Investor Objective and Financial Contracting: Evidence from the PIPE Market

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First Draft: September 2009
This Draft: September 2010

Abstract

We investigate empirically how investor objectives condition the design of financial contracts as manifest in private investment in public equity (PIPE) deals. We hypothesize that varying objectives among different types of institutional investors affect the observed allocation of cash flow rights, control rights, and other contractual protections. For instance, strategic investors are more likely to request control rights in comparison to financial investors and may be willing to trade off cash flow rights for control rights. Financial investors, in contrast, are more likely to demand investor protections and be adverse to contractual restrictions on their post-issue trading activity. Empirical analysis of more than 3000 PIPE deals occurring between 1999 and 2007 supports these hypotheses. We also find PIPEs associated with strategic investors outperform those with financial investors. The differences in performance can be explained by the contractual differences in PIPEs conditional on investor objective.

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1. Introduction

PIPEs involve the issuance of equity securities to private investors by companies that have publicly traded shares, and PIPE deals represent an increasingly important avenue for raising capital.[1] According to Sagient Research the number of PIPE transactions increased from 127 in 1995 to 2,626 in 2009; the total amount of capital raised via PIPEs increased from $2 billion to $296 billion.[2] Nevertheless, concerns have been raised that the structure of these offerings allows sophisticated investors to take advantage of companies with a typically desperate need for funds.[3] Research focusing on determinants of post-PIPE stock returns appears to validate these concerns. For instance, Hillion and Vermaelin (2004) argue that dismal long-run returns for structured PIPE issuers is partly due to inefficient and exploitive contract design. Brophy, Ouimet, and Sialm (2009) show that PIPE issuers experience significantly negative long run stock performance, with deals financed by hedge funds among the worst performers. Chaplisky and Haushalter (2010) raise a similar concern that PIPE investors impose deal terms that earn them asymmetric returns relative to other shareholders.

In this paper we study PIPE contract structures and PIPE investors for a comprehensive sample of 3,230 PIPE deals from 1999 to 2007. Our objective is to investigate how heterogeneous objectives of investors influence the observed design of PIPE contracts and how investor identity and contract structure jointly affect the issuing firms' stock performance. Both the investor pool and the contractual structure of PIPE offerings are characterized by considerable heterogeneity. Investors in the PIPE market include hedge funds, venture capital funds, private equity funds, corporations, banks, brokers/dealers, mutual funds, and other institutional investors. These investors participate in the PIPE market with different objectives, and thus variation in their investment behavior seems likely. In addition to heterogeneity among PIPE investors, the contractual structure of PIPE deals also exhibits substantial cross-sectional variation. At least eight basic security types are commonly issued in the PIPE market, and at least fourteen contractual contingency terms are negotiated and customized by investors and issuers, with or

[1] PIPE securities are generally issued pursuant to Section 4(2) and/or Regulation D of the Securities Act, which provides an exemption from registration for a non-public offering by an issuer. The PIPE securities are restricted (shareholders cannot resell to the public market) before the issuer files the registration statement and the SEC declares the registration statement effective.

[2] Data summarizing the number of PIPE transactions and the amount of capital raised via PIPEs over the last 10 years are available at http://www.sagientresearch.com/pt/.

[3] See for example "A Troubling Finance Tool for Companies in Trouble", New York Times (March 15th, 2006)

without assistance from placement agents. Prior research often implicitly assumes that demand for contract terms in PIPE deals depends solely on issuer attributes – such as risk or investment opportunities – and not on objectives of PIPE investors and their demand for alternative contractual features.

In this study we categorize PIPE investors as either strategic investors or financial investors. Financiers we categorize as strategic investors include venture capital funds, private equity funds, and corporation investors. Strategic investors strive for abnormal returns by adding value to the PIPE issuers. Strategic investors may be involved in active monitoring/intervening management after the PIPE and maintain their investment in the PIPE issuer for a reasonably long time horizon. Financial investors include hedge funds, mutual funds, and insurance companies. These financial investors prefer short-run cash profits from the PIPE transaction and are relatively passive investors even when they hold block stakes. Financial investors tend to look for opportunities to liquidate their PIPE stakes as soon as conveniently possible, legally permissible, and contractually feasible. Our implicit hypothesis is that these two categories of investors find different contractual provisions more or less suitable to their investment objectives, and hence contract terms will differ between PIPEs financed by strategic versus financial investors.

Our empirical results indeed suggest that whether PIPE investors are strategic or financial investors materially affects observed deal structures, even after controlling for issuer characteristics. Strategic investors obtain fewer extraordinary cash flow rights, more control rights, and fewer contractual protections than financial investors. Specifically, strategic investors request all-in-net-discounts about 13% lower than financial investors, their stake in the issuer is 6% greater than that acquired by financial investors, and they are 15% more likely to request board seats. These findings are robust after controlling for the potential endogeneity of the matching between investors and PIPE issuers using the instrumental variable approach. Our analysis also suggests that PIPE contract design corresponds with predictions of the financial contracting theory, similar in many aspects to the venture capital contracts as reported by Kaplan and Stromberg (2002, 2004).

We also find that investor identity has a significant influence on PIPE issuers' long-run stock performance. Specifically, PIPE issuers that deal with strategic investors significantly outperform those with financial investors. For instance, measured as equally weighted market adjusted cumulative abnormal return, the PIPE issuers financed by strategic investors outperform issuers with financial investors by 23% over 12 months, 33% over 24 months, and 32% over 36 months subsequent to the PIPE offering. The significance of investor identity per se diminishes when the variation in contract terms are considered. For instance, greater allocation of cash flow rights to PIPE investors negatively affects issuer returns. In contrast, greater allocation of control rights positively affects issuer returns. Thus, the superior performance of the issuers financed by strategic investors can be explained in part by the allocation of

cash flow and control rights between contractual parties. Specifically, in PIPEs associated with strategic investors less wealth transfer together with the potential value added by investors' post-investment monitoring and advising suggest better long-run stock performance of PIPE issuers.

This paper adds to the growing literature on PIPEs (Hillion and Vermaelen, 2004; Dai, 2007; Brophy, Outmet and Sialm, 2009; Champlinshy and Haushalter; 2010; Chen, Dai and Schatzberg, 2010; Dai, Jo and Schatzberg, 2010). While the pricing and structure of PIPEs have been examined in existing work, our paper provides a more holistic view of PIPE deal structure and issuer performance than available in the extant literature. Specifically, ours is a nearly comprehensive sample of PIPE deals from 1999 to 2007, our data collection and empirical investigation encompasses relations among issuer characteristics, investor objectives, and contract terms, and our results show that issuer performance varies by investors and contract terms.

We contribute to the literature that examines the real-world structure of sophisticated financial contracts. Our analysis shows that PIPE contracts often include many of the same protections that are found in contracts between venture capitalists and private entrepreneurial companies: special dividend rights, anti-dilution rights, first refusal rights and redemption rights (Kaplan and Stromberg, 2002, 2004). The prevalence of such investor-friendly terms in PIPE contracts also lends support to the argument of Chaplinsky and Haushalter (2010) and Chen, Dai and Schatzberg (2010) that PIPE offerings are surrounded with particularly large information and agency problems. Moreover, we show that demand for contract terms in PIPE deals not only depends on issuer attributes, but also on objectives of PIPE investors.

The paper proceeds as follows. Section 2 provides background information of the PIPE market, and develops hypotheses. Section 3 describes our sample and presents descriptive results of PIPE contracts. Section 4 analyzes examines the relationship between PIPE contract design and characteristics of both PIPE issuers and investors, and explores the performance implications of investor identity and contract terms. Section 5 summarizes and discusses our results.

2. Literature Review and Hypotheses Developments

A private placement is a sale of unregistered securities by a public company to a selective group of individuals or institutions. PIPE securities are issued pursuant to Section 4(2) of the Securities Act or Regulation D under the Securities Act, the SEC Rule that allows public companies to issue stocks privately to a group of accredited investors without the need for public registration prior to the transaction.[4] This feature makes the PIPE a time-efficient mechanism for issuers to raise equity capital.

[4] Regulation D Rule (501) defines investors from the following categories as accredited investors: banks, brokers or dealers, insurance companies, registered investment companies or business development companies, small business

PIPEs can potentially offer several advantages to issuers relative to SEOs. For instance, a PIPE may be the more time efficient mechanism as the issuer can close the transaction and draw down the committed capital before going through a lengthy registration procedure. A second advantage is that the private investor is directly involved in the due diligence process. This feature may help reduce undervaluation, particularly for firms with high levels of information asymmetry. A third advantage is that, if the firm's funding need is relatively small, the issuer may be able to eliminate or reduce certain cost components by negotiating directly with the purchaser. Finally, PIPE investors are accredited investors who typically are willing to and capable of taking large risks. This characteristic opens a financing window for highly risky firms that are otherwise isolated from traditional financing options. Chen, Dai, and Schatzberg (2009) show that the rise of PIPE market fills the capital needs of firms which may not have access to more traditional alternatives.

The characteristics of PIPE issuers and investors differ from those in the traditional SEO market. Most PIPE issuers are small, young, and risky (see Dai, 2007; Chaplinsky and Haushalter, 2010; Brophy, Ouimet, and Sialm, 2009; Chen, Dai, and Schatzberg, 2010). In other words, these firms exhibit particularly high level of agency cost. Thus, the PIPE contracting provides an ideal setting to test how the allocation of cash flow rights and control rights are conditional on firms' agency costs. As summarized in Kaplan and Stromberg (2002, 2004), all financial contracting theories, the traditional principal-agent approach pioneered by Holmstrom (1979), the control theories proposed in Aghion and Bolton (1992) and Dessein (2002), and the debt theories (see, e.g., Myers and Majluf, 1984; Duffie and Demarzo, 1999; etc.), predict the allocation of cash flow rights and control rights will be related to the extent of agency problems. In our paper, we empirically examine the relationship between PIPE contract design and firms' agency cost. Specifically, we examine investors' cash flow rights, such as offer discounts and warrant coverage; ; voting rights and control rights proxied by investors' ownership stake and whether they request board seats; investor trading restrictions; and other contractual protections provided to investors, for instance, anti-dilution provisions, redemption rights, etc. Section 3 provides detailed explanations for these terms. Based on the financial contract theories, we expect that PIPE investors request more higher discounts, more control rights, and more contractual protections when the PIPE issuers are associated with higher level of agency costs. Our first hypothesis is summarized as follows:

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investment companies, pension funds, directors, executive officers, or general partners of the issuer, corporations, limited liability companies, trusts or partnerships with total assets in excess of $5 million not formed for the specific purpose of acquiring the securities offered, any natural person whose individual net worth, or joint net worth with that person's spouse, at the time of the purchase exceeds $1 million, or income or joint income exceeds $200,000 or $300,000, respectively, in each of the two most recent years, and any entity in which all equity owners are accredited investors.

