The Influence of Investor Identity and Contract Terms on Firm Value: Evidence from PIPEs

Matthew T. Billett[a], Redouane Elkamhi[b], and Ioannis V. Floros[c*]
[a]Kelley School of Business, Indiana University, mbillett@indiana.edu
[b]Rotman School of Management, University of Toronto, redouane.elkamhi@rotman.utoronto.ca
[c]College of Business, Iowa State University, ivfloros@iastate.edu

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Abstract: Financial relationships can alleviate the adverse effects of asymmetric information and agency costs on outside stakeholders. We examine announcement returns to PIPE transactions, conditional on the contract terms and identity of the investor. We find that the influence of contract terms on announcement returns depends on investor identity. For PIPEs with hedge fund investors, the inclusion of control terms associates with much larger announcement returns. In contrast, announcement returns for PIPEs, involving strategic investors, are less dependent on the existence of control terms. We find the opposite for liquidity terms. Namely, announcement returns are dramatically different for strategic investors with and without liquidity terms, while inclusion of liquidity terms is less influential when PIPEs involve hedge funds. Our findings suggest that investor identity and contract terms jointly influence market reactions to PIPEs.

Keywords: PIPE, private placement, investor identity, contract terms, financial contracting
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*Corresponding author

1. Introduction

Prior studies show that financial relationships can benefit outside equity holders by mitigating the adverse effects of asymmetric information and agency conflicts. Such benefits arise when the investor possesses superior monitoring and/or information-production ability. While investor ability is a necessary ingredient to generate these benefits, ability alone may be insufficient. The investor must also have an incentive to engage those abilities; if a contract payoff is insensitive to the condition of the firm, then the investor may have little incentive to monitor or produce information, and the value of the financial relationship will be invariant to the investor's ability. In a similar vein, incentives will have little influence if the investor lacks inherent ability. Thus, the value of a financial relationship will depend not only on the identity of the investor (which captures the investor's ability), but also on the contract terms of the financial relationship (which shape the investor's incentives to employ her ability).

We explore how contract terms and investor identity influence shareholder wealth using a newly available dataset on private equity investments in public companies (PIPEs) over the period 2001-2010. We measure the value of the financial relationship as the stock market reaction to the announced PIPE financing, and relate this wealth effect to both investor identity and contract terms. We focus on two distinct investor identities intended to capture differences in investors' abilities: strategic/long-term investors (who likely have an information and/or monitoring advantage), and arms-length/short-term investors. Based on prior studies (Anderson and Dai (2010) and Bengtsson and Sensoy (2011)) and on our own analysis (discussed below), strategic/long-term investors include venture capitalists (VCs), private equity firms, and corporations; arms-length/short-term investors include hedge funds. We focus on two key contract terms: control terms and liquidity terms. *Control terms* will influence the investor's

incentives to engage in monitoring and/or information production. (For our primary tests, the key control term is board seat requests). *Liquidity terms* allow an investor to exit the relationship rather than engaging with the firm directly. (We use requests for preregistered securities, which allow the investor to sell his/her claims immediately as our key liquidity term).[1]

We argue the influence of contract terms, on shareholder wealth, will depend on the investor's identity (Section 2 motivates and presents our main hypotheses). For example, given strategic investors' low monitoring costs, they will tend to use control terms while hedge funds will tend to favor liquidity terms.[2] Thus, the market makes inferences regarding the benefits of monitoring conditional on an investor's cost and decision to engage a firm. When a strategic investor uses liquidity terms, the market infers there is little benefit to monitoring, leading to much smaller wealth effects. Similarly, the inclusion of a control term with a hedge fund investor suggests monitoring benefits must be large to overcome the investor's relatively high cost, which leads to larger wealth effects.

We explore the influence of investor identity and contract terms on shareholder wealth by comparing groupings of PIPE transactions across both investor identity and contract terms. We find that when PIPEs contain board seats, there is no difference in abnormal returns when the lead PIPE investor is a strategic investor versus a hedge fund. Yet, when PIPEs lack board seats, the reaction to strategic, investor-led PIPEs is significantly larger. Exploring the preregistered terms reveals a similar finding: While the use of preregistered terms negatively influences the

[1] As we show in Section 4.2, these two terms are the most frequently used ones by both strategic-led and hedge fund-led PIPEs. Moreover, PIPEs tend to include one or the other, but not both. In Appendix B, we show that among the PIPEs containing board seat requests only, 1.7% also include a pre-registered stock request. In general, we find negative correlations between inclusions of control and liquidity terms and low conditional probabilities of having liquidity terms when the contracts contain control terms (and vice versa).

[2] From this point forward, for ease of exposition, "monitoring" includes information production as well as active influence on the firm.

reactions to the PIPE for financings with both strategic investors and hedge funds, the incremental effect is far worse in the case of strategic investors.

One challenge for our study, as well as prior studies in this area, is the joint nature of financing characteristics (i.e., terms and identity) and firm characteristics. If different types of firms/investments require different types of financing to meet specific needs, then is the reaction due to the financing characteristics or to specifics of the firm obtaining the financing? When a firm's condition/situation is observable, we can include firm characteristics as control variables to address this concern. However, if there is an unobservable, omitted variable correlated with the financing variables then the results may be biased.

Specifically, our concern is that an omitted variable that influences the stock market reaction is also correlated with the financing characteristics. For example, assume this omitted variable is the value of the investment opportunity (independent of financing details), and that this omitted variable is positively related to the announcement return. If this omitted factor is negatively correlated with the use of preregistered stock requirements by strategic investors, then the omitted variable would impart a downward bias on the coefficient of the preregistered stock for strategic investors. Similarly, if the omitted variable is positively correlated with board seats used by hedge fund investors, then the coefficient on board seats for hedge funds will be upward biased.

This concern exists in most studies examining announcement returns to financing agreements (e.g., in the literature examining investor identity, the identity may correlate with the investment opportunity that is being financed). The most common way this issue has been addressed is to include firm characteristics to control for firm specifics. This works well if the characteristics are observable; however, it does little to address concerns when characteristics are

unobservable and thus omitted. In the case of omitted variables, we can include fixed effects in the regression, but this requires multiple financing events by the same firm. Fortunately for our study (and unlike many other forms of financing), many firms enter into PIPE transactions relatively frequently. This allows us to include firm fixed effects in our regressions, which should alleviate concerns about firm-specific omitted variables. We find that differences between the announcement effects for hedge fund-led versus strategic investor-led PIPEs (which are large and significant in OLS regressions), become insignificant once we include firm fixed effects. Once we include fixed effects, we find identity only matters *conditional* on contract terms.

