.7 million or 20.25 million dollars) to justify that avoiding shareholder approval is better than to go through the approval process and paying the cost of monetary cost of approval. Since it seems difficult to argue that the monetary cost would come even close to these numbers, the monetary cost hypothesis is not well supported.

Market Timing Hypothesis

: Managers avoid approval to sell overpriced equity.

The market timing hypothesis posits that managers might avoid approval so that the manager can sell equity at a level that is higher than the true price of the equity as argued by Baker and Wurgler (2002). Gaining approval might leak information about the private placement and the true price of the equity. Manager would avoid approval to keep information about the true

price of equity.

The market timing hypothesis has three predictions about pre-announcement returns, announcement day returns, and long-run returns. First, pre-announcement day returns should be lower for firms that gain approval. Firms that gain approval might have leaked information about the true price of the firm while preparing for the private placement in advance under this hypothesis. Therefore, pre-announcement day returns should be lower for firms that gain approval. Second, discount-adjusted announcement day returns should be negative for firms that avoid approval. If managers are selling overpriced 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.

Finally if the discount-adjusted returns are not negative, returns should come down to the true price and long-run returns should be lower for firms that avoid approval than the ones that gain approval. Firms that avoid approval should have lower long-run returns than firms that gain approval because the price level should come down to the true price after the announcement for firms that avoid approval. Firms that gain approval should have already realized the true price before the announcement of the private placement. Therefore, post-announcement returns should be lower for firms that avoid approval.

The second prediction can be rejected by looking at discount-adjusted returns in Panel B of Table IV. Discount-adjusted returns are non-negative for all bins that issue less than 20%. Returns for the 0% to 20% bin is statistically significant of 0.52 (t -stat=1.71) while bins that issue closer but less than the 20% region are statistically insignificant and positive. These results show that firms that avoid approval issued at a price that is not higher than the market value price after the issuance. These results are inconsistent with the second prediction of the Market Timing Hypothesis.

Table X presents the difference of cumulative abnormal returns for issuances above and

below the 20% threshold for different periods by different issuance fraction. Panel A presents pre-announcement CARs and Panel B presents post-announcement CARs. All differences are positive for the one-month (-30, -2) pre-announcement returns but only the sample from 0% to 40% fraction issued is statistically significant (3.23 [t -stat=1.78].) This suggests that there could have been positive leakage of the shareholder approval required private placements rather than negative signaling of equity being overpriced. For the one-week (-7, -2) pre-announcement returns none of the returns are significant. There are some difference in returns that are negative closer to the 20% threshold but none are statistically significant. These evidences are inconsistent with the first prediction of the Market Timing Hypothesis.

Panel B presents post-announcement CARs. I present one-week (+2, +7), one-month (+2, +30), half year (+2, +180), and one-year (+2, +365) CARs. Again all but one return difference (one-month post-announcement CAR for equity issuance region from 12.5% to 27.5%) is statistically significant. Although some of the differences in CARs are negative, none of them are statistically significant. These results do not support the third prediction of the Market Timing Hypothesis and therefore all predictions are rejected.

Fiduciary Duties Hypothesis

: Managers avoid approval due to fiduciary duties to creditors.

Fiduciary Duties Hypothesis argues that the private placement is still misaligned with shareholders but differs from the Managerial Entrenchment Hypothesis (MEH) in that the motivation is from fiduciary duties to creditors rather than managers private benefit. When in the proximity of distress, equity issuance would decrease distress cost and benefit creditors. However, equity holders would not always approve of such action due to the value transfer from equity holders to creditors (i.e., debt overhang problem) creating the equity-debt holder conflict. As an example, Becker and Stromberg (2012) studies 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 approval and issue privately to satisfy fiduciary duties to debt holders that equity holders would not agree to. As a result, shareholder value would decrease but debt value would increase enough to maintain or increase total firm value (i.e., debt value plus equity value).

Ideally, announcement day returns for debt would help measure the total firm value created from the private placement. However, it is difficult to measure how much creditors benefit from the private placement because only sparse market debt data is available for firms that issue privately in the database. As an alternative, I test the fiduciary duty hypothesis by looking at whether firms are distressed or in need of cash just as in CAH1. Firms that are more distressed should increase debt value more than firms that are less distressed. Therefore, the market response should be the same as predictions of MEH while other proxies should have the same prediction as CAH1.

Most strongly, debt covenant violation should affect managers' action. Roberts and Sufi (2009) shows that after covenants are triggered the control rights go to creditors and the firm's financial policy would be in the interests of creditors. Therefore, managers would avoid approval more often when debt covenants are violated. Additionally, higher distress level firms would have stronger reasons for the manager to avoid approval under this hypothesis so I look at distress levels, cash holdings, burn rate, frequencies of use of proceeds mentioning debt related reasons. Fiduciary duty hypothesis would predict managers would avoid approval more often when covenants are triggered and firms are more distressed, have less cash holdings, and more often mention debt related use of proceeds.

The market prediction of MEH is supported in earlier sections. This result is consistent with the Fiduciary Duties Hypothesis because both MEH and Fiduciary Duties Hypothesis are against equity holders' best interest. However, the predictions of CAH1 are not supported as seen in previous sections suggesting that Fiduciary Duties Hypothesis should be rejected.

Distressed firms's debt would benefit more from the private placements but I find that firms that are less distressed are more likely to avoid approval. Moreover, I did not find support for the effect of covenant violations. Thus, the Fiduciary Duties Hypothesis reasons for avoiding shareholder approval is not well supported by data.

VI Conclusion

This paper provides empirical evidence that many firms that issue privately have managerial entrenchment motivations when issuing discounted equity privately. Distressed firms have been the classical setting for agency theory literature. However, it has been difficult to empirically identify disagreement or value transfer among different agents. This paper focuses on the empirical setting of distressed equity issuance through private placements.

This paper identifies principle-agent disagreement when publicly traded firms issue equity privately using a shareholder approval regulation governing private issuance. Using the distribution discontinuity around the 20% threshold, I identify many managers avoid shareholder approval by manipulating issuance fraction to be just below the threshold.

Since managers have most accurate information about the company managers should have a good sense of whether an approval will be approved or not. I further test whether managers avoid approval due to managerial entrenchment or because gaining shareholder approval is costly. I find that both announcement day return patterns and company and contract characteristics are consistent with the managerial entrenchment hypothesis while other hypotheses are rejected.