H1: Overall, investors request more downside protections, higher discounts, and more control rights when the issuing firms are associated with higher agency cost.

In the PIPE market, most financial investors, for instance, hedge funds, rarely request board seats (see, e.g., Dai, 2007). However, board rights and voting rights are particularly important to strategic investors if they want to intervene managerial activities to improve firm performance. Board rights and voting rights give the controlling party the right to decide on any action that is not pre-specified in the original contract. Grossman and Hart (1986) and Hart and Moore (1998, 1990) argue that such rights are valuable in an incomplete contracting world, when it is difficult to specify all possible actions and contingencies in an ex ante contract. The importance of control rights in corporate finance was first noted by Aghion and Bolton (1992). They point out that entrepreneurs will have more control if the firm has stronger balance sheet; however, control transfers to investors in bad states of world. This state-contingent allocation of control rights between investors and entrepreneurs helps enhance managerial incentives and boost firms' external financing capacity. Dewatripont and Tirole (1994) focus on the correlation between control rights and cash flow rights. A key implication from their paper is that control rights may substitute for necessarily limited cash flow rights. Our second hypothesis relates investor objectives to the allocation of cash flow rights and control rights in the PIPE contracting.

H2: Strategic investors are more likely to acquire greater ownership stake and more likely to request board seats. As a trade-off, they accept less cash flow rights and require less investor protections in comparison to financial investors.

Not many works study the performance implication of financial contracting in the setting of corporate finance. In the PIPE literature, two studies provide some insights on this regard. For instance, Hillion and Vermaelen (2004) examine the contract characteristics of death spiral convertible PIPEs and find that few of the convertible contracts prohibit short selling, instead, majority explicitly mention that convertible investors are allowed to sell short. They find that at least partially, the faulty contract design explains the negative long-run performance following the issuance of death spiral convertibles. Chaplinsky and Haushalter (2008) find that in exchange for making large equity investments in poorly performing companies, PIPE investors receive warrants, price resets, and other cash flow rights that enable them to on average significantly outperform shareholders and to meet or beat benchmark portfolios. The authors argue that cash flow rights reflect private investors' outlook for the issuer's future returns. Another stream of the PIPE literature show that PIPEs associated with different investors exhibit different long-run stock performance. For instance, Dai (2007) and Brophy et al (2009) show hedge fund

invested PIPEs on average exhibit more negative long run stock performance that those invested by other investors such as venture capital funds. In our paper, we relate investor identity and contract design to the post-PIPE stock performance. Our purpose is to see whether the performance implication of investor identity found in the previous literature can be explained away by the genuine differences in their choices of financial contracts. Specifically, we expect that the more cash flow rights and contractual protections issuers give away to investors, the worse long run stock performance; if the market expects the control rights allocated to investors help add value to the firms, control rights shall be positively associated with issuers' long run stock performance. Our third hypothesis is summarized as follows.

H3: PIPE issuers have better stock performance when less cash flow rights and investor protections are provided to investors and when control rights allocated to investors allow them to effectively intervene management.

3. Sample and Descriptive Results

We start with a sample of 9,961 U.S. PIPEs closed between 1999 and 2007 that we obtain from Sagient Research, Inc.'s *Placementtracker* database.[5] Following Chaplinsky and Haushalter (2010), we exclude structured equity lines (703 observations) and common stock reset PIPEs (76 observations). We also exclude issuers that are not covered by Compustat and CRSP, because we need data on company characteristics and stock returns for our analysis. This restriction eliminates 5,521 observations, signifying that many PIPE issuers are small and thinly traded companies. For the purpose of our study, we further exclude 431 PIPEs that have no disclosed agent and investor information. This leaves us 3,230 observations with complete data, including 1,419 "direct" PIPEs, for which the issuer does not employ a placement agent, and 1,811 "intermediated" PIPEs (i.e., a PIPE with an issuer agent).

3.1. PIPE Contracts

In the sections that follow, we describe the contracts between the PIPE investors and issuers in great detail. We first describe investors who commonly invest in the PIPE market. We then describe how PIPE contracts are designed to allocate cash flow rights and control rights between investors and issuers, as

[5] As pointed out in Chaplinsky and Haushalter (2010), relative to the private placements available in *Security Data Corporation's New Issues* database, *Placementtracker* database has more PIPE offerings and has more detailed coverage of contract terms.

well as how various contingency terms are included to protect benefits of both new shareholders (PIPE investors) and existing shareholders.

3.1.1. PIPE Investors

Regulation D requires that PIPEs must be offered to accredited investors. Regulation D Rule (501) defines investors from the following categories as accredited investors: banks, broker or dealer, insurance company, registered investment company or business development company, Small Business Investment Company, pension funds, director, executive officer, or general partner of the issuer, corporation, limited liability company, trust or partnership with total assets in excess of $5 million not formed for the specific purpose of acquiring the securities offered, any natural person whose individual net worth, or joint net worth with that person's spouse, at the time of the purchase exceeds $1 million, or income or joint income exceeds $200,000 or $300,000, respectively, in each of the two most recent years, and any entity in which all equity owners are accredited investors.

According to the amount of capital invested in the PIPE market, the major investors in the PIPE market are the following: hedge funds, pension/government funds, corporation, mutual fund/institutional advisors, buyout firm/private equity, venture capital firm, broker/dealer, bank, insurance company, charitable/educational/family trust, and various individual investors. We categorize the above-mentioned investors into two general groups: strategic investors and financial investors, based on investors' investment objectives. We define strategic investors as those that aim to earn abnormal returns by adding value to the investee companies. Anecdotal evidence shows that venture capital firms, buyout and private equity, and corporations are more likely to acquire block stakes, to request board seats, and to intervene in the management of the issuer. Thus, we categorize these investors as strategic investors and others as financial investors.

As shown in Fig. 1, over years, financial investors have been the pre-dominant players in the PIPE market in terms of the amount of capital invested. In 2000, strategic investors invested about $10.6 billion in this market, in comparison to a total commitment of $13.7 billion by financial investors. This is primarily because venture capital and private equity investors were chasing deals outside their traditional investment arena as the capital commitment to the VC/PE industry skyrocketed. When the tech bubble broke, as expected, their investment in PIPEs immediately declined. Nevertheless, in more recent years, VC/PE and corporations have been showing greater interest in the PIPE market. In 2007, their total investment was comparable to that in 2000, rising from $2.0 billion in 2004.

[Insert Figure 1 here.]

In this paper, we focus on lead investors in each PIPE transaction. We define lead investors as those that invest the largest amount of capital in a specific PIPE. In Table 1, we tabulate the average offer

size and ownership acquired by strategic lead investors and financial lead investors by year. The data suggests that strategic lead investors often acquire greater ownership stake of their investee companies through PIPEs. The average offer sizes of PIPEs led by strategic investors are typically greater than those led by financial investors. Particularly in the 1999-2000 period, the average offer sizes of strategic investors led PIPEs are 4-5 times that of PIPEs led by financial investors.

[Insert Table 1 here.]

3.1.2. Securities

PIPE issuers and investors have many choices over the security type. The option generally includes: plain vanilla common stock issuance, common stock reset issuance, common stock shelf sale, company installment convertible issuance, fixed price convertibles, floating price convertibles, convertible reset issuances, and structured equity lines. Typically, security types that do not allow investors to adjust purchase/conversion price are called "traditional PIPEs," such as plain vanilla common stock issuance, common stock shelf sale, and fixed-price convertibles issuance. In contrast, those that give investors the right to reset the price are called "structured PIPEs", such as floating price convertibles, and reset issuances.

Among our sample of 3230 PIPE offerings by U.S. firms from 1999 to 2007, as shown in Panel A of Table 2, there are a total of 2856 traditional PIPEs and 1374 structured PIPEs, representing 88% and 12% of the sample, respectively. About 97.5% of PIPEs led by strategic investors are traditional PIPEs. This percentage is 74.5% for PIPEs led by financial investors.

[Insert Table 2 here.]

3.1.3. Cash Flow Rights

In most PIPE offerings, a discount ((closing price-purchase price)/closing price) is offered to PIPE investors as a compensation for the illiquidity risk as investors cannot resell PIPE shares to the public before the SEC declares the registration statement (which is filed after the closing of the PIPE) effective. In addition, some contracts also specify interest/dividend rate, and warrant coverage. These provisions determine the total returns that investors can obtain by investing in the PIPE. We discuss these three terms in the following section respectively.

Discount

Conditional on security type, discount is calculated slightly differently. For instance, for a plain vanilla common stock PIPE, the calculation of discount is straight forward. The purchase price is the offer price. On the other hand, for fixed convertibles, the purchase price is the fixed conversion price, while for

floating convertibles, we use the floor conversion price (the lowest possible conversion price) to calculate discounts. If the offer price/conversion price is greater than closing price, investors pay issuers a premium. Investors obtain a discount when the offer price/conversion price is lower than the closing price.

As shown in Panel B of Table 2, the mean and median discounts are 0.7% and 6.7%, respectively.[6] suggesting investors often obtain a discount. Interestingly, the mean discount based of PIPEs led by strategic investors is -8.1%, indicating that strategic investors on average pay a premium to issuing companies, in comparison to an average discount of 3.3% for PIPEs invested by financial investors. The median discount of the former is 0.6%, also significantly smaller than that of their counterparties, which is 8.2%.

Interest/Dividend Rate

About 31% of the PIPE contracts include a provision that entitle the investor to a fixed payment at a pre-specified dividend or interest rate. These dividends are sometimes cumulative, which means that the investor does not receive regular dividends but rather a lump sum later. As shown in Table 2, the mean and median rates are 7.4% and 7.0%, respectively. We find that strategic investors often charge higher interest or dividend rate than financial investors do. The mean (median) interest/dividend rate of the former is 8.0% (8.0%), while it is 7.3% (7.0%) for the latter.