In addition to fixed effects, we exploit PIPE sequences, namely the sample of PIPEs issued by the same firm and close together in time; this should help if the omitted variable is time varying but sticky across these relatively short time windows. These PIPE sequences allow us to isolate the effects of changes in financing features when the firm is unlikely to have fundamentally changed. In both of these sets of tests (multivariate regressions including firm fixed effects and examination of PIPE sequences), we find strong evidence that the value relevance of contract terms depends on investor identity.

We also address a second endogeneity concern arising from the notion that specific investors may have unobservable specific traits (e.g., specializing in a specific type of financing or firm). If this investor characteristic relates to announcement returns and is correlated with the contract terms or identity variables, then we again would have an omitted variables bias. For example, a particular hedge fund might specialize in certain financings that typically involve board seat requests. In this case, the difference in the wealth effects of hedge fund PIPEs, with and without board seats, could be due to the nature of the particular hedge fund's specialty and not the incremental effect of the board seat term. We address this issue by including investor

fixed effects in the regressions. This should capture omitted time-invariant investor characteristics, and exploits the differences in terms when used by the same investor. Last, given that many firms engage in multiple PIPE transactions, we include sequence fixed effects, which allow the wealth effects to systematically differ by whether the PIPE is a firm's first, second, third, etc. PIPE deal. All of these tests lead to the same conclusion: the value relevance of contract terms depends on investor identity indeed.

We also examine the post-PIPE announcement stock returns of the issuer. In general, we find no abnormal stock return performance regardless of investor identity and contract terms. Overall, these results contrast with prior work on PIPEs documenting large negative stock returns following hedge fund-led PIPEs, and suggest that the PIPE landscape has indeed developed since its inception and early years.

The dependence of the influence of contract terms on investor identity has important implications beyond that for the PIPE literature. Numerous studies of firm financings and financial policies include either measures of investor identity or contract terms. They draw conclusions on the effectiveness of contract terms (or investor characteristics) in influencing firm outcomes and choices. However, if the nature of identity and terms is conditional, then failing to include their joint interaction could lead to incorrect inferences and conclusions.

2. Theoretical motivation and development of hypotheses

Numerous studies examine how financing relationships can mitigate costs of asymmetric information and agency conflicts. In particular, if an investor has superior information - or can credibly commit to screening and/or monitoring the firm in ways that behoove outside investors - then the financial relationship enhances firm value (see Leland and Pyle (1977) and Campbell

and Kracaw (1980)). Thus, the value of financial relationships likely depends on the identity and incentives of the investor.

The important role of investor identity in determining the value of financial relationships has been documented in a number of studies. Barclay, Holderness and Sheehan (2007) classify investors as “passive” and “active" and find that active investors alleviate problems associated with entrenched management. Gompers and Lerner (1998) show that relationships in the VC industry are more successful when the investor has an information advantage or strategic relation to the firm. Specific to PIPEs, Hillion and Vermaelen (2004) characterize many PIPEs in the 1994-1999 period as “death spiral” financings; captive, desperate firms would often turn to hedge funds for very expensive financing. Brophy, Ouimet and Sialm (2009) show that PIPEs transacting with hedge fund investors exhibit lower announcement returns and underperform in the post-issuance period. They report significant short-selling activity by hedge funds around the announcements as evidence of the short-term focus of hedge fund investors. They argue that hedge funds are investors of “last resort” and provide funding for companies that are otherwise constrained from raising equity capital.

Anderson and Dai (2010) further categorize PIPE investors as either strategic investors or financial investors. Strategic investors include VCs, private equity funds, and corporations. They argue that strategic investors, in contrast to hedge fund investors, are more likely to actively monitor and invest in the PIPE issuer for a longer duration. Anderson and Dai (2010) suggest the differential expertise of strategic and hedge fund investors likely lead them to invest in different types of firms and with different purposes. We adopt this classification and define “investor identity” as strategic versus hedge fund investors. This literature leads to our first hypothesis:

Hypothesis 1: The stock price reaction to the announcement of a PIPE with a strategic investor is positive and larger than that for a hedge fund investor.

Contract terms (specifically cash flow and control rights) have been shown to play an important role in financial relationships given their influence on investor incentives. The incomplete contracts paradigm introduced by Grossman and Hart (1986) and Hart and Moore (1988, 1990) shows how the allocation of control rights may align incentives between the issuer and investor to alleviate agency costs. Kaplan and Stromberg (2003, 2004) study contracts between VCs and entrepreneurs, and report several features of real-world contracts that support predictions of financial contracting theory. They find that the allocation of control rights and cash flow rights between the VC and the entrepreneur is a central feature of the contracts. They find that VCs often require control rights, through board seats and voting rights; this increase in board seats and voting rights (among the VC and the entrepreneur) depends on the firm's financial performance. If operating performance (or net worth) falls below some threshold value, then VCs are granted greater control rights; otherwise, contracts contain more cash flow rights.[3] Thus, the choice of contract terms may also serve to screen amongst different types of firms, and the investor's contract terms may signal such differences to the market. Following this line of research, we define contract terms as those enhancing investor control and liquidity (i.e., the ability of the investor to sell her stake), which we formalize in hypothesis 2:

Hypothesis 2: The stock price reaction to the announcement of a PIPE with a control term is positive and larger than that for a liquidity term.