This shows that managers' might take actions that do not necessarily maximize shareholder value when issuing discounted equity privately. Also, my paper has an implication for the private placement literature as I show a break in the distribution of private placements as well as a break in the issuance firms' returns. In the full sample, the majority of the sample that are placed at a discount and issue a fraction less than 20% do not have a positive announcement day

return. Firms that issue at a premium and issue more than 20% have positive announcement day returns. The averaging of these observations creates the puzzling positive announcement day returns of private placements.

Finally, the paper leaves the question whether the 20% threshold in the U.S. is too high compared to other countries. Most European and Asian companies require rights offering before the manager goes out to seek funding that might dilute shareholders. Although the speedy procedure of private issuance has its benefits, the cost of dilution seems to be too high to justify the benefits in many cases and the high threshold of requiring shareholder approval might have been abused in many cases.

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Table I: Summary Statistics

The table presents summary statistics of discounted common equity issuance and the issuer characteristics. Discount is the difference in issuance price relative to the day previous to the close of the equity issuance. Fraction placed is the amount issued calculated to apply the 20% rule. Use of proceeds is divided into debt related and specific project stated use of proceeds and are denoted by indicator functions I_{Debt} and $I_{Specific}$, respectively. CHS is the distress measure from Campbell, Hilscher, and Szilagyi (2008). $CASHMTA$ is cash and short term investments over market equity and total liabilities. $BURN$ is the geometrically decreasing average of net income ($NIMTAAVG$) divided by $CASHMTA$ when $NIMTAAVG$ is negative, and zero otherwise. MB is the market-to-book measure and Size is market equity measured in 1,000 millions of dollars. $I_{Covenant Violation}$ is an indicator function which is one if debt covenants is triggered, and zero otherwise. Inst. Ownership and Managerial Shares are the proportion of institutional ownership and managerial ownership and are from Thomson Reuters. Private Placement data is from PlacementTracker.

	No. of Obs	Mean	Median	Std. Deviation	Min	Max
<i>Placement Characteristics</i>						
Year	2,484	2003.27	2003	3.49	1995	2010
Discount	2,484	-0.15	-0.13	0.11	0.00	0.88
Fraction Placed	2,484	0.14	0.13	0.08	0.00	0.40
<i>Use of Proceeds</i>						
I_{Debt}	2,484	0.09	0	0.29	0	1
$I_{Specific}$	2,484	0.36	0	0.48	0	1
<i>Distress</i>						
CHS	2,484	-6.67	-6.80	1.03	-9.09	-3.14
$CASHMTA$	2,484	0.09	0.06	0.09	0.00	0.384
$BURN$	2,484	-0.90	-0.24	3.74	-84.78	0
$I_{Covenant Violation}$	2,484	0.06	0.00	0.23	0	1
<i>Ownership Information</i>						
Inst. Ownership (%)	2,484	12.18	0.57	19.80	0	100
Managerial Shares (%)	2,484	2.76	0.22	7.87	0	85.55
<i>Firm Characteristics</i>						
MB	2,484	3.59	3.57	1.71	0.37	5.73
Size (1,000MM)	2,484	0.41	0.12	2.20	0.001	58.44

Table II: Distribution Discontinuity at the 20 Percent Threshold

The table reports estimates from regressions that regresses 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 at “0” both 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 1% to 39%. 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.

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

Range (%)	Bin Size	$I_{Fraction \geq 20\%}(\beta)$	t -statistics	No. Bins	Adj R ²	Mean (α)
17.5 - 22.5	0.10	-43.93***	(-10.78)	50	0.87	48.97
	0.25	-84.93***	(-7.76)	20	0.85	95.84
15 - 25	0.10	-43.39***	(-11.15)	100	0.77	47.93
	0.25	-84.41***	(-9.49)	40	0.83	93.80
10 - 30	0.10	-34.54***	(-11.19)	200	0.73	38.20
	0.25	-72.54***	(-8.82)	80	0.79	81.55
0 - 40	0.10	-25.40***	(-11.36)	400	0.72	29.04
	0.25	-56.69***	(-9.37)	160	0.81	66.00
Permutation test (t -statistic)						
0 - 40	0.10		(-128.33)	380		

Table III: Announcement Day Returns by Fraction of Equity Placed

The table presents announcement day returns of discounted private placement issuing firms by bins of different issuance fraction. Panel A presents the mean difference of the 3-day cumulative abnormal return (CAR) between issuances above and below the 20% threshold. Panel B presents returns for fractions centered around the 20% shareholder approval threshold while Panel C presents returns for non-overlapping bins. 3-day CAR is the sum of the ± 1 day announcement abnormal returns where returns are adjusted by coefficients estimated by regressing past daily returns on market, HML, SMB, momentum factors from Ken French's website. Discounted common equity private placement observations are from PlacementTracker. Returns are presented in percentages. The t -statistics are calculated using robust standard errors clustered at the firm level and presented in parentheses. The statistical significance at the 10%, 5% and 1% levels is denoted by *******, ******, *****, and ********, respectively.

Panel A. Mean Difference of CARs for Issuances above and below 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		
Difference	2.42***	2.02**	2.12**	2.85***	3.02***	3.32***	3.77***	4.32***		
3-day CAR	(2.88)	(2.40)	(2.40)	(2.94)	(3.04)	(3.09)	(3.01)	(2.64)		
No. of Obs	2,484	2,333	2,073	1,743	1,410	1,057	703	366		

Panel B. CARs by Fraction of Equity Placed Centered around the 20% Threshold										
Range (%)	0 - 20	10 - 20	15 - 20	17.5 - 20	20 - 22.5	20 - 25	20 - 30	20 - 40		
3-day CAR	-0.90***	-1.32***	-1.41**	-1.82***	2.50	2.36**	1.70*	1.51*		
	(-3.33)	(-3.33)	(-2.44)	(-2.66)	(1.66)	(2.07)	(1.83)	(1.85)		
No. of Obs	2,060	1,129	534	281	85	169	281	424		

Panel C. CARs by Fraction of Equity Placed without Overlapping Bins										
Range (%)	0 - 10	10 - 15	15 - 17.5	17.5 - 20	20 - 22.5	22.5 - 25	25 - 30	30 - 40		
3-day CAR	-0.42	-1.23**	-0.95	-1.82***	2.50	2.23	0.71	1.13		
	(-1.18)	(-2.37)	(-1.01)	(-2.66)	(1.66)	(1.29)	(0.50)	(0.63)		
No. of Obs	931	595	253	281	85	84	112	143		

Table IV: Discount-adjusted Announcement Day Returns by Fraction of Equity Placed

The table presents discount-adjusted announcement day returns of discounted private placement issuing firms by bins of different issuance fraction. Panel A presents the mean difference of the discounts-adjusted 3-day cumulative abnormal return (CAR) between issuances above and below the 20% threshold. Panel B presents returns for bins by fractions centered around the 20% shareholder approval threshold while Panel C presents returns for non-overlapping bins. 3-day CAR is the sum of the ± 1 day announcement abnormal returns where returns are adjusted by coefficients estimated by regressing past daily returns on market, HML, SMB, momentum factors from Ken French's website. 3-day CAR is then adjusted by the discount amount and fraction of equity placed to adjust for dilution. Discounted common equity private placement observations are from PlacementTracker. Returns are presented in percentages. The t -statistics are calculated using robust standard errors clustered at the firm level and presented in parentheses. The statistical significance at the 10%, 5% and 1% levels is denoted by **“**”**, **“***”**, and **“****”**, respectively.