Warrant Coverage

About half of our sample contracts include warrants, which allow investors to purchase a predetermined number of certain securities at a specified price in the future. Practitioners often regard warrants as sweetners to investors. That is, if the predetermined exercise price is smaller than the issuers' stock performance subsequent to the PIPE offering, investors could be earning additional returns by exercising their warrants. As shown in Table 2, financial investors are more likely to request warrants than strategic investors. We further calculate warrant coverage for the PIPEs where warrants are attached, which is defined as the ratio of proceeds that the issuer will receive if the investors exercise the attached warrants to the gross (cash) proceeds of the PIPE transaction. The mean warrant coverage is 48.9%, with a median

[6] These numbers appear smaller than the discounts reported in Chen, Dai, and Schatzberg (2010) and Dai, Jo, and Schatzberg (2010) which study common stock PIPEs. In unreported analysis, we summarize discounts for common stock PIPEs, fixed price convertible PIPEs, and other PIPEs separately. We find the discounts for common stock PIPEs are similar in magnitude to those reported in Chen et al (2010) and Dai et al (2010). For the group of structured PIPEs, the discounts are even greater in magnitude than those of common stock PIPEs. However, the mean and median discounts of fixed price convertible PIPEs based on conversion price turn out to be negative, indicating a premium is often offered in this type of PIPEs.

of 30.1%. Although the mean warrant coverage for PIPEs led by strategic investors is significantly higher than that of PIPEs led by financial investors, the median warrant coverage is around 30% in both groups.

All-in-Net-Discounts

Following Chaplinsky and Haushalter (2010), we also calculate all-in-net-discounts which represent the total return to investors incorporating the offer discounts, embedded interest or dividend payments, and the value of warrants granted. The mean and median all-in-net-discounts are 36.9% and 25.7%, respectively. For the PIPEs led by strategic investors, the mean and median all-in-net-discounts are 24.0% and 15.1%, both significantly smaller than PIPEs led by financial investors, which are 28.7% and 40.9%, respectively.

3.1.4. Control Rights

Chaplinsky and Haushalter (2010) show that in contrast to venture capitalists who make heavy use of control rights (Kaplan and Stromberg, 2002, 2004), PIPE investors primarily obtain terms that allocate *supra* cash flow rights, while only a small percentage (eight percent) involve management or investor board participation. Consistent with their observation, we find that only 7.5% of our sample involves investor board participation. However, we show the frequency of board participation is very much contingent on investor identity. Among PIPEs associated with strategic investors, about 20.2% of the contracts specify investor board participation, significantly higher than 3.6% for PIPEs associated with financial investors.

Using the ownership stake that PIPE investors acquire as proxy for voting rights, we show that strategic investors on average own 11.1% of their investee company after the PIPE, with a median of 7.1%. In contrast, financial investors on average acquire 6.0% of their investee company, with a median of 4.1%. The differences in both means and medians are statistically significant.

3.1.5. Contingency Terms

Various contractual terms that involve state-contingent cash flow or control right allocations between issuers and investors are commonly included in PIPE contracts. For presentational purposes, we group these terms into three categories. The first category, investor protections, contains terms that attach various protections to the PIPE investor's stock. Terms in this category are favorable to the investor at the expense of the issuer. The second category, trading restrictions, contain terms that determine how the investor can trade the underlying stock after the offering. The third category, issuer rights, contains terms that give the issuer the right to force the investor to take certain actions. The terms in these latter categories favor the issuer at the expense of the investor.

Investor Protections

Investor Registration Rights

The key feature of PIPE offerings is that firms can close the offering before filing any registration statements with the SEC, which makes the PIPE offering time-efficient, nevertheless, PIPE investors assume the risk of illiquidity before the effectiveness of Registration Statement. Most PIPE contracts specifically request the company to file a registration statement covering the resale of common stocks (underlying the issued securities) no later than certain days after the closing and make it effective within certain time window. Such protection is included in about 46.3% of our sample, with the frequency of financial investor led PIPEs (50.8%) significantly higher than those led by strategic investors (31.6%). In some cases, investors place a cap on the amount of capital that the company can draw down before the effectiveness of the Registration Statement. Some contracts include penalty terms if the registration fails, for instance, the cancellation of the financing.

Anti-Dilution Protection

Anti-dilution provision protects the PIPE investors against future financing at a lower valuation than the valuation of the current offering. In its harshest form, anti-dilution prohibits the issuer from issuing or selling any equity securities (or securities convertible into equity) during a certain period after the PIPE offering. A typical period is 90 trading days following the effectiveness of the Registration Statement. The contract could also prohibit the issuer from issuing or selling such securities at a price below what the PIPE investor paid, or below a specified benchmark price.

In a less harsh form, anti-dilution protects the investor from future price decreases by reducing her offer price (or, alternatively, conversion price) to equal the lowest price paid for any equity security in future financing. The investor could also have the right to receive cash or additional common shares, without additional consideration. About 35.2% of our sample provides the investor with some form of anti-dilution protection. In particular, PIPEs led by financial investors include such protection in 38.6% of the cases, while this percentage is only 19.7% in PIPEs led by strategic investors.

Right of First Refusal and Investor Call Option

Investor call option and investor right of first refusal give investors the right to purchase additional shares of the company's security during a certain period in the future. Similar to warrants and anti-dilution, these contract terms are in place to protect the investor against future dilution that comes from price decreases or equity offerings at the below-market price. About 37.9% of our sample

includes right of first refusal. Investor call option is included in only 5.3% of our contracts. We find financial investors are more likely to request such rights than strategic investors.

Redemption rights

Investor optional redemption is sometimes used to strengthen the liquidation rights of the investor's investment. This protection gives the investor the right to demand that the firm redeems the investors' claim upon a change of control. Such conversion is typically priced at face value or at a certain percentage above the face value (often higher than 100%, occasionally, higher than 200%) plus the value of any accrued and unpaid interest. About 9.5% of our sample includes investor redemption option. The importance of redemption rights follows from PIPE contracts often not specifying any contracted payments on which the issuer can default. Redemption rights may thereby be the only way the investor can force the issuer to repay to the investment. We further show that redemption rights are included in 10.7% of the PIPEs led by financial investors, but a much lower percentage (5.4%) is in PIPEs led by strategic investors.

Investors Trading Restrictions

Many PIPE offerings have provisions restricting how the investor can trade the underlying stock during a certain time period after the offer closing. These restrictions, which are much less prevalent than the above discussed investor protections, favor the issuer at the expense of the investor.

The most common trading restriction prohibits the investor from engaging in any short transactions or hedging of the company's common stock or in excess of the amount of shares owned (i.e., an offsetting long position) prior to the effectiveness of the Registration Statement. Sometimes, the contract also requires the investor not to engage in shorting or hedging for a longer period than the SEC's requirement, sometimes as long as the purchased PIPE security remains outstanding. About 9.0% of our sample explicitly forbids short selling before certain date and 2.6% of the sample does not allow the investor to hedge the company's common stock in excess of the amount of shares owned before certain date.

An additional trading restriction is the so-called lock-up period. Basically, with this provision, the investor is not allowed to sell any shares of the issuer's common stocks purchased or received through the exercise of warrants for the duration of a few months following the closing. We find lock-up provision in 2.9% of our sample.

Finally, in very rare cases (0.7% of our sample), the PIPE contract prohibits the investor from affecting any sales to the public of shares of the company for a period of certain days following the

effectiveness of the Registration Statement. This restriction is useful if the company plans a public offering (i.e., SEO) shortly after the closing of the PIPE offering because it avoids the price pressure from investors' resale of their shares to the public.

Issuer Right

Company Forced Conversion

PIPE contracts sometimes include a company forced conversion option, according to which the shares held by the PIPE investors will automatically convert into common stock under certain conditions, typically related to the issuer's stock performance during a period after the PIPE offering. For instance, the investor may have to convert his shares if the stock price or the weighted average stock price exceeds a certain benchmark number. In an alternative formulation, the issuer may have to convert his shares if the daily trading volume exceeds certain level for some consecutive trading days. In some extreme cases—such as the company taking a 10,000-to-1 reverse stock split—the investor will also be forced to convert. About 9.3% of the contracts in our sample include the company forced conversion option.

The effect of the company forced conversion provisions is to require the investor to give up her contractual protections when the company attains a desired level of performance. In particular, if the company has good performance then the investor will retain only the same right as common shareholders, but if the company has bad performance then the investor will retain her superior cash flow and control rights. The usefulness of such contingency term has been demonstrated in extant theoretical work (see Bengtsson and Sensoy, 2010, for a discussion). We show that PIPE contracts with financial investors are more likely to include such terms with a frequency of 10.8%, in comparison with a frequency of 4.4% in PIPEs with strategic investors.

Company Put Option and Optional Redemption

About 10.3% of our sample includes a company optional redemption provision, which gives the issuer the right to force the PIPE investors to exercise the redemption right after a certain date or upon a certain events. About 5% of our sample includes a company put option, according to which the company has the right to force the investor to purchase additional amount of shares at specified price.

The effect of put option and optional redemption is that the investor would receive less favorable cash flow rights if the company were to experience good performance. Thus, these terms introduce similar investor downside protection as the above described forced conversion option. Company optional redemption term appears more often in contracts with financial investors with a frequency of 11.5%, in comparison to 6.4% frequency in contracts with strategic investors. We do not observe significant difference in the frequency of company put option across groups.

Investor Friendly Index (IFI)

Following Bengtsson and Dai (2010), we design an aggregate measure of the PIPE contract's use of contingency terms to represent the overall level of friendliness to investors. Specifically, we create an "Investor-Friendly Index" (IFI) by first adding together all contingency terms that are favorable to the investor (i.e., investor protections) to a base value of seven and then deducting from this sum all terms that are favorable to the issuer (i.e., trading restrictions and issuer rights).[7] The mean of IFI is 7.7. Contracts with financial investors are on average more investor friendly in terms of contingency terms.

Summary

We make three general observations concerning the relationship between investor identity and the contract terms in PIPE offerings. First, many contract terms appear to be in place to overcome agency and information problems regardless of investor identity. This is not surprising given that these problems are particularly severe for the type of companies that issue PIPEs. Second, strategic investors request more control rights as represented by their board seats and voting rights than financial investors. Third, financial investors request substantially more cash flow rights and contractual protections than strategic investors.