Previous empirical research has provided evidence in line with hypotheses 1 and 2 using different datasets and approaches; however, the interaction of investor identity and contract terms has not yet been explored in the literature. We investigate the value relevance of the joint information (contained in both contract terms and investor identity) in a toy model, which we

[3] Martos-Vila (2011) compares public and private offerings and attributes PIPE discounts to the illiquidity of the restricted private shares. PIPEs often contain a cash flow right requiring that the securities be pre-registered, dramatically enhancing their liquidity.

formally present in the Internet Appendix. The setup and intuition of the toy model can best be illustrated through the following example. Suppose we have two different firm types: one good and one bad. (Bad firms have an incentive to engage in risk-shifting (i.e., moral hazard). Also, there are two types of investors: strategic and hedge fund. Strategic investors have a greater ability to monitor and discern firm type at the time of the investment decision. Contracts may contain two terms: a control term that alleviates risk-shifting (by allowing the investor to engage in costly monitoring), and a liquidity term that allows the investor to exit without incurring monitoring costs. The cost of monitoring is smaller when the investor type is "strategic" and when the firm type is good (i.e., monitoring cost depends on both investor and firm type).[4]

Firms and investors are randomly matched, and the investor receives noisy information regarding the firm's type. Given their greater precision in identifying firm type at the outset, an investment from a strategic investor suggests the firm is more likely to be good; this results in a more positive market reaction (hypothesis 1). The market will also react more positively if the investment agreement contains a control term (regardless of investor type), which is more likely when the investor believes the firm to be good, given the lower expected monitoring cost (hypothesis 2).

This framework also motivates predictions about what the market infers based on contract terms conditional on investor type:

Hypothesis 3: The stock price reaction to the announcement of a PIPE with a strategic investor and a control term is positive and smaller in magnitude than that for a hedge fund with a control term.

The intuition is as follows. Given hedge funds' higher monitoring costs, strategic investors will be more reluctant to use a control term unless they are relatively certain a firm is good. Strategic investors have a greater tendency to include control terms because their monitoring cost is lower,

[4] Differential monitoring costs between strategic and arms-length investors reflect their different ability.

which lessens the impact of mistaking a bad firm for a good one. Thus, the incremental information from observing a control term is conditional on the investor's type (*ability*). We have a similar prediction for liquidity terms:

Hypothesis 4: The stock price reaction to the announcement of a PIPE with a strategic investor and a liquidity term is negative and larger in magnitude than that for a hedge fund with a liquidity term.

The intuition is similar. Given the greater precision of the strategic investor's information regarding firm type and her monitoring cost advantage, the inclusion of the liquidity term will convey, with a relatively high degree of certainty, that a firm is bad. In contrast, a hedge fund investor is more likely to include a liquidity term simply because their information is less precise, and their cost of monitoring is high. Again, this demonstrates that the information conveyed by contract terms depends on the investor's type.

3. Data

PIPEs are Regulation D private placements, which make up the majority of private placement transactions (92% over the sample period). Our sample of PIPEs comes from multiple data sources. Our full sample consists of closed PIPEs conducted in the U.S. from 2001 through 2010. We use the PrivateRaise database (which starts in 2001) to collect PIPE information (e.g., gross proceeds, purchase amount, security type, investor identity (for the period of 2007 and 2010), PIPE issuer characteristics, and contractual terms). We rely on Sagient Research's PlacementTracker (which starts in 1995) to compute the accurate number of each PIPE transaction as well as collect investor identity information (for the period of 2001 to 2006). Table 1 presents our sample by investor type, year, and contract term inclusion. Given most of our analysis requires contract term information; thus, our sample is limited to 2001-2010.[5] We

[5] Note this later time period also alleviates concerns that our sample is mainly comprised of death spirals and last-resort hedge fund-led PIPEs.

provide a detailed comparison of the data and coverage in PlacementTracker and PrivateRaise in Appendix A.

PrivateRaise started collecting investor identity information in 2007. Thus, we use PlacementTracker's investor identity up to 2007, and combine with PrivateRaise investor information for 2007-2010. As stated above, we also use earlier PlacementTracker PIPE transactions from 1995 to 2001 to track the complete sequence of PIPE transactions by each firm issuer, which we use in later tests. We match PIPE deals on the issuers' ticker symbol and the PIPEs' closing date (see Appendix A for details).[6]

Our masterfile contains all closed PIPE transactions in the U.S. conducted by domestic and foreign PIPE issuers, and includes 18,391 PIPE transactions offered by 8,448 distinct issuers. Lead investor (defined as the investor with the highest dollar amount of the PIPE) information is available for 11,796 PIPEs. As shown in Panel A of Table 1, the lead investor is a corporation in 1,130 PIPEs, a private equity or VC firm in 1,121 PIPEs, and a hedge fund in 6,667 PIPEs. The remaining associate with a variety of investor types (e.g., banks, broker/dealers, mutual funds, pension funds, insurance companies, sovereign wealth funds, individual investors, corporate insiders, affiliated companies, and foreign investment houses).[7] We see hedge funds are the most frequent lead investor, consistent with Brophy, Ouimet and Sialm (2009). Turning to Panel B, we see that post-2005, strategic investor types (e.g., corporations, private equity companies, and VC firms) have risen in prominence. Based on total

[6] We find that, on average, the PIPE announcement date precedes the PIPE closing date by one calendar day. However, we find that for 31% of our PIPEs sample, the announcement date appears after the PIPE closing date. We utilize the first public announcement (closing date or announcement date, depending on which comes first) as the event date for all later analyses. When comparing the closing dates from PrivateRaise and PlacementTracker (using the closed PIPE deals of 2001-2008), we find that the average (median) difference for the reported announcement dates is 39.91 (five) calendar days. We are able to compare announcement dates reported in PlacementTracker and PrivateRaise for 5,188 overlapping PIPE transactions and find that for 1,326 of them, the announcement dates differ.

[7] Information on sovereign wealth funds, individual investors, insiders/affiliates and foreign investment houses PIPE investor types is only available for the period of 2007-2010, and is provided only in PrivateRaise.

dollars invested, strategic investors consistently rank second to hedge funds as the most common investor type.

We are able to get CRSP pricing information for 671 corporation-led PIPEs, 831 VC- and private equity-led PIPEs, and 4,164 hedge fund-led PIPEs,[8] and we obtain contract-term information for 9,642 PIPE deals from PrivateRaise.[9] Out of the total 671 corporation-led, 831 VC- and private equity-led, and 4,164 hedge fund-led PIPEs, we have contract-term information for 380 corporation-led PIPEs, 665 VC-led and private equity-led PIPEs, and 1,995 hedge fund-led PIPE deals. The number of observations reported in the tables depends on whether we require contract terms for the analysis.[10]

4. Empirical design

We begin by describing the PIPEs process. We then explore the data on contract terms and investor identity, and describe the construction of our empirical measures. We then describe our empirical setup.