Panel A. Mean Difference of CARs for Issuances above and below 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		
Difference	5.44***	4.56***	4.33***	4.86***	4.74***	4.86***	4.85***	4.77**		
3-day CAR _{adj}	(5.13)	(4.34)	(3.96)	(4.04)	(3.91)	(3.70)	(3.15)	(2.37)		
No. of Obs	2,484	2,333	2,073	1,743	1,410	1,057	703	366		

Panel B. CARs by Fraction of Equity Placed Centered around the 20% Threshold										
Range (%)	0 - 20	10 - 20	15 - 20	17.5 - 20	20 - 22.5	20 - 25	20 - 30	20 - 40		
3-day CAR _{adj}	0.52* (1.71)	0.67 (1.49)	1.11 (1.65)	0.92 (1.11)	5.68*** (3.07)	5.96*** (4.23)	5.41*** (4.72)	5.96*** (5.72)		
No. of Obs	2,060	1,129	534	281	85	169	281	424		

Panel C. CARs by Fraction of Equity Placed without Overlapping Bins										
Range (%)	0 - 10	10 - 15	15 - 17.5	17.5 - 20	20 - 22.5	22.5 - 25	25 - 30	30 - 40		
3-day CAR _{adj}	0.33 (0.90)	0.28 (0.48)	1.33 (1.23)	0.92 (1.11)	5.68*** (3.07)	6.25*** (2.92)	4.58*** (2.53)	7.04*** (3.06)		
No. of Obs	931	595	253	281	85	84	112	143		

Table V: Logit Regression of Firms Issuing without Approval

The table presents the results of logit regressions predicting privately issued equity avoiding shareholder approval by issuing less than 20% of existing shares. The left hand side variable is one if the fraction of equity placed is less than 20% (i.e., shareholder approval is avoided,) and zero otherwise. Discounted private placements observations with fraction of equity placed between 17.5% and 22.5% are used for regressions (1) and (2), 15% to 25% for regressions (3) and (4), and 10% to 30% for regressions (5) and (6). The right hand side variables include measures of characteristics of the firm and the issuance. Distress measure *CHS* is from Campbell, Hilscher, and Szilagyi (2008). Distress_{High} and Distress_{Low} are indicator functions which are one if the firms are in the highest and lowest distress quartile, respectively. *CASHMTA* is cash and short term investments over market equity plus total liabilities. *BURN* is the geometrically decreasing average of net income (*NIMTAAVG*) divided by *CASHMTA* when *NIMTAAVG* is negative, and zero otherwise. *ICovenant Violation* is an indicator function which is one if debt covenants is triggered, and zero otherwise. Debt related use of proceeds and specific use of proceeds and are denoted by indicator functions *IDebt* and *ISpecific*, respectively. Discount is the difference in issuance price relative to the day previous to the close of the equity issuance. Inst. Ownership and Managerial Shares are the proportion of institutional and managerial ownership. *MB* is the market-to-book measure and *Size* is market equity measured in millions of dollars. The statistical significance at the 10%, 5% and 1% levels is denoted by “*”, “**”, and “***”, respectively, and the *t*-statistics are presented in parentheses.

Range (%)	Logit($I_{\text{Fraction}(i) < 20\%}$) = $\alpha + X_i B + \epsilon_i$					
	17.5% - 22.5%		15% - 25%		10% - 30%	
	(1)	(2)	(3)	(4)	(5)	(6)
Distress (<i>CHS</i>)	-0.50*** (-3.49)		-0.40*** (-4.21)		-0.40*** (-5.70)	
Distress _{High}		-0.87*** (-2.88)		-0.56*** (-2.70)		-0.61*** (-3.94)
Distress _{Low}		-0.02 (-0.05)		0.25 (0.97)		0.39* (1.92)
<i>CASHMTA</i>	0.22 (0.14)	0.06 (0.04)	-1.29 (-1.16)	-1.30 (-1.18)	-1.13 (-1.32)	-1.16 (-1.37)
<i>BURN</i>	0.45 (0.11)	1.32 (0.33)	-1.88 (-0.49)	-1.18 (-0.33)	0.15 (0.07)	0.57 (0.27)
<i>ICovenant Violation</i>	0.37 (0.71)	0.21 (0.41)	0.14 (0.38)	0.03 (0.09)	-0.04 (-0.14)	-0.10 (-0.37)
<i>IDebt</i>	0.07 (0.12)	0.06 (0.12)	-0.54 (-1.57)	-0.54 (-1.58)	-0.11 (-0.39)	-0.13 (-0.47)
<i>ISpecific</i>	-0.11 (-0.39)	-0.05 (-0.19)	-0.11 (-0.54)	-0.06 (-0.31)	-0.10 (-0.68)	-0.07 (-0.47)
Inst. Ownership	0.02** (2.03)	0.02** (2.16)	0.02** (2.68)	0.02** (2.94)	0.02** (3.66)	0.02** (3.94)
Managerial Shares	-0.01 (-0.77)	-0.01 (-0.86)	0.01 (0.59)	0.01 (0.67)	0.02 (1.36)	0.02 (1.37)
Discount	3.19** (2.33)	2.96** (2.16)	1.43 (1.63)	1.31 (1.49)	0.44 (0.70)	0.38 (0.61)
MB	-0.03 (-0.39)	-0.05 (-0.66)	-0.07 (-1.25)	-0.09 (-1.45)	-0.02 (-0.45)	-0.02 (-0.50)
Size	-0.49 (-1.49)	-0.48 (-1.59)	-0.00 (-0.09)	0.00 (0.01)	0.02 (0.46)	0.03 (0.53)
No. of Obs	366	366	703	703	1,410	1,410
Pseudo R^2	0.06	0.05	0.05	0.04	0.05	0.04

Table VI: Rate of Delisting following Private Placement

The table presents portion of firms that delist after the private placement. The period of (0, +180), (0, +365), and (0, +730) denote the period of six months, one year, and two years after the private placement. I present the rate of delisting below and above the 20% fraction issued for ranges of 17.5% to 22.5%, 15% to 25%, and 10% to 30%. The mean difference of the rate of delisting below and above the 20% fraction are present with statistical significance at the 10%, 5% and 1% levels denoted by “*”, “**”, and “***”, and “****”, respectively. Robust standard errors clustered at the firm level are used to calculate *t*-statistics presented in parentheses.