3.2. Characteristics of PIPE Firms

In this section, we present summary statistics on the characteristics of PIPE issuers. We consider the following aspects of the issuing companies, firm size (market capitalization at closing), the R&D/Assets ratio, the Intangible/Assets ratio, the EV/Assets ratio, the EBITDA/Assets ratio, the Long Term Debt/Assets ratio, number of analyst coverage prior to PIPEs, bid-ask spread, volatility measured as the daily return standard deviation during the 12 months prior to the offering, and issuer stock performance prior to the issuance(CAR 12 months to 1 month prior to the offering). We also summarize whether insiders participate the PIPE offering and whether the funds raised are used for strategic alliance purpose. The detailed definitions of these variables are provided in Appendix. All the accounting data (assets, long term debt and EBITDA) are based on the financial statements one year before the issuance and acquired from COMPUSAT. Analyst coverage data are obtained from I/B/E/S. Stock price data are acquired from CRSP.

[Insert Table 3 about here.]

[7] The base value of 7 (there are a total of 7 terms that are friendly to issuers) is included in calculating IFI to make IFI always positive so that a Poisson regression can be applied in the analysis that follows.

As shown in Table 3, most of the PIPE issuers are rather small. The mean and median market capitalizations are $394 million and $96 million, respectively. The average EV/Assets ratio is 4.8, with a median at 2.2. The profitability of many PIPE issuers is poor, with a mean EBITDA margin at -38.1% and median at -23.1%. Less than half of the firms are covered by financial analysts. Average analyst coverage is 1.9. PIPE issuers also exhibit wide bid-ask spread and high volatility. The The mean and median spreads are 7.3 and 7.0, respectively. The mean and median volatilities are 6.1% and 5.6%, respectively. These findings are very much consistent with the existing literature that PIPE firms typically are small, have negative earnings, and display characteristics consistent with a high degree of information asymmetry.

Table 3 also presents the comparison of the above-mentioned issuer characteristics between PIPEs led by strategic investors and those led by financial investors. We show that PIPE issuers associated with strategic investors are significantly larger measured by market capitalization, have higher R&D/Assets ratio, have more analyst coverage and better access to debt financing. On the other hand, they have poorer operating performance and stock performance before PIPE than firms invested by financial investors. In addition, we show that insiders are more likely to participate in PIPEs associated with strategic investors. Further, the funding from PIPEs invested by strategic investors is more likely to be used for establishing strategic alliances.

4. Empirical Analysis

In this section, we start with examining the relationship between investor identity and PIPE contract design controlling for issuers' agency cost; then we apply instrumental variable approach to address the endogeneity issue that can potentially arise from the matching between investors and issuers; in the third sub-section, we provide an analysis on the performance implication of contract design and investor identity.

4.1. Investor Identity and PIPE Contract Design

In Table 4, we organize the PIPE contract terms into three general groups, including cash flow rights, control rights, and additional investor protections provided by contingency terms. We examine how these terms are conditional on PIPE investor identity controlling for issuers' agency cost.

The *Strategic* dummy is equal to 1 if the lead PIPE investor is a VC/PE fund or a corporation, and 0 otherwise. Our proxies for PIPE issuers' agency cost include the *R&D/Assets* ratio, the *Intangible/Assets* ratio, the *EV/Assets* ratio, the natural logarithm of the number of analyst coverage, the natural logarithm of issuers' market capitalization prior to the offering, and the *Debt/Assets* ratio. Specifically, issuers' agency cost shall rise with the *R&D/Assets* ratio, the *Intangible/Assets ratio*, the

EV/Assets ratio, but decrease with *Ln(Analyst), Ln(MV),* and the *Debt/Assets* ratio. Most of the PIPE issuers have very low financial leverage which reflects the difficulty for these firms to raise debt financing. A higher debt/assets ratio thus indicates that the issuer has better access to debt financing which serves as a certification. We further control for the PIPE issuers' volatility, which is the standard deviation of daily returns 12 months prior to the issuance, their operating and stock performance before PIPE, measured as the EBITDA/Assets ratio and CAR (-12,-1), respectively.

In addition, we control for the security type by including the *Traditional* dummy which is set to equal to 1 if common stocks or fixed convertibles are issued, and 0 otherwise. Bengtsson and Dai (2010) show that financial intermediaries play an important role in contract negotiation. Thus, we include a *With Agent* dummy, which is equal to 1 if an agent is employed in the PIPE offering, and 0 otherwise. We also include industry fixed effects and year fixed effects in all specifications. The coefficients and p-values are reported in Table 4. P-values are estimated using robust standard errors clustered by PIPE firms.

[Insert Table 4 about here.]

We develop four proxies for investor cash flow rights, including discounts, interest or dividend rate, whether warrants are attached, and the all-in-net-discounts estimated following the methodology developed in Chaplinsky and Haushalter (2010). The regression results are shown in models (1) to (4). Model (2) is a probit regression where the dependent variable is a dummy equal to one if warrants are offered to PIPE investors, and 0 otherwise. The other three are OLS regressions where the dependent variables are percentage discounts, percentage interest/dividend rate, and percentage all-in-net-discounts, respectively.

We show investor identity has important implications for cash flow rights allocation in PIPE offerings. Specifically, we find that strategic investors require lower discounts and are less likely to request warrants, however, they ask for higher interest or dividend rate. In the regression of all-in-net-discounts which incorporate all the three cash flow rights, we find a negative coefficient for the *Strategic* dummy, which is significant at 10% confidence level. From the perspective of economic significance, strategic investors on average request an all-in-net-discount 12.6% lower than financial investors, *ceteris paribus*, which is by no means trivial.

Consistent with the traditional contract theories, we show that investors typically request more cash flow rights when issuers have higher level of information and agency cost. For instance, firms with less analyst coverage are associated with higher discounts and are more likely to offer warrants. Smaller firms pay higher interest or dividend rate. Firms with little access to debt market are more likely to offer warrants. Furthermore, we show firms with higher volatility are more likely to issue warrants and are associated with higher discounts.

Among other control variables, we show that traditional PIPEs are associated with higher discounts, lower interest or dividend rate, more warrants, and lower all-in-net-discounts. PIPEs intermediated by placement agents are more likely to attach warrants.

In Models (5) and (6), we analyze the allocation of control rights represented by ownership that investors acquired through PIPEs and whether investors also acquire at least one board seat upon PIPEs. Model (5) is an OLS regression where the dependent variable is the percentage ownership that investors acquire through PIPEs. Model (6) is a probit regression where the dependent variable is a dummy equal to 1 if at least one board seat is assigned to the PIPE investors, and 0 otherwise. We show that strategic investors acquire significantly larger stake of the PIPE issuers and are significantly more likely to obtain board seats upon PIPEs. The economic significances of these two effects are nontrivial either. For instance, ownership acquired by strategic investors is 6.1% greater than that acquired by financial investors assuming everything else equal. Further, strategic investors are 14.6% more likely to request board seats than financial investors. Together with the findings from models (1)-(4), these results suggest that strategic investors ask for more control rights in PIPE offerings and they agree on less cash flow rights as a trade off. The disparity in preferences for cash flow rights and control rights is most likely driven by the different objective functions of strategic investors versus financial investors. Strategic investors intend to add value through post-investment monitoring and advising. For such activism activities to be effective, it is essential that they are allocated sufficient control rights. Among the control variables, we find investors obtain larger ownership of smaller firms. Investors acquire greater ownership and are more likely to sit on board when companies have lower EV/Assets ratio, which indicates possibility of undervaluation. Further, we show that board seat request is more likely to be included in traditional PIPEs.

In models (7)-(10), we further analyze the relation between investor identity and other contract terms. The dependent variable in model (7) is the IFI index, which measures the overall level of friendliness of PIPE contracts to investors. The dependent variables in models (8)-(10) are the number of investor protection terms, the number of terms that restrict investors' trading, and the number of terms that protect issuers' rights, respectively. All the four regressions are poisson regressions. We find that PIPE contracts with strategic investors are overall less investor friendly than those with financial investors. Results from models (8) to (10) further show that PIPE contracts with strategic investors include less investor protection terms, less investor trading restrictions and more issuer right terms. Nevertheless, only the difference in investor protection terms is statistically significant. Among control variables, we show that PIPEs by smaller firms offer investors more protections. Firms with better access to debt market offer less friendly terms to investors. Interestingly, we show PIPE contracts become more

investor friendly (more investor protection terms are included and less investor trading restriction terms are included) when an agent is employed.

Overall, the above findings are consistent with the prediction of financial contracting theories that the allocation of cash flow rights and control rights are conditional on issuers' agency costs. In general, higher agency cost, more cash flow rights and control rights, as well as contractual protections are allocated to investors.

More importantly as for the purpose of this study, we show that investor identity, strategic investor or not, plays an important role in the formation of PIPE contracts. Specifically, in comparison to financial investors, strategic investors, on average, acquire more control rights, smaller cash flow rights, and less investor protections. This pattern in the allocation of cash flow and control rights between contractual parties can be best explained by the heterogeneity in PIPE investors' objective functions. To add value to the company through investors' effective monitoring and advising subsequent to the offering, control right is desired and is a necessity for strategic investors. As for financial investors who target for the short-term cash profits, superior cash flow rights are more appealing. Further, because they typically don't get much control right, contractual protections are more commonly included.

The above findings are insightful by showing that contract design varies according to the objective of contractual parties. However, one concern with our analysis in Table 4 is the endogeneity that could arise from the non-random matching between PIPE investors and issuers. Some features of issuers systematically preferred by strategic investors may impact the contract design. To assure our results are not systematically biased due to this potential endogeneity concern, in the section that follows, we apply instrumental variable approach.

4.2. Instrumental Variable Approach

Our instrumental variable approach begins with a probit regression where we analyze whether strategic and financial investors prefer different types of PIPE issuers as their investment targets and predict the probability of a PIPE issuer being associated with strategic investors.