4.1 The PIPE issuance process and the value relevance of PIPE financings

We use the stock market reaction to announcements of PIPE transactions to measure the value relevance of the PIPE financing. This approach works well if PIPEs, and their associated contract terms and investor identity, come as a surprise. The PIPE process is designed to help ensure this is the case. First, a PIPE is privately negotiated with the investor and involves the transmittal of inside information that prohibits the investor from revealing the information or trading in the issuer's stock until after public disclosure of the PIPE. In the case of an

[8] For the 21% of the sample of PIPEs not covered by CRSP, we collect daily pricing from finance.yahoo.com.

[9] They obtain the term information from S-1, S-2, S-3, and SB-2 documents. We discuss contract-term data and categorization in detail below in Section 4.2.

[10] We find that 2,154 out of 11,796 PIPE deals do not have any recorded contract terms. We hand-check a random sample of 100 out of 2,154 PIPE transactions with no terms and verify that the accompanying SEC document does not incorporate any contract terms information. To our knowledge, there is no SEC regulation imposing the reporting of contract terms employed in PIPE transactions.

intermediated PIPE, the issuing firm first contacts a placement agent (typically a broker-dealer). The placement agent contacts potential investors and provides cursory information that does not reveal the issuer. Any interested potential investor signs a nondisclosure agreement (NDA) and receives private information about the issuer. Investors who sign the NDA are legally barred from trading in the issuer's stock until the PIPE issue is publicly announced. The firm and "lead" investor (typically the investor investing the greatest amount) enter into private negotiations regarding the contract. Additional investors may then be involved to complete the offering. Upon agreement, the company issues a press release, files an 8-K document with the SEC announcing the PIPE, and provides details on the investors and contract terms.

The PIPEs process generally takes two to four weeks to complete. Dresner (2009) describes the "stealth" nature of a PIPE as a key benefit cited by managers of PIPE-issuing firms. This is in stark contrast to a seasoned equity offering where the intent to issue equity is public knowledge well ahead of the actual issuance.

4.2 Categorizing investor identity and contract terms

We categorize investors into two distinct investor types: strategic *investors* and *arms-length investors*, motivated by prior literature. Rajan (1992) models informed investors (banks) as better able to monitor and utilize inside information to actively influence firm policies and outcomes. In contrast, uninformed, arms-length investors use contract mechanisms that influence the firm from a distance by altering the cash flows equity holders receive, and by enhancing the investor's ability to exit (via enhanced liquidity provisions). This distinction is also similar to that of Anderson and Dai (2010) in the PIPEs literature, and it is consistent with work in the VC area (see Lerner, Sorensen, and Strömberg (2011) and Kaplan and Strömberg (2003)).

We begin with 13 distinct PIPE investor types, as defined by the data vendor. We categorize private equity firms, VCs, and corporations as *strategic* investors, and hedge funds as *arms-length* investors. The remaining investor types are omitted from the sample (as they do not obviously fit in either category). We choose to focus exclusively on hedge funds as arms-length investors given the adequate sample size, greater resulting homogeneity, and the typically short investment horizon of hedge funds (documented in our sample and discussed below).[11]

These categorizations are formed based on prior literature as well as our own analysis. We know, from prior studies, that VCs and private equity firms engage in long-term strategic financings (see Lerner, Sorensen, and Strömberg (2011) and Kaplan and Strömberg (2003)); however, the role of corporations as investors in PIPEs is less well understood. Floros and Sapp (2012) report that corporations' PIPE investments rose dramatically from 2003 to 2008, exceeding all other types of investors in 2007. They find that 91% of corporations involved in PIPEs operate in the same industry as the PIPE issuer.[12] Examination of PIPE contracts reveals that corporate investors also tend to be long-term strategic financing agreements. PIPEs with corporate investors commonly include hurdles for future financing (i.e., staged investment), and information about strategic alliances, collaborative efforts, strategic product market relationships, and licensing agreements (in stark contrast to PIPEs involving hedge fund investors).[13] Hedge

[11] Supporting the short-term nature of hedge funds, Brophy, Ouimet and Sialm (2009) note that the role of hedge funds in PIPEs is as the financiers of last resort that take short interest positions prior to PIPE transactions. They classify corporations, mutual funds, brokers, banks and insurance companies as "other investors" when comparing short- and long-term stock performance. During their sample period of 1995 to 2002, hedge funds comprised the vast majority of PIPE transactions; strategic investors were relatively rare.

[12] We examine corporate control actions following the completion of a sequence of strategic-led PIPEs. We find 109 incidences of PIPE issuers being later targeted for takeovers. We are able to calculate abnormal returns for 26 of the corporate control actions and find that corporate bidders experience insignificant returns. PIPE issuers (targets) earn positive significant returns with positive synergistic returns computed for eight acquisition deals. By analyzing the contents of Item 4, we find that strategic-led PIPEs are for general investment purposes.

[13] We find that 30% of corporate-investor PIPEs contain such features compared to less than 1% for hedge fund investor PIPEs. Additionally, we find that corporations rarely go on to acquire the company, suggesting the PIPE is not an initial stage in an eventual takeover. In fact, subsequent acquisitions of PIPE issuers are equally frequent for strategic-led versus other investor type-led PIPEs (12.12% of corporation-led PIPEs issuers are acquired within three

fund investors, on the other hand, typically engage in arms-length relationships using contract terms that provide significant downside protection and enhanced liquidity. Brophy, Ouimet, and Sialm (2009) find that short interest in the stock of PIPE issuers increases following hedge fund-led PIPE transactions (presumably by the hedge fund PIPE investors), consistent with a short-term/arms-length focus. Dai (2007) reports hedge funds have a shorter-term relationship with the issuer.