Range (%)	Rate of Delisting								
	<20%	17.5% - 22.5%	Diff	<20%	15% - 25%	Diff	<20%	10% - 30%	Diff
(0, +180)	0.00 (1.00)	0.05 (2.04)	0.04* (1.89)	0.00 (1.42)	0.04 (2.49)	0.03** (2.19)	0.01 (2.84)	0.03 (3.04)	0.02** (3.15)
(0, +365)	0.05 (3.35)	0.12 (4.75)	0.07* (1.68)	0.04 (4.43)	0.12 (4.75)	0.08*** (3.04)	0.04 (6.68)	0.10 (5.46)	0.06*** (3.15)
(0, +730)	0.15 (7.11)	0.21 (4.75)	0.06 (1.18)	0.14 (9.33)	0.23 (7.10)	0.09*** (2.45)	0.15 (13.85)	0.21 (8.72)	0.07** (2.46)
No. of Obs	281	85	366	534	169	703	1,129	281	1,410

Table VII: Announcement Day Return of Firms that Issue without Approval

The table presents the ordinary least square regression of announcement day returns of firms that issue discounted equity privately without shareholder approval (i.e., fraction of discounted equity placed less than 20%). Discounted private placements observations with fraction of equity placed between 17.5% and 20% are used for regressions (1) and (2), 15% to 20% for (3) and (4), and 10% to 20% for (5) and (6). The left hand variable is the 3-day CAR which is the sum of ± 1 day announcement abnormal return in percentages. The right hand side variables include measures of characteristics of the firm and the issuance. Distress measure *CHS* is from Campbell, Hilscher, and Szilagyi (2008). Distress_{High} and Distress_{Low} are indicator functions which are one if the firms are in the highest and lowest distress quartile, respectively. *CASHMTA* is cash and short term investments over market equity plus total liabilities. *BURN* is the geometrically decreasing average of net income (*NIMTAAVG*) divided by *CASHMTA* when *NIMTAAVG* is negative, and zero otherwise. *ICovenant Violation* is an indicator function which is one if debt covenants is triggered, and zero otherwise. Debt related use of proceeds and specific use of proceeds and are denoted by indicator functions *IDebt* and *ISpecific*, respectively. Discount is the difference in issuance price relative to the day previous to the close of the equity issuance. Inst. Ownership and Managerial Shares are the proportion of institutional and managerial ownership. *MB* is the market-to-book measure and *Size* is market equity measured in millions of dollars. The statistical significance at the 10%, 5% and 1% levels is denoted by “*”, “**”, and “***”, respectively, and the *t*-statistics are presented in parentheses.

Range (%)	3-day $CAR_i = \alpha + X_i B + \epsilon_i$					
	17.5% - 20%		15% - 20%		10% - 20%	
	(1)	(2)	(3)	(4)	(5)	(6)
Distress (<i>CHS</i>)	1.18 (1.60)		1.45* (1.80)		1.25*** (2.67)	
Distress _{High}		2.50 (1.31)		3.46* (1.82)		2.79** (2.26)
Distress _{Low}		-0.62 (-0.44)		-0.57 (-0.52)		-0.94 (-1.25)
<i>CASHMTA</i>	-6.62 (-0.73)	-6.86 (-0.76)	-1.77 (-0.25)	-2.36 (-0.34)	-4.41 (-0.81)	-4.60 (-0.86)
<i>BURN</i>	-1.77 (-0.15)	-3.54 (-0.30)	2.66 (0.21)	2.07 (0.18)	3.10 (0.23)	2.79 (0.21)
<i>ICovenant Violation</i>	-1.21 (-0.37)	-0.91 (-0.28)	-1.55 (-0.65)	-1.32 (-0.57)	-0.97 (-0.59)	-0.88 (-0.55)
<i>IDebt</i>	-2.88 (-1.26)	-2.95 (-1.29)	-2.33 (-1.32)	-2.33 (-1.30)	-1.07 (-0.95)	-1.03 (-0.91)
<i>ISpecific</i>	2.90** (1.98)	2.91* (1.95)	2.12 (1.64)	2.07 (1.63)	0.87 (0.99)	0.84 (0.97)
Inst. Ownership	-0.02 (-0.54)	-0.02 (-0.52)	-0.03 (-1.09)	-0.03 (-1.22)	-0.01 (-0.57)	-0.01 (-0.67)
Managerial Shares	0.01 (0.20)	0.01 (0.23)	0.10 (1.03)	0.10 (1.04)	0.06 (1.08)	0.06 (1.09)
Discount	-6.82 (-0.87)	-6.51 (-0.84)	-9.24 (-1.43)	-8.89 (-1.40)	-9.46** (-2.25)	-9.42** (-2.25)
<i>MB</i>	-0.52 (-1.11)	-0.47 (-1.04)	-0.67* (-1.80)	-0.64* (-1.69)	-0.31 (-1.32)	-0.28 (-1.18)
<i>Size</i>	-0.43 (-0.16)	-0.81 (-0.29)	-0.04 (-0.91)	-0.04 (-0.89)	-0.12 (-1.46)	-0.12 (-1.50)
No. of Obs	281	281	534	534	1,129	1,129
<i>R</i> ²	0.029	0.030	0.027	0.029	0.017	0.018

Table VIII: Returns of Avoidance Firms by Distress, Use of Proceeds, and Discounts

The table presents the mean announcement day returns for subgroups of firms that issue discounted equity privately without shareholder approval (i.e., fraction of discounted equity placed less than 20%). The subgroups are formed by distress, specific use of proceeds, and discount. Distress measure *CHS* is from Campbell, Hilscher, and Szilagyi (2008). High distress and low distress are firm observations that are in the highest distress quartile and lowest distress quartile using the distress measure. There is a specific use of proceeds when the use of proceeds is explained in detail rather than stating working capital or a general use. High discount and low discounts are issuances that are in the highest quartile and lowest quartile, respectively. The 3-day announcement day CAR is the syn if ± 1 day announcement abnormal return where returns are adjusted by coefficients estimated by regressing past daily returns on market, HML, SMB, momentum factors from Ken French's website. Discounted common equity private placements observations with fraction of equity placed from 10% to 20%, 15% to 20%, and 17.5% to 20% are used. Private issuance observations with use of proceeds and discounts are from PlacementTracker. Returns are presented in percentages. Robust standard errors clustered at the firm level are used to calculate *t*-statistics presented in parentheses. The statistical significance at the 10%, 5% and 1% levels is denoted by “*”, “**”, and “***”, respectively.