As shown in the first regression in Table 5, the dependent variable of the matching regression is a dummy which is equal to one if the lead investor is a strategic investor, and zero if it is a financial investor. The independent variables include various measures that represent the agency cost, operating and stock performance of issuers prior to the PIPE, such as R&D/Assets, Intangible/Assets, EV/Assets, EBITDA/Assets, Long-term Debt/Assets, Ln (Analyst), Ln (MV), CAR (-12,-1), and Ln(Volatility). A few additional measures regarding the PIPE characteristics are also included, for instance, whether the transaction is a traditional PIPE, whether a placement agent is employed, whether insiders of the issuing

firms participate the PIPE, and whether the funds raised in the PIPE will be used for strategic alliance purpose. We also include industry fixed effects and year fixed effects.

[Insert Table 5 about here.]

We find that strategic investors are more likely to invest in firms with higher financial leverage. In addition, strategic investors on average favor traditional PIPE offerings and direct PIPEs (without placement agents). Further, we show that in PIPEs associated with strategic investors, insiders (managers and directors) are significantly more likely to participate the offering. Arguably, this co-investment serves as a mechanism to further align the interests of firm insiders and investors. We also find that in PIPEs with strategic investors, funds are more often used for the purpose of establishing strategic alliances.

We estimate the probability of a firm being associated with a strategic investor off the above probit regression and include it in our second-stage regressions of PIPE contract terms as shown in models (1)-(10) in Table 5. The estimated coefficients for the predicted probability reveal the impact of being associated with a strategic investor on the allocation of cash flow rights, control rights, and other contractual protections after controlling for the endogeneity of the selection process. The instrumental variable approach requires that at least one variable in the first stage regressions is not significantly correlated with dependent variables of the second stage regressions and should be omitted from the second stage regressions. In the unreported correlation matrix, we correlate all the independent variables in our first stage regression to the PIPE contract terms (the dependent variables of our second stage regressions) and find the *Insider* dummy and *Strategic Alliance* dummy meet the criteria. Thus, these two variables serve as our exogeneous instruments.

As show in Table 5, after controlling for the endogeneity, we continue to find that strategic investors request lower discounts and are less likely to get warrants. In contrast to the finding in Table 4, strategic investors are associated with lower interest/dividend rates. All together, being associated with strategic investors significantly reduces the magnitude of all-in-net-discounts. This effect is even stronger than shown in Table 4. Models (5) and (6) reveal similar information as we find in Table 4 that strategic investors obtain significantly more control rights indicated by ownership and board seats than financial investors. The negative relation between strategic investor and the overall friendliness of contract terms also hold with the utilization of instrumental variable approach as shown in model (7). We also continue to find a significantly negative relation between strategic investor and the number of investor protection terms included in the contract and an insignificant relation between investor identity and terms on issuer right. However, as shown in model (9), the relation between strategic investors and the number of trading restrictions included has flipped the sign (from negative and insignificant to significantly positive) after controlling for the endogeneity. This finding is not consistent with our theoretical prediction. Our analysis in Table 6 sheds more light on this regard.

To further understand which type of investor protection, trading restriction, and issuer right is more likely to be included in contracts with strategic investors, we analyze the inclusion or not of every single contractual term using probit regressions in Table 6. Similar to Table 5, we apply the instrumental variable approach in this set of analysis.

[Insert Table 6 about here.]

As shown in Table 6, PIPE contracts with strategic investors are less likely to include registration right and anti-dilution right than those with financial investors. On the other hand, the former are more likely to include lock up provisions and trading restriction related to future public offering, but less likely to include restrictions regarding shorting PIPE shares. These findings make sense given the longer investment horizon of strategic investors and the fact they have more control rights. The long investment horizon of strategic investors make them more willing to accept lock up provisions which is normally longer than the time it takes to make the registration statement effective. Similarly, because strategic investors do not plan to exit immediately after the effectiveness of the registration right, the registration right is less valuable to them. Further, strategic investors, with member on the board, can determine (more or less) when additional funding will be raised and at what price, thus less anti-dilution right is included.

In summary, findings from Tables 5 and 6 are overall consistent with the observation upon Table 4 that strategic investors obtain more control rights, less cash flow rights and other contractual protections. Our findings indicate that the allocation of these rights between contractual parties is subject to the investment objective and horizon of investors.

4.3. Investor Identity, Contract Design, and Issuer Stock Performance Following PIPEs

In this section, we analyze the stock performance of PIPE issuers. In particular, we examine whether investor identity has an influence on issuers' post-PIPE stock performance. If yes, we further explore whether this influence could be explained by the contractual differences between strategic investors and financial investors.

4.3.1. Issuer stock performance following PIPEs

In Table 7, we report the PIPE issuers' stock performance 12 months, 24 months, and 36 months subsequent to the offering. We present the raw returns, the equal-weighted market adjusted cumulative abnormal returns, and the buy and hold returns based on the abnormal alphas estimated using the Ibbotson RATS with Fama-French factors calendar time approach.

[Insert Table 7 here.]

On average, PIPE issuers experience negative long run stock performance, consistent with Hertzel et al (2002) and Brophy, et al (2009). Further, we show that up to 36 months subsequent to the

issuance, PIPEs associated with strategic investors have significantly less negative performance than their counterparties. This finding is robust across all the three return measures. In the section that follows, we further analyze what contributes to the better stock performance of PIPEs associated with strategic investors.

4.3.2. Regression analysis

In Table 8, we start with regressing equal-weighted CAR[1,12], CAR[1,24], and CAR[1,36] on the strategic investor dummy, and variables that control for characteristics of issuing firms prior to the offering, including EBITDA/Assets, EV/Assets, Ln (Analysts), Ln(Spread), Ln(Volatility), and equal-weighted CAR[-12,-1]. Both industry fixed effect and year fixed effect are also included. The results are presented in models (1) to (3). Then in models (4)-(6), we add detailed contract characteristics into the above regressions, such as security type, cash flow rights including discounts, interest/dividend rates, and warrant coverage, control rights including ownership and board dummy, and the overall investor friendliness of other contractual terms measured by IFI. In models (7)-(9), IFI is replaced by three variables, the number of investor protections, the number of investor trading restrictions, and the number of issuer rights.

[Insert Table 8 here.]

As shown in models (1) to (3), consistent with Table 7, we find PIPEs associated with strategic investors have significantly better stock performance subsequent to the issuance. Specifically, issuers associated with strategic investors outperform those with financial investors by 23% in 12 months, 33% in 24 months, and 32% in 36 months following the PIPE offering, which is economically significant. In addition, we show that issuers with more analyst coverage and better pre-PIPE stock performance have outperform their counterparties in the long run, while those with poor operating performance, high EV/Assets ratio, large volatility before PIPEs significantly underperform their counterparties in the long run.

When we include contract design variables in the regressions as shown in models (4) to (9), the coefficients of strategic investor dummy remain positive, however, become insignificant. Meanwhile, we find that higher discounts and warrant coverage correspond to worse long run stock performance of PIPE issuers. Further, both ownership stake and board seats acquired by investors are significantly and positively correlated with PIPE issuers' long run stock performance. IFI is positively correlated to the long run stock performance of PIPE issuers, but not significant.

Our analysis in this section shows that investor identity has a significant influence on PIPE issuers' stock performance. Specifically, PIPEs associated with strategic investors outperform those with financial investors both in the short run and the long run. The relative superior performance of the former

is due to the fact that strategic investors typically require less supra cash flow rights (discounts and warrants) and require more control rights, indicating their potential intervening and/or supporting activities subsequent to the issuance. This potential value-added is shared by PIPE investors and non-PIPE investors. On the other hand, when substantial cash flow rights are granted to investors in exchange for the last resort of financing (see, e.g., Brophy, et al 2009; Chaplinsky and Haushalter, 2010; Chen, Dai, and Schatzberg, 2010), the PIPE issuers experience much worse stock performance, suggesting there is a wealth transfer from non-PIPE investors to PIPE investors whose returns are protected as shown in Chaplinsky and Haushalter (2010).

5. Conclusions

Despite the fast growth of the PIPE market, concerns have been raised that the structure of these offerings allows sophisticated investors to take advantage of companies with desperate financing needs (Hillion and Vermaelin, 2004; Brophy, et al, 2009; Chaplinsky and Haushalter, 2010). We empirically examine how different investment objectives of investors influence the formation of PIPE contracts and how they jointly affect the issuing firms' stock performance subsequent to PIPE offering. With this analysis, we aim to clarify what is good (bad) for PIPE investors and non-PIPE investors of the issuing firms.

We show that investor objectives together with the agency cost of PIPE issuers condition the formation of PIPE contracts. In particular, strategic investors who aim to add value by actively monitoring and intervening management and who often have longer investment horizon obtain significantly more control rights than financial investors. As a trade off, they are willing to accept less superior cash flow rights and less contractual investor protections. On the issuers' side, we find supporting evidence that more cash flow rights, control rights, and other contractual protections are provided to investors when the information and agency cost of the PIPE issuers are high. This is consistent with the predictions by the financial contracting theories and similar to the empirical findings in the venture capital contracts (Kaplan and Stromber, 2002, 2004).

We also present novel evidence that long-term stock returns following PIPE deals is conditional on investor objectives and contractual design. Specifically, we show that PIPEs associated with strategic investors outperform those associated with financial investors in the long run. The superior relative performance of the former is due to the fact that strategic investors appear to demand lower cash flow rights and more control rights. The former potentially provides the firm more financial flexibility, while the latter possibly help improving managerial efficiency and thus add value in the long run.