Our analysis, discussed below, confirms the strategic role of corporations (Anderson and Dai (2010)) and the financial role of hedge funds (Brophy, Ouimet and Sialm (2009), Dai (2007)). We find that strategic-led PIPEs exhibit a much greater propensity to include a strategic relationship with the issuer, and have a longer investment time horizon with the leading strategic investors acting as sole investors in PIPEs more frequently.[14] Specifically, we find that 91% of corporation-led PIPEs detail a strategic alliance or joint venture, compared to 1% in the hedge fund-led PIPE sample. We find that 81% of corporation-led PIPEs report only one corporation leading the PIPE investment, compared to 28% for hedge fund-led PIPEs. Last, we explore the investors' time horizon for a sample of 395 corporation-led/hedge fund-led PIPEs.

We find that hedge fund investors exit their PIPE investments much sooner. By analyzing the reported beneficial ownership structure reported on 10-K statements, we find among the hedge-fund investors that began with at least a 5% stake in the PIPE firm, only 26.32% retain an equity stake of 5% by the year-end of the PIPE transaction (i.e., are still reported as significant owners on SEC filings as of year-end). In contrast, 57.14% of corporation-led PIPE investors

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years of the PIPE compared to 11.12% for other investor type-led PIPE issuers). Our findings corroborate Fee, Hadlock and Thomas (2006), who also find that equity investments preceding outright takeovers are relatively rare.

[14] In order to identify the strategic alliance/joint venture information in PIPE contracts, we search PIPE for the following key terms: "strategic alliance," "strategic initiatives," "strategic partnership," "collaboration," "joint ventures," and "distribution agreements."

maintain a significant stake in the PIPE issuer by year-end. Overall, we conclude that corporations tend to have a strategic role and hedge funds tend to take an arms-length role.

We present the frequency of all completed PIPE transactions by investor identity in Table 1. In Panel A, we see 2,251 PIPEs led by strategic investors with roughly half led by corporations. Hedge funds act as lead investors in 6,667 PIPEs, making them the most prevalent investor type. Panel B of Table 1 shows time trends. We see that strategic investor-led PIPEs were relatively rare from 1995 to 2000; however, they have increased rapidly in the following years. (We use both PlacementTracker and PrivateRaise for this longer sample). Hedge fund-led PIPEs also see an increase in the later period, and they are more prevalent in general.

We next categorize contract terms into those that likely enhance an investor's ability to monitor (i.e., "control terms"), and those that enhance investor liquidity or the ability to exit/cash out the investment (i.e., "liquidity terms"). After extensive analysis of the use of 19 different terms, we base our measure of control terms on the existence of board seat requests; liquidity provision terms, on pre-registered stock requests. This is done for the following reasons: 1) these terms are clearly control and liquidity terms; 2) they are the most frequently used terms in their category; and 3) the correlations and conditional probabilities of the terms suggest they capture those PIPEs that grant greater control to the investor (as well as overall liquidity and cash flow protection to the investor). We come to this conclusion based on the analysis described below.

We start by obtaining information on 19 different PIPE terms (for all PIPEs, not just those led by strategic and arms-length investors). Of the 19 terms, only a few are unambiguously control or liquidity terms. Clear control terms include requests for board seats and voting rights, and clear liquidity terms include requests for preregistered stock (providing instant liquidity) and

price resets ("hard floors" and "soft floors"). Appendix B presents and defines 10 of the 19 contractual terms that could be argued to be control- or liquidity-related.[15]

It is challenging to quantify and isolate the role of individual terms, as terms may be bundled together or act as substitutes. To explore this, we examine the correlations between terms (as well as the probability of a term conditional on another term's existence) in Appendix B. The two control terms (board seat requests and voting rights) are significantly positively correlated; the conditional probabilities of requesting one control term conditional on the presence of another control term is high (i.e., exceeding 32%). In contrast, the conditional probability of a control term utilized when pre-registered stock (a dominant liquidity provision term) is requested does not exceed 3%. Similarly, preregistered stock requests are negatively correlated with both of the two control terms. The conditional probabilities tell a similar story; conditioning on the presence of either of the two control terms, we see the probability of requesting pre-registered stock is roughly 2%. These results suggest that PIPE contracts tend to focus terms on an enhanced control *or* liquidity provision, but not both simultaneously.

Aside from the two control terms and the preregistered stock in Appendix B, we present another seven contractual terms that could be classified as liquidity enhancing (i.e., right of first refusal, soft floor, hard floor, price reset, investor redemption rights, liquidation rights, and call option rights). For each term, we offer its description, frequency, and a characteristic PIPE transaction where it has been requested. We find low correlations and probabilities of these terms conditional on the presence of control terms. The only exceptions are the right of first refusal and investor redemption rights, which are two terms that are very frequently encountered in PIPE contracts.

[15] The contractual terms that we have been unable to clearly classify as control- or liquidity-enhancing terms are the following: forced conversion rights, put options, hedging restrictions, selling restrictions, lockup provisions, shareholder approval, anti-dilution rights, warrants, greenshoe options.

Second, we analyze the popularity of all terms across the years. Board seats appear 22% more often than voting rights and are more popular consistently from 2001 to 2010. In addition, pre-registered stock is encountered in PIPE contracts 31% more often than soft floors and hard floors, particularly in the years after 2006 (when preregistered stock requests occur three times more often). As a result, we choose requests for board seats (which likely allow for superior monitoring) and the requests for pre-registered stock (which provide instantaneous liquidity) as the most pronounced control and liquidity terms, respectively.

In untabulated results, we further investigate the popularity of the 10 contractual terms that we comfortably classify as control- or liquidity-enhancing terms (as described above). We find that board seats are more popular than additional voting rights for both strategic-led and hedge fund-led PIPE transactions. In addition, we find that pre-registered stock is the most popular among all eight liquidity-enhancing terms. We report the number of PIPEs that include requests for board seats and preregistered stock over time in Panel C of Table 1. We see that inclusion of these two terms increases across time, but it is not concentrated in any given year.

Contract terms have also been categorized in the VC literature (Cumming (2008)). While we follow their spirit, there are distinct differences for PIPE firms that do not allow us to adopt the VC categorizations. The average PIPE issuer has been a publicly traded company for seven years. In contrast to VCs, PIPE contracts do not include exit rights, majority board seats requests, or cumulative dividends. We also note that even among terms appearing in both PIPEs and VCs (i.e., redemption rights, anti-dilution rights, conversion rights, rights of first refusal), such terms could serve different roles in the two financing events, given that PIPE issuers tend to have a more diverse investor base that may not be easily coordinated.