Range (%)	Returns	Distress		Specific Use of Proceed		Discount	
		High	Low	Yes	No	Low	High
17.5% - 20%	3-day CAR	-0.32 (-0.19)	-2.37** (-2.44)	-0.88 (-0.96)	-3.00*** (-2.94)	1.23 (-0.26)	-1.89 (-1.14)
	No. of Obs	65	64	156	125	48	72
15% - 20%	3-day CAR	0.79 (0.47)	-2.09*** (-2.70)	-0.78 (-0.94)	-2.17*** (-2.80)	0.81 (0.69)	-2.28** (-1.93)
	No. of Obs	127	129	182	350	91	139
10% - 20%	3-day CAR	0.77 (0.72)	-2.27*** (-4.23)	-1.11** (-1.97)	-1.57*** (-2.91)	0.53 (0.83)	-1.49*** (-1.45)
	No. of Obs	250	283	626	503	389	267

Table IX: Full Sample Announcement Day Returns

The table presents ordinary least square regressions of announcement day returns for the full sample including both premium and discounted issuance. The left hand side variable is the 3-day cumulative abnormal return (CAR) which is the sum of ± 1 day announcement abnormal return where returns are adjusted by coefficients estimated by regressing past daily returns on market, HML, SMB, momentum factors from Ken French's website. The right hand side variables include characteristics of the private placement. Premium is the relative price of issuance to the market price the day before closing which is a negative number for discounted issuances and positive for premium issuances. Fraction placed is the fraction of newly placed shares compared to existing shares. $I_{Approval}$ is an indicator function that is one for discounted issuances with fraction of equity placed larger than 20% (i.e., shareholder approval) and zero otherwise. $I_{Premium}$ is an indicator function which is one if the common equity is placed at a premium and zero otherwise. Premium \times Fraction is the interaction terms of Premium and Fraction. Premium \times Fraction $\times I_{Premium}$ is the interaction term of Premium, Fraction and $I_{Premium} > 0$. Private issuance observations are from PlacementTracker and are limited to issuance with fractions less than 40% of existing shares placed. Returns are in percentages. Robust standard errors clustered at the firm level are used to calculate t -statistics presented in parentheses. The statistical significance at the 10%, 5% and 1% levels is denoted by "*", "**", and "***", respectively.

VARIABLES	3-day CAR _{<i>i</i>} = $\alpha + X_i B + \epsilon_i$							
	Discounted Issuance Sample			Discounted and Premium Issuance Sample				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Fraction Placed	5.97 (1.56)	-6.91 (-1.38)	-12.26** (-2.10)	13.18*** (3.45)	20.62*** (3.77)	15.27*** (2.92)	6.33 (1.40)	0.23 (0.04)
Premium	4.25 (1.57)	3.88 (1.44)	9.18* (1.91)	13.11*** (3.40)	5.27 (1.22)	4.43 (1.03)	1.37 (0.31)	0.22 (0.05)
Premium \times Fraction Placed (%)			-0.35 (-1.25)		0.77** (2.32)	0.88** (2.53)	0.08 (0.34)	0.20 (0.84)
$I_{Premium}$							1.44 (1.24)	1.65 (1.44)
Premium \times Fraction $\times I_{Premium}$ (%)							2.00** (2.53)	2.00** (2.52)
$I_{Approval}$			3.73*** (3.37)			2.54** (2.12)		2.88** (2.44)
No. of Obs	2,484	2,484	2,484	3,276	3,276	3,276	3,276	3,276
R^2	0.002	0.007	0.008	0.034	0.044	0.046	0.065	0.067

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

The table presents difference of cumulative abnormal returns of discounted common equity private placement issuing firms above and below the 20% threshold by bins of different issuance fraction in percentages for pre-announcement and post-announcement day windows . Panel A presents the mean difference of one month and one week pre-announcement day cumulative abnormal returns (CAR) between issuances above and below the 20% threshold. Panel B presents the mean difference for one week, one month, six month, and one year post-announcement day CARs between issuances above and below the 20% threshold. CAR is the sum of the event window abnormal returns where returns are adjusted by coefficients estimated by regressing past daily returns on market, HML, SMB, momentum factors from Ken French's website. Discounted common equity private placement observations are from PlacementTracker. Robust standard errors clustered at the firm level are used to calculate *t*-statistics presented in parentheses. The statistical significance at the 10%, 5% and 1% levels is denoted by “*”, “**”, and “***”, respectively.

		Mean Difference of CARs for Issuances above and below 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) CAR		3.23* (1.78)	2.74 (1.41)	1.92 (0.95)	1.89 (0.87)	2.27 (0.94)	1.34 (0.55)	0.09 (0.03)	0.09 (0.03)	2.26 (0.62)	
(-7, -2) CAR		0.57 (0.65)	0.45 (0.47)	0.29 (0.28)	0.18 (0.16)	-0.18 (-0.16)	-1.01 (-1.05)	-1.47 (-1.26)	-1.47 (-1.26)	-1.05 (-0.72)	
		Panel B. Post-announcement Long-run CAR									
(+2, +7) CAR		-0.06 (-0.10)	-0.30 (-0.44)	-0.13 (-0.18)	-0.08 (-0.11)	0.35 (0.42)	0.28 (0.30)	0.37 (0.33)	0.37 (0.33)	0.94 (0.61)	
(+2, +30) CAR		0.42 (0.31)	0.30 (0.21)	0.21 (0.14)	1.24 (0.76)	2.20 (1.24)	3.42* (1.68)	3.66 (1.53)	3.66 (1.53)	0.53 (0.16)	
(+2, +180) CAR		-2.54 (-0.69)	-3.84 (-1.01)	-3.00 (-0.76)	-0.21 (-0.05)	-0.74 (-0.16)	-1.65 (-0.31)	-0.75 (0.12)	-0.75 (0.12)	-2.25 (-0.25)	
(+2, +365) CAR		2.32 (0.44)	-2.46 (-0.45)	-1.90 (-0.34)	2.61 (0.44)	1.17 (0.18)	2.99 (0.41)	2.79 (0.34)	2.79 (0.34)	1.84 (0.16)	
No. of Obs		2,484	2,333	2,073	1,743	1,410	1,057	703	703	366	

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 of the day before the private placement contract. Histograms of percents for each 0.25% width are presented towards the left and bottom of the scatter plot. The common equity issuance data are from the PlacementTracker database for the period from 1995 to 2010.