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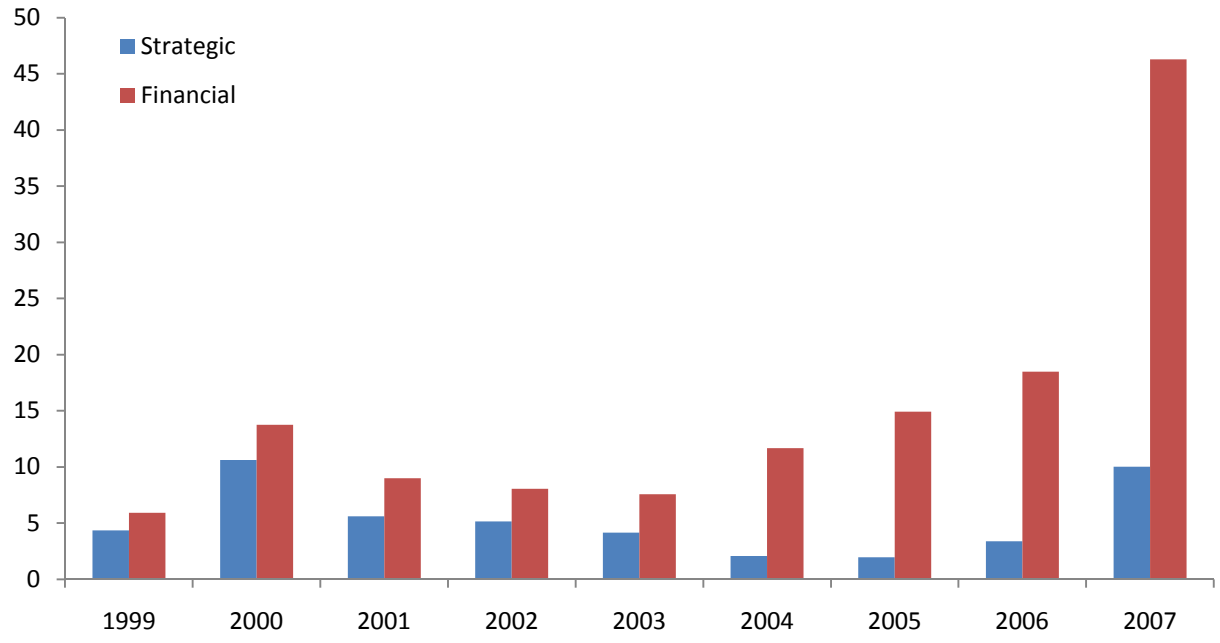

Fig. 1 Amount of Capital ($ billion) Invested by Financial and Strategic Investors in the PIPE Market, 1999-2007

Table 1
Number of PIPEs where Financial or Strategic Investors are the Lead Investors

We start with a sample of 5709 PIPE transactions with investor information during the period of 1999-2007. Financial investors include hedge funds, mutual funds, banks, pension funds, insurance companies, brokers/dealers. Strategic investors include corporations, venture capital funds, private equity and buyout funds. Lead investors are defined as the ones that invest the largest percentage of capital in a specific PIPE transaction.

	Financial Lead Investor			Strategic Lead Investor		
Year	N	Ownership Acquired	Offer Size ($M)	N	Ownership Acquired	Offer Size ($M)
1999	309	6.1%	10.4	86	9.3%	55.1
2000	579	5.9%	15.7	166	12.1%	68.3
2001	450	6.3%	11.4	191	13.1%	30.1
2002	331	6.8%	17.4	118	15.0%	34.5
2003	456	5.8%	11.1	111	12.3%	36.9
2004	711	7.4%	10.1	95	11.5%	23.0
2005	673	11.0%	14.5	115	14.9%	16.9
2006	570	11.0%	19.5	96	12.2%	36.6
2007	540	11.9%	66.9	112	12.5%	89.6

Table 2
PIPE Contract Provisions

Our final sample consists of 3230 PIPE transactions in U.S. from 1999 to 2007. This table summarizes the frequency, means and medians of the various PIPE contract terms. For the purpose of presentation, we group these terms into security type, cash flow right, control right, investor protection, trading restriction, and issuer right. We also compare and contrast these contract terms associated strategic investors with those associated with financial investors. P-values on the differences in means and medians are provided in the last column. ***, **, and * denote statistical significance at 1%, 5%, and 10% confidence levels, respectively.

Terms	Stat.	Total	Strategic	Financial	P-value on Difference
Panel A. Security Type					
Traditional PIPEs	N	2856	728	2128	
	Frequency	88.4%	97.5%	74.5%	0.000***
Structured PIPEs	N	1374	19	355	
	Frequency	11.6%	2.5%	25.5%	0.000***
Panel B. Cash Flow Right					
Discounts	Mean	0.7%	-8.1%	3.3%	0.000***
	Median	6.7%	0.6%	8.2%	0.000***
Interest rate or dividend	Frequency	30.8%	27.7%	31.7%	0.039**
	Mean	7.4%	8.0%	7.3%	0.076*
	Median	7.0%	8.0%	7.0%	0.007***
Warrant coverage	Frequency	48.6%	31.9%	53.7%	0.000
	Mean	48.9%	72.4%	44.8%	0.001***
	Median	30.1%	30.0%	30.4%	0.555
All-in-Net-Discounts	Mean	36.9%	24.0%	28.7%	0.000***
	Median	25.7%	15.1%	40.9%	0.000***
Panel C. Control Right					
Ownership	Mean	7.2%	11.1%	6.0%	0.000***
	Median	4.5%	7.1%	4.1%	0.000***
Board Seat	Frequency	7.5%	20.2%	3.6%	0.000***
Panel D. Investor Protection					
Registration Right	Frequency	46.3%	31.6%	50.8%	0.000***
Anti-Dilution	Frequency	35.2%	19.7%	38.6%	0.000***
First Refusal Right	Frequency	37.9%	22.3%	44.4%	0.000***
Investor Call Option	Frequency	5.3%	2.5%	6.1%	0.000***
Redemption	Frequency	9.5%	5.4%	10.7%	0.011**
Panel E. Restrictions on Trading					
No shorting/hedging	Frequency	9.0%	4.7%	10.3%	0.000***
Offsetting long position	Frequency	2.6%	0.5%	3.2%	0.000***
Public offering	Frequency	0.7%	1.2%	0.5%	0.032**
Lock up	Frequency	2.9%	4.7%	2.4%	0.001***
Panel F. Issuer Right					

Company Forced Conversion	Frequency	9.3%	4.4%	10.8%	0.000***
Company Put Option	Frequency	4.9%	5.4%	4.2%	0.193
Company Optional Redemption	Frequency	10.3%	6.4%	11.5%	0.000***
Panel G. Investor Friendly Index (IFI)					
IFI	Mean	7.7	7.4	7.8	0.000***

Table 3
Characteristics of PIPE Issuers

Our sample consists of 3230 PIPE transactions in U.S. from 1999 to 2007. This table summarizes the means and medians (in the parentheses) of the characteristics of PIPE firms. We also compare and contrast these characteristics of PIPE firms associated with strategic investors with those associated with financial investors. P-values on the differences in means and medians are provided in the last column. ***, **, and * denote statistical significance at 1%, 5%, and 10% confidence levels, respectively.

	Full Sample	Strategic	Financial	p-value on difference
Market Cap ($M)	394	578	339	0.078***
	(96.3)	(125.0)	(90.7)	(0.000)***
R&D/Assets	24.0%	25.7%	23.5%	0.229
	(10.8%)	(15.2%)	(9.0%)	(0.000)***
Intangible /Assets	12.3%	11.4%	12.5%	0.161
	(1.6%)	(0.9%)	(1.8%)	(0.209)
EV/Assets	4.8	5.2	4.6	0.227
	(2.2)	(2.2)	(2.2)	(0.115)
EBITDA/Assets	-38.1%	-40.8%	-37.3%	0.212
	(-23.1%)	(-27.7%)	(-21.7%)	(0.035)**
Percentage Profitable	18.5%	15.7%	19.3%	0.025**
LT Debt/Assets	17.2%	25.1%	14.9%	0.000***
	(4.4%)	(5.3%)	(4.0%)	(0.001)***
With Analyst Coverage	47.7%	52.5%	46.2%	0.003***
Analyst Coverage	1.9	2.6	1.7	0.000***
	(0.0)	(1.0)	(0.0)	(0.000)***
CAR (-12,-1)	16.5%	3.2%	20.3%	0.013**
	(5.0%)	(-5.6%)	(7.8%)	(0.002)***
Spread	7.3	7.3	7.3	0.815
	(7.0)	(7.0)	(7.0)	(0.712)
Volatility	6.1%	6.0%	6.1%	0.290
	(5.6%)	(5.6%)	(5.6%)	(0.621)
With Agent	66.4%	42.3%	73.7%	0.000***
Insider	2.8%	4.8%	2.2%	0.000***
Strategic Alliance	7.2%	29.8%	0.5%	0.000***
N	3230	747	2483	

Table 4 PIPE Contract Characteristics and Issuers' Agency Costs

This table reports the regression results of various contract terms, for instance, the allocation of cash flow rights, control rights, and contingency contractual terms. Specifically, for cash flow rights, we examine discounts, interest/dividend rate, whether warrant is attached to the offering, and the all-in-net-discounts following Chaplinsky and Haushalter (2010); for control rights, we examine ownership and whether at least one board seat is assigned to PIPE investors; for contingency terms, for the purpose of presentation, we categorize them into three groups, investor protection terms, trading restriction terms, and issuer right terms. We also calculate an Investor-Friendly-Index following Bengtsson and Dai (2010) to represent the overall investor friendliness of contingency terms. Models (1), (2), (4), and (5) are OLS regressions. Models (3) and (6) are probit regressions. Models (7)-(10) are Poisson Regressions. The definitions of independent variables are provided in details in the Appendix. Standard errors are clustered at the company level. P-values are reported in parentheses. ***, **, and * denote statistical significance at the 1%, 5%, and 10% confidence levels, respectively.