For the remainder of the analysis, we focus on *board seats* as the primary control term and *preregistered stock* as the primary liquidity-enhancement term. Board seat requests are likely indicative of the investors' intent to actively monitor and influence the issuer. Investor requests for pre-registered stock (which make the investors' shares immediately liquid) likely conveys a shorter-term relationship.

4.3 Structure of empirical tests of hypotheses

Given the above investor identity and contract-term categories, we explore how contract terms and identity interact. We structure our tests of Section 2's hypotheses in the spirit of the following diagram:

		Investor Identity (Monitoring / Information advantage)	
		Strategic/long-term investors *Corps.,VCs,PEs* (High)	**Arms-length/short-term investors** *Hedge Funds* (Low)
Contract Terms (Incentives)	**BOARD SEAT Control rights** (High)	**HH**	**LH**
	PRE-REGISTERED Liquidity (Low)	**HL**	**LL**

The two-by-two diagram illustrates how we plan to examine our main hypotheses. Strategic investors arguably have a monitoring and information advantage so they will make more frequent board seat requests. Board seat requests by hedge fund investors, however, suggest the benefits of monitoring are particularly large given they must overcome relatively high monitoring costs. This motivates our hypothesis 3 in Section 2, which states the stock price reaction to PIPEs in boxes HH and LH will be positive and those in LH will be larger than HH. Preregistered stock, which allows the investor to quickly sell her securities, may suggest a

passive role (i.e., the investor may choose to exit the relationship rather than directly influence the firm). Thus, preregistered requests by strategic investors will be particularly bad news given their information and monitoring-cost advantages. The opposite is true for arms-length investors. This motivates hypothesis 4 in Section 2, which states the stock price reaction to PIPEs in boxes HL and LL will be negative, and those in HL will be more negative than those in LL.

5. Results

We begin our analysis by examining the financial characteristics of PIPE issuers, categorized by investor identity. Given the difference in objectives of the two investor types, we might expect them to invest in different types of firms. We explore this in Table 2 where we examine the characteristics of PIPE issuers categorized by investor identity. (All financial characteristics are as of the fiscal year prior to the PIPE transaction.) In Table 2, we see that PIPE issuers in strategic investor-led financings are significantly larger, exhibit higher capital and research and development (R&D) expenditures, and have higher leverage than firms with hedge fund-led PIPE financings. The operating income ratio is negative for both subgroups of PIPE issuers without being significantly different. The negative operating income ratio is consistent with the nature of PIPE issuers (who are predominantly in the "healthcare" and technology industries (e.g., biotech firms); much of the PIPE financing is to fund new products).

Given that issuing-firm characteristics differ by investor identity, we may expect contract terms to vary by investor type. We expect strategic investors to include more control-oriented contract terms and fewer liquidity terms. Table 3 presents the estimates of a logistic predictive model to see how the contract terms and financials, presented in Table 2, associate with investor identity. The dependent variable takes the value *one* if the PIPE is led by a strategic investor and *zero* if by a hedge fund. Explanatory variables include log of total assets, total leverage ratio,

ROA, sales ratio, capital expenditures ratio, R&D ratio and board seat and preregistered dummy. We measure firm financial characteristics the fiscal year prior to the initial PIPE transaction, and we report log-odds coefficients and Chi-square statistics.

We see from the table that bigger firms, with lower profitability and higher cash balances, capital, and R&D expenditures associate with strategic investor-led PIPE financings. Strategic investors more frequently associate with board seats and less frequently with liquidity terms. We note that including PIPE contract terms considerably increases the explanatory power of the logistic model, with the max-rescaled R-squared values (untabulated) increasing from 5.9% to 21.8%. The marginal effects (untabulated) for the board seat and preregistered dummy variables are 4.99 and 0.31, respectively. This implies board seat requests are five times more frequent for strategic investors, and preregistered stock requests occur three times more frequently for hedge fund investors. We now examine wealth effects to see how the market reaction to financing depends on investor identity and contract terms.

5.1. Univariate wealth effects of PIPE transactions

Table 4 reports the average five-trading day, [-2,+2] market reaction around PIPE announcements stratified by investor identity and contract terms. We find that PIPE announcements, associated with strategic investors, average 5.46%, statistically significant at the 1% level. Hedge fund PIPEs elicit an average abnormal return of -0.63%, significant at the 5% level. The difference between strategic investor-led and hedge fund-led PIPEs is 6.09%, which is also statistically significant.

As shown in Table 3, investor identities associate with the use of certain types of contract terms. Strategic investors use board seats more often; hedge funds make pre-registration requests more often. To see to what degree this influences market reactions, we next explore

announcement reactions to the subsample of PIPE contracts when there are no contract terms reported in the S-1, S-2, S-3, SB-2 documents.[16] For strategic-led PIPEs with no reported terms information, we see the average cumulative abnormal returns (CARs) are 5.06%, similar to the overall average for strategic-led PIPEs. For hedge fund-led PIPEs, we see that the CAR increases to 1.82% when there are no terms. The difference between these two CARs, 3.24%, is significant at the 5% level, suggesting that the market indeed responds more favorably to PIPEs when the identity of the investor is (more likely to be) strategically oriented.[17]

Next, we turn to the results examining whether the PIPE contains board seats and preregistered stock. For strategic investors, we see PIPEs with board seats elicit an average abnormal return of 8.93% while the return for hedge fund-led PIPEs with control rights is 9.95%, both significant at the 1% level. Thus, consistent with hypothesis 3, control rights have a dramatic impact on the announcement returns and much more so for hedge fund PIPEs. Interestingly, these average CARs do not differ from one another, suggesting that a hedge fund-led PIPE with control rights is not distinguishable from a strategic investor-led PIPE with control rights. When we look at PIPEs lacking control rights, we see that both CARs fall dramatically, with an average CAR of 2.95% for strategic investors and -1.57% average CAR for hedge fund-led PIPEs. The difference in these average reactions is 4.52%, significant at the 1% level.