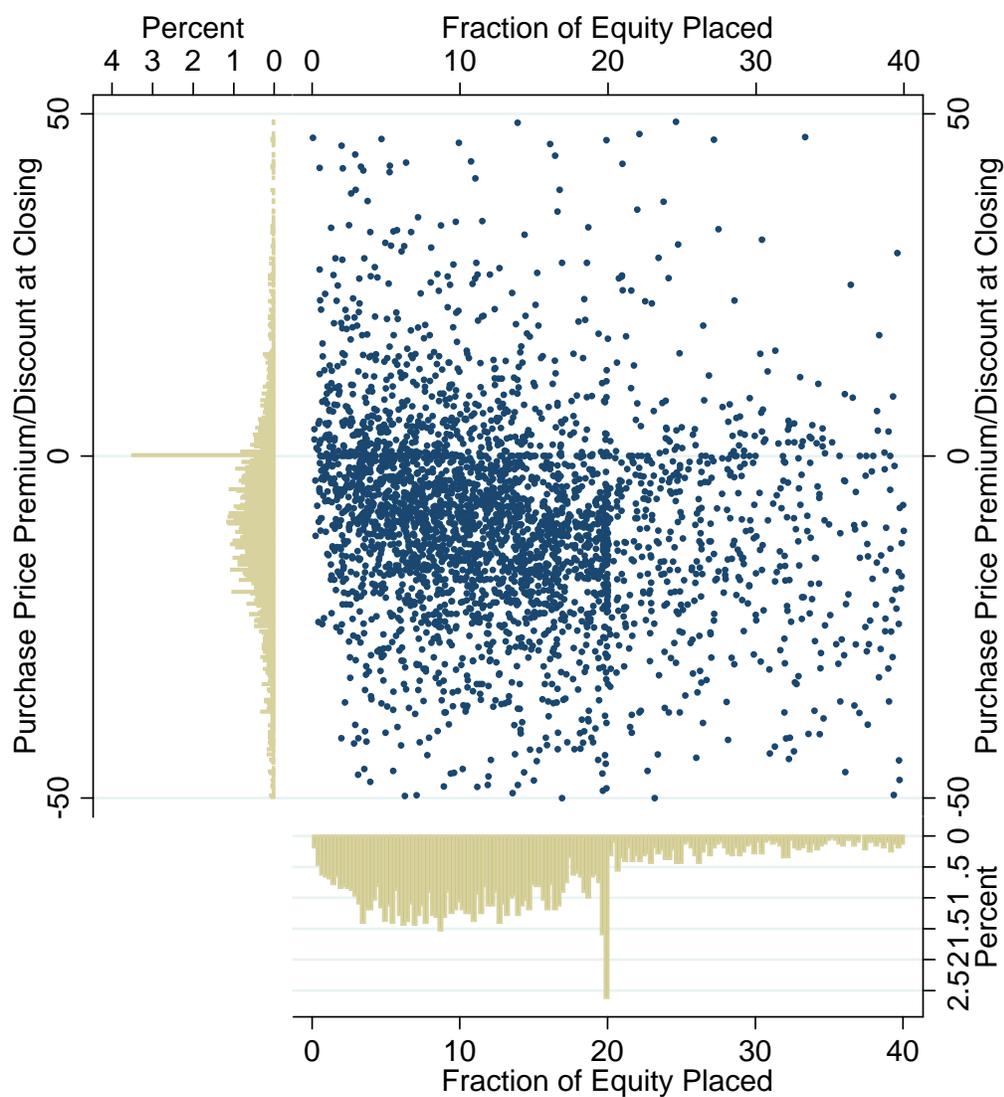


Figure 2: Distribution of Privately Issued Equity by Fraction of Equity Placed

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

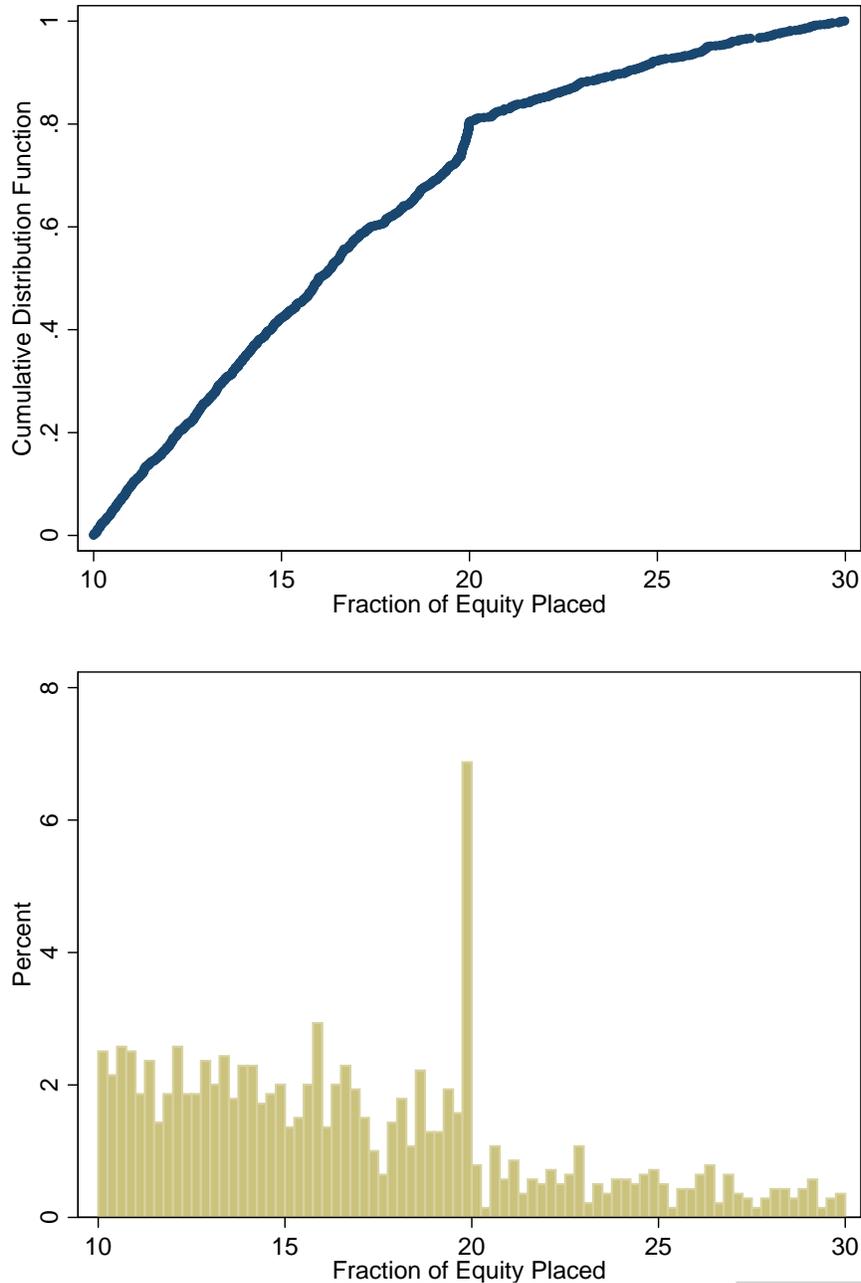


Figure 3: Number of Privately Issued Equity by Fraction of Equity Placed

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 polynomials 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.

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

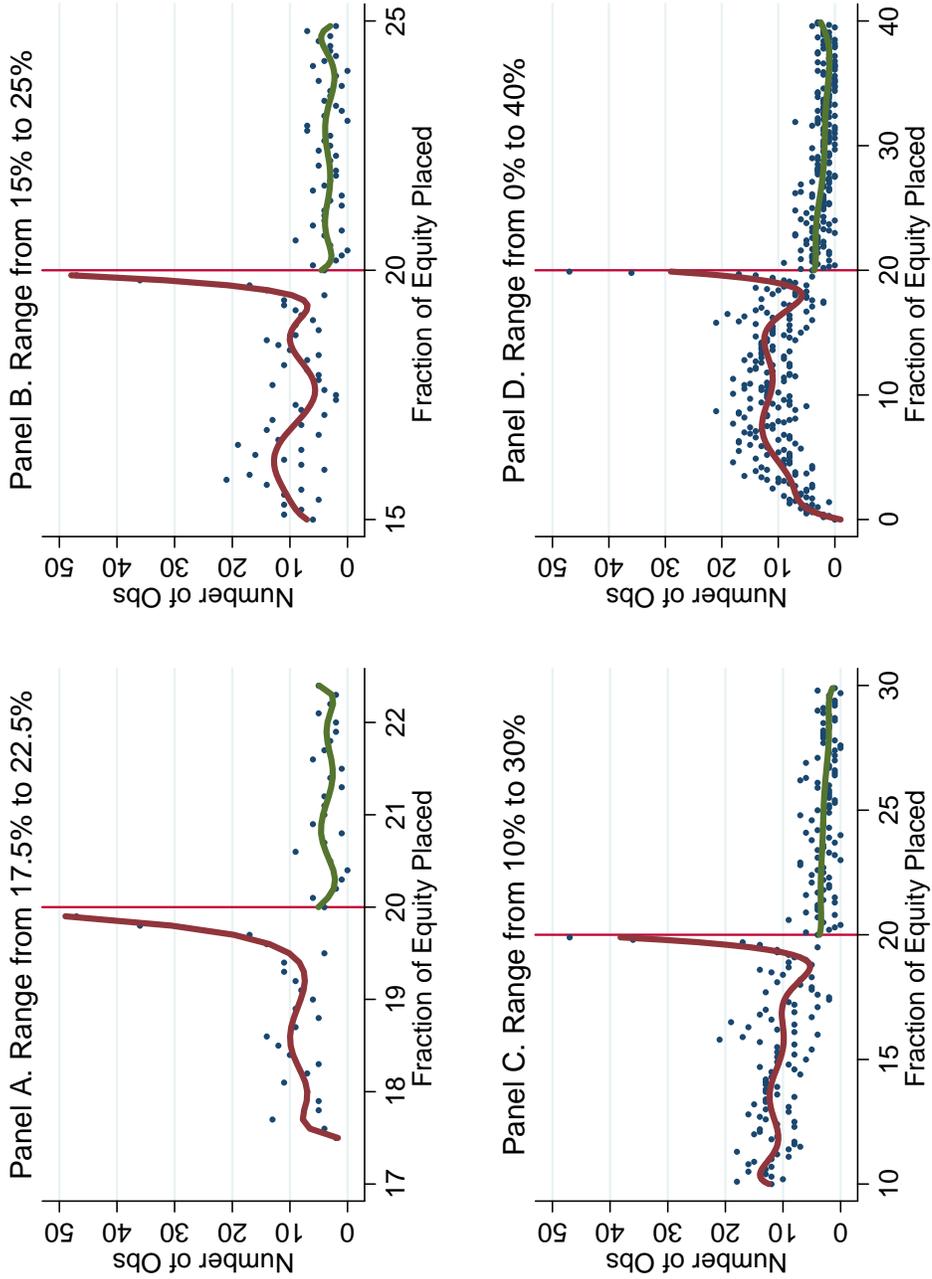


Figure 4: Distribution of Announcement Day Returns of Private Placements

The table presents mean abnormal returns of common equity private placements. The announcement day return is presented in Panel A for the full sample and in Panel B for separate regions by premium, discount, above, and below the 20% equity issuance fraction. Announcement day returns is the 3-day cumulative abnormal return (CAR) which is the sum of ± 1 day announcement abnormal return where returns are adjusted by coefficients estimated by regressing past daily returns on market, HML, SMB, momentum factors from Ken French’s website. Private issuance observations are from PlacementTracker and are limited to issuance with fractions less than 40% of existing shares placed. Returns are presented in percentages. The statistical significance at the 10%, 5%, and 1% levels is denoted by “*”, “**” and “***”, respectively, and the *t*-statistics are presented in parentheses.