	Cash Flow Rights				Control Rights		Contingency Terms			
	Discounts	Interest or Dividend Rate	Warrant Attached	All-in-Net-Discounts	Ownership	Board	IFI	N of Investor Protection Terms	N of Trading Restriction Terms	N of Issuer Right Terms
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Intercept	-0.384***	0.072***	1.780***	0.758***	0.191***	-2.545***	1.950***	0.012	-3.331***	0.463***
	(0.004)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.934)	(0.000)	(0.000)
Strategic	***-0.139****	***0.004****	***-0.241*****	***-0.126****	***0.061*****	***1.110*****	***-0.020*****	***-0.140****	***-0.166***	***0.024***
	(0.051)	***(0.030)***	***(0.002)***	***(0.096)***	***(0.000)***	***(0.000)***	***(0.001)***	***(0.010)***	***(0.291)***	***(0.434)***
R&D/Assets	0.006	-0.003	-0.051	-0.098**	0.003	0.096	0.001	-0.033	0.116	-0.030
	(0.887)	(0.370)	(0.626)	(0.041)	(0.672)	(0.526)	(0.888)	(0.646)	(0.547)	(0.542)
Intangible/Assets	0.052	0.007	0.086	0.156*	-0.005	0.163	0.014	0.085	-0.426	-0.037
	(0.469)	(0.142)	(0.621)	(0.059)	(0.633)	(0.461)	(0.365)	(0.368)	(0.184)	(0.652)
EV/Assets	0.002	-0.001	0.004	-0.002	-0.001**	-0.089***	0.001*	-0.003	0.002	-0.001
	(0.221)	(0.192)	(0.422)	(0.119)	(0.016)	(0.000)	(0.069)	(0.443)	(0.870)	(0.978)
Ln (Analyst)	-0.027*	0.002*	-0.089*	-0.013	0.007***	0.031	-0.002	-0.026	-0.191**	0.011
	(0.080)	(0.065)	(0.057)	(0.516)	(0.003)	(0.577)	(0.576)	(0.367)	(0.030)	(0.553)
Ln (MV)	0.050	-0.004***	-0.340***	-0.004	-0.027***	-0.058	-0.002	-0.044***	0.092**	-0.050***
	(0.153)	(0.000)	(0.000)	(0.922)	(0.000)	(0.176)	(0.473)	(0.009)	(0.050)	(0.000)
LT Debt/Assets	-0.114	0.003	-0.478***	-0.126	0.004	-0.137	-0.026**	-0.214	-0.422**	0.112***
	(0.373)	(0.452)	(0.000)	(0.290)	(0.775)	(0.386)	(0.028)	(0.112)	(0.046)	(0.003)
Ln (Volatility)	0.970*	0.021	3.341**	0.422	0.124	-0.069	0.183	1.137	0.768	-0.899

	(0.093)	(0.567)	(0.024)	(0.526)	(0.141)	(0.973)	(0.101)	(0.161)	(0.748)	(0.121)
EBITDA/Assets	-0.065	-0.001	-0.080	-0.114*	0.008	-0.039	0.004	0.037	0.206	0.013
	(0.241)	(0.577)	(0.316)	(0.065)	(0.219)	(0.767)	(0.550)	(0.447)	(0.190)	(0.691)
CAR(-12,-1)	0.005	-0.001	-0.026	-0.009	-0.002*	-0.028	0.001	-0.005	-0.058*	-0.009
	(0.535)	(0.114)	(0.221)	(0.386)	(0.074)	(0.418)	(0.730)	(0.733)	(0.091)	(0.219)
Traditional	0.202***	-0.031***	-0.995***	-0.253***	-0.001	0.584**	-0.020**	-0.750***	-0.435***	-0.289***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.788)	(0.011)	(0.027)	(0.000)	(0.006)	(0.000)
With Agent	-0.035	0.001	0.291***	-0.020	-0.002	0.107	0.026***	0.080**	-0.290***	-0.012
	(0.394)	(0.696)	(0.000)	(0.653)	(0.564)	(0.265)	(0.000)	(0.033)	(0.008)	(0.664)
Industry Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	3230	3230	3230	2596	3230	3230	3230	3230	3230	3230
Pseudo R^2 (%)			20.75			20.70	1.26	22.10	15.05	4.76
Adjusted R^2 (%)	3.27	15.83		4.85	26.33					

Table 5

PIPE Contract Characteristics and Investor Identity: Controlling for the Endogeneous Matching between PIPE Issuers and Investors

This table examines the relation between PIPE contract terms and investor identity controlling for the endogeneous matching between PIPE issuers and investors. We apply the instrumental variable framework to control for the endogeneity. Specifically, in the first stage regression, we run probit regression where the dependent variable is a dummy variable which is set to equal to 1 if the PIPE offering is associated with a strategic investor, and 0 otherwise. The exogeneous instruments are *Insider* and *Alliance*. *Insider* is a dummy variable, which is equal to 1 if the company's manager or director or any other insiders participate in the PIPE offering, and 0 otherwise. *Alliance* is a dummy variable, which is equal to 1 if the proceeds from the PIPE offering are related to establishing a strategic alliance, 0 otherwise. In the second stage regressions, similar to Table 4, for cash flow rights, we examine discounts, interest/dividend rate, whether warrant is attached to the offering, and the all-in-net-discounts following Chaplinsky and Haushalter (2010); for control rights, we examine ownership and whether at least one board seat is assigned to PIPE investors; for contingency terms, for the purpose of presentation, we categorize them into three groups, investor protection terms, trading restriction terms, and issuer right terms. We also calculate an Investor-Friendly-Index following Bengtsson and Dai (2010) to represent the overall investor friendliness of contingency terms. Models (1), (2), (4), and (5) are OLS regressions. Models (3) and (6) are probit regressions. Models (7)-(10) are Poisson Regressions. The definitions of independent variables are provided in details in the Appendix. Standard errors are clustered at the company level. P-values are reported in parentheses. ***, **, and * denote statistical significance at the 1%, 5%, and 10% confidence levels, respectively.

		Second Stage									
		Cash Flow Rights				Control Rights		Contingency Terms			
		Discounts	Interest or Dividend Rate	Warrant Attached	All-In-Net-Discounts	Ownership	Board	IFI	N of Investor Protection Terms	N of Trading Restriction Terms	N of Issuer Right Terms
	First Stage	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Intercept	-1.707***	-0.360***	0.073***	1.785***	0.779***	0.192***	-2.521***	2.124***	0.469***	-0.749	0.651***
	(0.000)	(0.004)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.007)	(0.398)	(0.000)
Strategic		***-0.526****	***-0.006****	***-0.756*****	***-0.619****	***0.053*****	***1.410*****	***-0.102*****	***-0.332****	***1.056*****	***-0.040***
		(0.078)	***(0.072)***	***(0.000)***	***(0.053)***	***(0.000)***	***(0.000)***	***(0.000)***	***(0.060)***	***(0.039)***	***(0.687)***
R&D/Assets	-0.045	-0.003	-0.003	-0.060	-0.110**	0.003	0.107	-0.004	-0.071	0.258	-0.047
	(0.742)	(0.947)	(0.329)	(0.557)	(0.039)	(0.700)	(0.477)	(0.690)	(0.366)	(0.638)	(0.474)
Intangible/Assets	-0.069	0.031	0.006	0.062	0.119	-0.005	0.181	0.029*	0.141	-1.900***	-0.067
	(0.729)	(0.645)	(0.173)	(0.721)	(0.115)	(0.589)	(0.417)	(0.090)	(0.245)	(0.000)	(0.526)
EV/Assets	-0.012	0.001	-0.001	0.003	-0.004*	-0.001**	-0.092***	-0.001	-0.010**	0.015	-0.002
	(0.204)	(0.529)	(0.146)	(0.560)	(0.086)	(0.014)	(0.000)	(0.655)	(0.023)	(0.221)	(0.401)
Ln (Analyst)	0.041	-0.022	0.002**	-0.081*	-0.005	0.007***	0.029	-0.003	0.008	-0.400***	0.011
	(0.430)	(0.142)	(0.046)	(0.084)	(0.795)	(0.002)	(0.598)	(0.454)	(0.820)	(0.008)	(0.650)
Ln (MV)	0.055	0.060	-0.004***	-0.322***	0.010	-0.027***	-0.066	-0.019***	-0.075***	-0.219**	-0.057***

	(0.145)	(0.136)	(0.004)	(0.000)	(0.820)	(0.000)	(0.122)	(0.000)	(0.001)	(0.018)	(0.002)
EBITDA/Assets	-0.034	-0.071	-0.001	-0.088	-0.123*	0.008	-0.039	0.002	0.005	0.989***	0.012
	(0.737)	(0.228)	(0.527)	(0.256)	(0.065)	(0.232)	(0.767)	(0.824)	(0.941)	(0.002)	(0.819)
LT Debt/Assets	0.479***	-0.051	0.005	-0.382***	-0.044	0.005	-0.185	-0.044***	-0.049	-1.260***	0.164***
	(0.002)	(0.649)	(0.218)	(0.000)	(0.624)	(0.689)	(0.265)	(0.000)	(0.677)	(0.002)	(0.000)
Ln (Volatility)	-0.403	1.023*	0.022	3.304**	0.558	0.126	-0.147	0.312**	0.908	2.575	-1.026
	(0.799)	(0.097)	(0.547)	(0.026)	(0.453)	(0.134)	(0.942)	(0.015)	(0.343)	(0.622)	(0.271)
Car(-12,-1)	-0.009	0.002	-0.001*	-0.028	-0.014	-0.002*	-0.023	-0.002	0.007	-0.077	-0.020*
	(0.718)	(0.799)	(0.098)	(0.192)	(0.283)	(0.067)	(0.507)	(0.408)	(0.732)	(0.383)	(0.091)
Traditional	0.984***	0.265***	-0.029***	-0.898***	-0.165**	0.001	0.527**	-0.122***	-0.903***	-1.132***	-0.397***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.011)	(0.969)	(0.023)	(0.000)	(0.000)	(0.006)	(0.000)
With Agent	-0.559***	-0.123	-0.002	0.172**	-0.138	-0.004	0.189*	0.009	-0.022	-0.424	-0.023
	(0.000)	(0.178)	(0.359)	(0.023)	(0.172)	(0.335)	(0.088)	(0.202)	(0.711)	(0.136)	(0.586)
Insider	0.567***										
	(0.002)										
Strategic Alliance	2.382***										
	(0.000)										
Industry Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	3230	3230	3230	3230	3230	3230	3230	3230	3230	3230	3230
Pseudo R^2 (%)	27.21										
Wald Chi2		120.04	375.11	507.56	272.76	283.49	167.31				
Prob > Chi2		0.000	0.000	0.000	0.000	0.000	0.000				

Table 6
Inclusion of Individual Contingency Term: Controlling for the Endogeneous Matching between PIPE Issuers and Investors

This table examines the inclusion of individual contingency term in PIPE contracts controlling for the endogeneous matching between PIPE issuers and investors. Similar to Table 5, we apply the instrumental variable framework to control for the endogeneity. The first stage regression is the same as reported in Table 5. The second stage regressions are probit regressions, where the dependent variables are equal to 1 if a specific contingency term is included, and 0 otherwise. The definitions of independent variables are provided in details in the Appendix. Standard errors are clustered at the company level. P-values are reported in parentheses. ***, **, and * denote statistical significance at the 1%, 5%, and 10% confidence levels, respectively.