The last three columns of Table 4 report results based on whether the financial agreement contains preregistered requests. Consistent with hypothesis 4, we see strategic investor-led PIPEs with preregistered requests elicit highly negative CARs on average, -6.71%, which are much

[16] We hand-check SEC filings for 100 randomly selected "no-term" PIPE deals and verify that indeed no contractual terms exist.

[17] We also examine the wealth effects over a longer window, given completion of private equity offerings can face delays. In non-tabulated results, the market reaction utilizing an extended time window ([-15, +15]) around the first PIPE public announcement, we find similar results. Corporation-led PIPE investments exhibit a positive market reaction of 8.19% (statistically significant), and hedge fund-led PIPEs elicit 1.52% (statistically significant). We conclude that our main market reaction findings for shorter event windows still hold when expanding the event window to one trading month around the first PIPE public announcement for main investor identity distinctions.

more negative than those excluding such terms, 4.83%.[18] We see a similar pattern for hedge fund-led PIPEs (i.e., the average CAR for an agreement containing preregistered requests is -4.76% compared to 0.42% for those without liquidity terms). Of note, only one strategic-led PIPE and five hedge fund-led PIPEs in our sample have both board seat requests and preregistered stock requests. Thus, PIPEs tend to be either control- or liquidity-oriented, but not both. Comparing CARs of hedge fund- and strategic investor-led PIPEs, we see that average CARs are no different when preregistered requests are included, but are significantly different absent those terms (similar to the pattern we saw for board seats). We repeat the entire analysis using median wealth effects, rather than mean, and find similar results.

We obtain similar findings to those in Table 4 when we use liquidity-enhancing and control-term indices, rather than just board seat and preregistered stock requests.[19] Specifically, in untabulated results, we find that average announcement CARs for the control-terms-related index strategic-led (hedge fund-led) PIPEs amount to 6.84% (8.13%), respectively. The average announcement CARs for the strategic- and hedge fund-led PIPEs, when the liquidity-terms-related index is nonzero, amount to 2.11% and -2.12%, respectively. Overall, these results suggest the influence of contact terms on the value relevance of financial relationships is conditional on investor identity.

5.2 Multivariate analysis of PIPE wealth effects

[18] These 27 instances of strategic-led PIPEs do not appear to be a unique subset of strategic investors. Of the 27 strategic-led PIPEs requesting pre-registered stock, we identify the investor's name in 19 cases and find 16 distinct investor names. We find that half of these investors also engage in PIPEs lacking requests for pre-registered stock. We find a similar pattern for the 90 cases of hedge fund-led PIPEs requesting board seats. We identify 43 distinct investor names (different hedge funds) of which 42% also engage in PIPEs that lack board seat requests. These results suggest that we have significant variation across contract terms even by specific investors. We explicitly look at this using investor-name fixed effects in our multivariate regression analysis, below.

[19] The control-terms-related index takes the value of *one* if there is either board seat(s) or additional voting rights requested in the PIPE contract and *zero* otherwise. The liquidity-enhancing-terms index takes the value of *one* if either call option(s), or investor redemption right(s), or price resets, or hard floors, or soft floors or pre-registered stock are requested and *zero* otherwise.

The results in Table 4 do not control for potential selection issues associated with firm characteristics. We revisit the wealth effects of PIPEs controlling for firm characteristics by running multivariate regressions where the dependent variable is the CAR. We include, within the following firm characteristics, as control variables: *Cash, Leverage, R&D, Capex, Sales, Size,* and *ROA*. We also include *Gross proceeds (*the dollar proceeds from the PIPE divided by the issuers' market capitalization three trading days prior to the PIPE) and *Discount (t*he percent discount of the PIPE shares multiplied by *Gross proceeds).*

We include the dummy variable *Strategic* that equals *one* if the PIPE is led by a strategic investor and *zero* if led by a hedge-fund investor. We include the dummy variables *Board seat* (representing control terms) and *Preregistered* (representing liquidity terms), which capture whether or not the PIPE agreement contained the associated contract terms, as well as their interactions with *Strategic*. The results are reported in Table 5.

The first column contains our complete sample of strategic- and hedge fund-led PIPEs. We see the influence of contract terms remains significant after controlling for firm and PIPE characteristics. The coefficient on *Board seat* is 0.0925, significant at the 1% level while the coefficient on *Preregistered* is -0.0402, significant at the 5% level. The coefficient on the interaction term (*Strategic)x(Board seat)* is -0.0878, significant at the 5% level, and the coefficient on (*Strategic)x(Preregistered)* is -0.1415, significant at the 1% level. Thus, the total effect of a board seat on the wealth effect for strategic-led PIPEs is 0.46%; this is the sum of the interaction coefficient and the *Board seat* coefficient (-0.0878+0.0925=0.0046). This contrasts

with the value relevance of *Preregistered* for strategic-led PIPEs, which has a total effect of -18.17% (-0.1415 + -0.0402). Taken together, these results support hypotheses 3 and 4.[20]

As discussed in the introduction, a major concern for our study is the potential joint nature of contract terms, investor identity, and firm characteristics. If the firm's condition/situation is observable, including firm characteristics as control variables will address the concern (as in the first column of Table 5). However, unobservable omitted variables that also correlate with contract terms or investor identity will bias the results. To address this concern, we include firm fixed effects in column 2 of Table 5. We limit our sample to firms with two or more PIPE transactions. We have 179 distinct PIPE issuers with up to nine PIPE transactions. Our PIPE issuers appear, on average, 2.21 times. The results are reported in column 4. Again, looking at the coefficients of the contract terms and the investor type-contract term interactive variables, we continue to find similar results as in the prior three columns. In addition to firm fixed effects, we include PIPE sequence fixed effects (i.e., whether the PIPE is the firm's first, second, third and so on). Controlling for the sequence of PIPE offerings will help if subsequent (later transaction number) PIPEs are more anticipated.