Panel A. Full Sample		Panel B. Sample by Region	
	20%		20%
Premium	0.78*** (2.81)	Premium	3.82*** (4.37)
0%		0%	11.05*** (4.85)
Discount	No. Obs: 3,276	Discount	-0.90*** (-3.33)
			1.51** (1.85)
			No Obs: 2,060
			No Obs: 424

Appendices

A Data Selection and Equity Issuance Fraction

To match PlacementTracker database with unique permnos, I first match all types of private placements with the symbol at closing and the current 6 digit cusip to CRSP database each year-month from January 1995 to December 2010. I first keep permno matches if the observations match either symbol or cusip, or if they have match with both that agree. When I have multiple matches from either ticker or cusip, I use the permno that agrees, or the one that matches the symbol. When I have multiple permnos that do not agree, I use the smallest permno of the multiple. Finally, I recheck all matches by comparing private placement closing company names from PlacementTracker against the matched company name from CRSP.

For the purpose of this study, I only keep common equity issuance including the ones that have attached warrants. The Frequently Asked Question (“FAQ”) section on the NASDAQ website clarifies different situations in applying the shareholder approval rule.¹⁶ I drop observations that PlacementTracker indicates as including secondary offerings. NASDAQ might require shareholder approval of private placements to insiders. Therefore, I also drop shareholder approved issuances and manager participating issuances with issuance fraction below 20%. These screens are for cautionary purpose and do not affect the main results of the paper.

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 to calculate the shares placed. Premiums and discounts are calculated relative to market price at closing. NASDAQ historically assigns a value of \$0.125 over any amount that the warrant’s exercise price is below market price. I include shares of

¹⁶I focus on NASDAQ regulations because 76% of my observations are from NASDAQ, 17% from AMEX and 7% from NYSE. Similar regulations of the 20% rule exist on AMEX and NYSE exchanges. Amex Equity Section 713 and NYSE Rule 312 describe the 20% shareholder approval rule and the financial viability exception.

warrants that can be exercised less than \$0.125 above the closing price.

NASDAQ might also look back 6 months to aggregate similar transactions to determine whether the 20% threshold has been triggered. Although 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, 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 issues 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 6 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. Common equity issuances with past discounted convertibles or preferred shares placed have been dropped at sample selection because of the possibility of aggregation and the difficulty to calculate the aggregate fraction of equity placed from the convertibles. Keeping these observations do 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. I first use number of shares outstanding from COMPUSTAT quarterly database. I update the shares outstanding if there is an update in the number of shares from CRSP daily database after the COMPUSTAT reporting 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 shares outstanding by PlacementTracker. PlacementTracker collects shares outstanding data from the company's most recent 10-K or 10-Q file prior to the closing date. I use 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. Again, these observations do not affect my main results.

B Constructing *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:

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

where ME_{it} is price time shares outstanding and book equity (BE_{it}) is initially constructed as Cohen, Polk, and Vuolteenaho (2003) have done. Following Campbell, Hilscher, and Szilagyi (2008), book equity is then adjusted 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*,

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

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). The distress measure is :

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

C Announcement Day

Finding the announcement day for private placements is critical for this research because it would be the first day information about the terms of the issuance is publicly announced. Generally, the proceeds, price of issuance and use of proceeds are announced. These information are important to evaluate whether the issuance requires shareholder approval. PlacementTracker (PT) database includes closing day of the issuance for all observations. The closing day is also important because whether the issuance is at a premium or discount is relative to the market price at closing. Additional to the closing date, PT starts to rigorously document the announcement dates starting 2003. Since many announcement dates are missing before 2003 I search and refine announcement dates for my observation.

PT defines announcement date as the date that the transaction was first announced to the public. This is usually taken from the initial press release but can be taken from SEC filings as

well. PT defines the closing date as either the date when the purchase agreement/subscription agreement for the transaction was signed by both parties and/or the date the actual funding of the private placement took place, depending on what information was provided by the company in its public filing. Out of 5,118 common equity issuance observations from the PT database, 2,973 have announcement dates. Out of 2,973 observations, 1043 are on the closing date, 612 are on the date after closing, 29 are on the day before the closing. Out of 2,973 observations, 2,058 are within three days of the closing, 2,363 are within five days of the closing, and 2,812 are within 30 days of the closing date.¹⁷

Based on the distribution of announcement and closing dates from PT, I refine the announcement dates by searching the LexisNexis database for public announcement. I search all news articles available on LexisNexis. Since there are too many articles for each company, I need to either use additional screens for the searches when using a wider window, or use a narrow window to search all articles without any screens. I use the mix of these searches to search announcement dates.

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 the 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 dates for observations I did not initially find an announcement date or the initially searched announcement date is after the announcement date given by PT. Since I use a narrower search window, I search without any word screens other than the company name. Out of 1,493 observations, I find 1,180 announcement dates. The reason these announcements were not found in the initial search is because the announcement did not use the screens. Many articles refer the private

¹⁷All numbers in this section are from PT database only. Observations are required to later have such as variables from CRSP and COMPUSTAT to be included in the final database.

placement as simply investments, offering, funding, selling common equity etc. and sometimes even referred as public offering.

Finally, I redo the search within two days before and after the PT closing dates for observations I have not yet found an announcement or the searching date range is before the closing date. I find 467 out of 3,215 observations. Most of the observations I do not find have announcements outside of this 5 day window. After these searches, I use the earliest date as the refined announcement date.

I end up with 4,271 dates out of the 5,118 observations. For firms with announcement dates from PT, 90% of the searched announcement date is within one day of the given announcement day from PT. For all 4,271 with announcement dates found, 1,381 are on the closing date, 2651 are within one of the closing date, 2,827 is within two days of the closing date, and 3,504 is within five days of the closing date.

Out of the 847 observation I do not find an announcement date, 215 are replaced with the PT provided announcement. To maximize observations, I use the closing date as the announcement date for the 632 observations that do not even have PT provided announcement dates. I do this to keep as many observations as possible because more observations help identifying distribution discontinuity and the above distribution shows that observations are centered around the closing date. Not filling in the announcement dates with the closing dates and also expanding the announcement day window to 5-day window does not qualitatively change the results of this paper.

Searching the initial shareholder approval date or voting proxy date instead of the announcement of the placement is an alternative but a difficult task. For most observations that should have had a shareholder approval, there is no public announcement of the approval or SEC filing on EDGAR. If not approved or the financial viability exception not applied, however, the companies would have been delisted.

For a small amount of observation that do have some documentation of the shareholder

approval, the dates are generally after the closing of the private placements which makes the later date invalid for event study. This is because the price and the number of shares issued are set at the closing date and not generally known before the placement contract to know if shareholder approval is required. Also, some articles mention the issuance was already approved or needs to be approved but there is no public announcement or SEC filings on when or how it was approved. As a result, searching initial proxy statements or looking for announcement of the shareholder approval does not give enough valid observations for the announcement date.