	Investor Protection Terms					Trading Restriction Terms				Issuer Right Terms		
	Registration Right	Redemption Right	Anti-Dilution Right	First Refusal Right	Investor Call Option	No Shorting/ Hedging	Offsetting Long Position	Public Offering	Lockup	Company Forced Conversion	Company Put Option	Company Optional Redemption
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Intercept	-1.248***	-5.793***	-1.365***	-1.648***	-2.196***	-1.656***	-2.412***	-8.167***	-2.960***	-0.814***	-2.101***	-0.589**
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.009)	(0.000)	(0.037)
Strategic	***-0.948******	***-0.465***	***-0.618******	***-0.120***	***-0.426***	***-0.123***	***-0.876****	***0.972******	***1.339*****	***-0.440***	***0.384***	***-0.169***
	(0.000)	***(0.157)***	***(0.000)***	***(0.662)***	***(0.294)***	***(0.622)***	***(0.051)***	***(0.002)***	***(0.000)***	***(0.147)***	***(0.129)***	***(0.526)***
R&D/Assets	0.230	-0.193	-0.002	0.124	-0.092	0.106	0.047	0.276	0.151	0.069	-0.049	0.031
	(0.125)	(0.335)	(0.992)	(0.405)	(0.588)	(0.432)	(0.829)	(0.699)	(0.537)	(0.730)	(0.743)	(0.878)
Intangible/Assets	-0.128	0.170	-0.010	-0.010	-0.013	0.182	-0.856**	-1.454***	-0.856**	0.217	-0.230	-0.048
	(0.566)	(0.471)	(0.955)	(0.964)	(0.957)	(0.434)	(0.025)	(0.007)	(0.025)	(0.329)	(0.362)	(0.833)
EV/Assets	-0.001	-0.004	-0.003	0.013*	-0.001	0.006	-0.006	-0.125*	0.010	-0.026**	-0.041***	-0.016
	(0.956)	(0.623)	(0.593)	(0.067)	(0.922)	(0.414)	(0.571)	(0.080)	(0.459)	(0.041)	(0.004)	(0.313)
Ln (Analyst)	-0.010	0.012	-0.040	-0.028	-0.155**	-0.060	-0.205**	-0.035	-0.202**	0.024	0.078	-0.059
	(0.875)	(0.855)	(0.405)	(0.671)	(0.017)	(0.377)	(0.046)	(0.846)	(0.011)	(0.712)	(0.257)	(0.368)
Ln (MV)	-0.030	-0.004	-0.033	-0.148***	0.149***	-0.053	0.063	0.100	0.149***	-0.112***	0.032	-0.087**
	(0.517)	(0.920)	(0.306)	(0.000)	(0.001)	(0.224)	(0.325)	(0.350)	(0.006)	(0.005)	(0.536)	(0.027)
EBITDA/Assets	0.233*	0.086	0.102	0.225**	-0.035	0.149	0.149	0.532	0.176	0.155	-0.138	0.258**
	(0.052)	(0.500)	(0.317)	(0.033)	(0.762)	(0.191)	(0.417)	(0.235)	(0.406)	(0.254)	(0.254)	(0.024)
LT Debt/Assets	-0.484***	0.005	-0.237*	-0.579***	-0.307	-0.306**	-0.173	-2.122**	-0.230	-0.440**	0.058	-0.041
	(0.001)	(0.972)	(0.068)	(0.000)	(0.162)	(0.049)	(0.555)	(0.030)	(0.184)	(0.036)	(0.613)	(0.765)
Ln (Volatility)	0.002	-1.045	2.778**	4.753***	0.385	-0.446	1.282	0.833	-4.775	-2.014	4.620***	-1.945
	(0.999)	(0.602)	(0.045)	(0.006)	(0.824)	(0.802)	(0.574)	(0.884)	(0.295)	(0.268)	(0.002)	(0.532)

Car(-12,-1)	0.007	-0.063*	0.008	-0.047*	0.032	-0.016	-0.018	-0.091	-0.046	0.005	-0.034	-0.045
	(0.815)	(0.059)	(0.733)	(0.060)	(0.320)	(0.611)	(0.593)	(0.307)	(0.198)	(0.869)	(0.123)	(0.107)
Traditional	-0.285*	-1.397***	-0.614***	-0.859***	-0.413***	-0.371**	-0.231		-0.446**	-0.751***	-0.350**	-1.143***
	(0.072)	(0.000)	(0.000)	(0.000)	(0.003)	(0.011)	(0.234)		(0.044)	(0.000)	(0.010)	(0.000)
With Agent	0.101	0.092	0.044	0.311***	-0.085	-0.189*	0.143	-0.733***	0.008	0.034	-0.298***	-0.077
	(0.353)	(0.409)	(0.598)	(0.002)	(0.459)	(0.064)	(0.468)	(0.001)	(0.956)	(0.749)	(0.007)	(0.427)
Industry Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	3230	3230	3230	3230	3230	3230	3230	3230	3230	3230	3230	3230
Wald Chi2	1148.84	441.03	508.40	297.32	86.73	223.88	175.91	268.50	174.22	194.37	124.91	232.51
Prob > Chi2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Table 7
Stock Performance of PIPE Issuers

This table presents the stock performance subsequent to (12, 24, and 36 months after) the PIPE issuance. We report the raw buy and hold returns (RAW), buy and hold abnormal returns adjusted by the equal-weighted market returns (CAR_EW), and buy and hold abnormal returns estimated using the Ibbotson RATS with Fama-French factors. The p-values on the differences in returns between strategic investors and financial investors are reported. ***, **, and * denotes whether the difference are significantly different from zero at 1%, 5%, and 10% confidence level.

	RAW			CAR_EW			Ibbotson RATS with Fama-French		
Months	Strategic	Financial	p-value on difference	Strategic	Financial	p-value on difference	Strategic	Financial	p-value on difference
[1,12]	8.3%	-7.3%	0.000***	-1.9%	-21.2%	0.000***	1.6%	-15.7%	0.000***
[1,24]	0.8%	-14.7%	0.000***	-9.1%	-38.0%	0.000***	-0.99%	-25.4%	0.000***
[1,36]	-2.0%	-20.9%	0.000***	-27.6%	-52.2%	0.018**	-19.3%	-34.4%	0.000***

Table 8 Investor Objective, Contract Design and PIPE Issuer Long Run Stock Performance

In this table, we analyze how investor objective and contract design jointly condition the stock performance of PIPE Issuers. The dependent variables are cumulative abnormal returns adjusted by the equal-weighted market returns (CAR_EW) over the following periods: one month prior to the PIPE, 12 months, 24 months, and 36 months subsequent to the PIPE. ***, **, and * denotes statistic significance at 1%, 5%, and 10% confidence levels, respectively.

	CAR_EW (1,12)	CAR_EW (1, 24)	CAR_EW (1,36)	CAR_EW (1, 12)	CAR_EW (1,24)	CAR_EW (1, 36)	CAR_EW (1, 12)	CAR_EW (1, 24)	CAR_EW (1,36)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Intercept	-0.097	-0.679***	-0.798**	-0.497**	-1.017***	-1.266***	-0.159	-0.769***	-0.887**
	(0.583)	(0.008)	(0.015)	(0.048)	(0.006)	(0.007)	(0.413)	(0.007)	(0.014)
Strategic	***0.227******	***0.332******	***0.322*****	***0.075***	***0.123***	***0.078***	***0.074***	***0.126***	***0.081***
	(0.000)	***(0.000)***	***(0.000)***	***(0.159)***	***(0.118)***	***(0.433)***	***(0.169)***	***(0.111)***	***(0.419)***
Control Variables									
EBITDA/Assets	-0.228***	-0.385***	-0.524***	-0.206***	-0.356	-0.496***	-0.205***	-0.357***	-0.495***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
EV/Assets	-0.023***	-0.040***	-0.055***	-0.022***	-0.037***	-0.051***	-0.021***	-0.037***	-0.050***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Ln (Analyst)	0.035	0.140***	0.177***	0.037	0.125***	0.151***	0.037	0.127***	0.151***
	(0.195)	(0.000)	(0.000)	(0.182)	(0.002)	(0.003)	(0.184)	(0.002)	(0.004)
Ln (Spread)	0.116	0.266*	0.285	0.072	0.243	0.280	0.077**	0.252*	0.289
	(0.236)	(0.064)	(0.117)	(0.479)	(0.101)	(0.138)	(0.046)	(0.091)	(0.126)
Ln (Volatility)	-2.421**	-3.445**	-4.048*	-2.172*	-3.137*	-3.884*	-2.248*	-3.248*	-4.027*
	(0.041)	(0.047)	(0.066)	(0.074)	(0.079)	(0.087)	(0.064)	(0.069)	(0.076)
CAR (-12, -1)	0.131***	0.180***	0.227***	0.146***	0.198***	0.248***	0.146***	0.197***	0.246***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Security Type									
Traditional				0.220***	0.275***	0.339***	0.218***	0.280***	0.338***
				(0.001)	(0.006)	(0.008)	(0.002)	(0.006)	(0.009)
Cash Flow Rights									

Discounts				-0.011	-0.167**	-0.252**	-0.013	-0.168**	-0.256**
				(0.852)	(0.046)	(0.018)	(0.816)	(0.044)	(0.016)
Interest Rate/Dividend				0.631	-0.034	-0.629	0.667	-0.200	-0.691
				(0.337)	(0.972)	(0.609)	(0.387)	(0.860)	(0.632)
Warrant Coverage				-0.013	-0.138**	-0.119	-0.014	-0.141**	-0.124
				(0.760)	(0.025)	(0.130)	(0.730)	(0.022)	(0.114)
Control Rights									
Ownership				0.916***	0.983**	1.130**	0.939***	0.1.007**	1.169**
				(0.001)	(0.014)	(0.026)	(0.001)	(0.012)	(0.022)
Board				0.185**	0.306**	0.496***	0.186**	0.303**	0.493***
				(0.022)	(0.010)	(0.001)	(0.022)	(0.011)	(0.001)
Contingency Terms									
IFI				0.035	0.024	0.035			
				(0.137)	(0.484)	(0.424)			
N of Investor Protection							0.033	0.041	0.051
							(0.142)	(0.207)	(0.222)
N of Trading Restriction							-0.040	-0.027	-0.078
							(0.487)	(0.755)	(0.473)
N of Issuer Rights							-0.120***	-0.114*	-0.171**
							(0.007)	(0.084)	(0.042)
Industry Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	3230	3230	3230	3230	3230	3230	3230	3230	3230
Adjusted R^2	8.97	11.04	11.44	10.10	11.41	11.75	10.24	11.46	11.84