We report these fixed effects results in column 2 of Table 5. Note that many of the previously significant control variables are no longer significant, including *Strategic*. However, examination of the contract-term variables and their interactions yields conclusions identical to those drawn in column 1. While inclusion of firm effects indeed influences the results on identity alone, our main variables of interest (i.e., measuring the conditional relation of identity and terms) suggest omitted firm time-invariant characteristics do not account for these findings. In Column 3 of Table 5, we replicate the estimation model displayed in Column 2, incorporating all

[20] We repeat our analysis focusing only on PIPE transactions strictly involving common stock, given that Chaplinsky and Haushalter (2010) show that contingent claims imbedded in PIPE contracts associate with issuer risk. We find similar results and reach the same conclusions for this subsample of PIPE transactions.

of the remaining eight control- and liquidity-enhancing terms. We also include the interaction variables of each of the eight contractual terms with the leading strategic investor-type dummy variable. The board seats and preregistered stock dummy variables, together with the interaction variables, retain the same sign as well as their statistical significance after the inclusion of the other eight contractual terms. We also find that the request of the right of first refusal and the liquidation right (investor redemption rights and price resets) for strategic-led PIPEs is associated with positive (negative) announcement CARs.

We next address concerns that the contract terms may be anticipated. We run logistic regressions on all of our PIPE observations, determining whether or not the PIPE includes board seats or pre-registration requests; we use the financial characteristics from Table 2 as explanatory variables. In untabulated results, we find that indeed many firm characteristics associate with the inclusion of board seat requests and pre-registered stock requests. We use the predicted probability from the logit results to construct surprise variables. *Surprise Board seat* is the difference between the value of the dummy variable, *Board seat*, and the predicted probability that the PIPE will contain a board seat request from the logit analysis. Similarly, *Surprise Preregistered* is the difference between *Preregistered* and the predicted probability that the PIPE will contain preregistered stock. We report the results, substituting the surprise variables in the multivariate regression explaining the PIPE announcement effects, in Column 4 of Table 5. We find results similar to columns 1 and 2 and conclude anticipation of contract terms does not appear to affect our results.

The last column of Table 5 includes investor-name effects. If investors specialize in particular PIPEs, then it's possible to have omitted investor-specific characteristics. If these omitted investor characteristics correlate with investor terms then we will have biased

coefficients on the contract-term variables. To implement investor-name specific effects, we limit the sample to only those observations when the specific PIPE investor appears at least twice in the sample. We have 184 unique investor names in this sample that appear, on average, 2.4 times. The results are reported in column 5. Again, looking at the coefficients of the contract terms and the investor-type contract-term interaction variables, we continue to find similar results as in the prior three columns.

5.3. PIPE sequences

While we control for fixed effects in the section above, it is possible that the omitted firm characteristics are time varying. While this is a very challenging problem, we attempt to alleviate this concern by examining sequences of PIPEs by the same issuer that occur relatively close to one another. If the firm characteristic remains the same in these close sequences (or even less changed than in our full sample), then any bias from time-varying, firm-specific characteristics should be attenuated. For these PIPE sequences, we find that the median number of days separating the two PIPEs is 258 (less than one calendar year).

We report the results in Table 6, which focuses on sequential PIPE transactions. For all PIPEs by the same firm (up to the firm's first seven PIPEs), we include any two sequential PIPEs that meet our criteria of interest. For example, when we explore investor identity in sequential PIPEs, we include the first and second PIPE in a sequence when the investor identity switches. We also look at PIPE sequences with consistent identity type and inconsistent contract terms.

In the first column of Panel A, we report the CARs to sequential PIPEs by the same firm with the same investor type for both PIPEs. In the case of hedge funds, we see the first PIPE in the sequence has an insignificant average CAR as does the average CAR for the subsequent PIPEs. For strategic investors, we see the initial PIPE associates with an average CAR of 4.95%

for the initial PIPE and 9.18% for the subsequent PIPEs, both highly significant. In the next column, we examine sequential PIPEs by the same firm when the investor identity switches. For initial hedge fund-led PIPEs, the average CAR is an insignificant 1.08%. However, the average CAR for subsequent PIPEs (when the investor type switches to a strategic investor) is 5.26%, significant at the 1% level. This is in stark contrast to the 0.62% CAR we see for second PIPEs when the investor, in the second PIPE, remains a hedge fund. We repeat the analysis in the second column for instances where the initial PIPE transaction involved a corporate investor. For these cases, we see an average CAR for subsequent PIPEs of 2.02%, statistically insignificant (and in contrast to the 9.18% found when the subsequent PIPE involved a strategic investor). Overall, these results suggest that investor identity indeed conveys significant information to the market and is not simply due to differences in the firms receiving the PIPEs.[21]

While Panel A explores changes in investor identity (in sequences of PIPEs by the same firm), we also explore changes in contract terms in PIPE sequences where the investor type does not change. We report these results in Panel B. In the first column, we explore sequences of hedge fund-led PIPEs where the first PIPE lacked the contract term and the subsequent PIPE included the contract term. When the initial PIPE lacks a board seat, the average CAR is an insignificant -0.56% compared to a 6.78% average CAR for subsequent PIPEs including a board seat. The difference between these average CARs is 7.34% and significant at the 10% level. In contrast, we see that hedge fund-led PIPEs, with and without pre-registration requests, have statistically indistinguishable average CARs. We repeat the analysis for the strategic investor-led PIPE sequences in the next column of Panel B. Comparing the first PIPE in the sequence to the

[21] We also examine whether switching or retaining the same exact investor, rather than just the investor type, matters. We see that for PIPEs, corporate investors switching to a different corporation elicits an average CAR of 7.51% while maintaining the same corporation elicits an average CAR of 7.39%. For hedge-fund PIPEs, maintaining the exact same investor associates with an insignificant CAR while switching to a different hedge fund investor associates with a 1.63% CAR, significant at the 5% level.

subsequent PIPE, we see the inclusion of board seats and pre-registration requests has a large influence on CARs (even from the same issuer with the same investor identity). Overall, these results support the value relevance of terms in conveying the nature of financial agreements and alleviate concerns that the association between wealth effects and terms is driven by firm-specific traits.

5.4. Post PIPE announcement buy-and-hold returns

Prior studies on PIPEs report significantly negative long-run returns following PIPE issuance, particularly in the case of hedge fund-led PIPEs. To see if this continues to be the case for our more recent sample of PIPEs, we follow the methodology of Brophy, Ouimet and Sialm (2009). We compute abnormal returns for PIPE issuers as the difference between the return and that for a matched firm based on Fama-French industry, market capitalization, book-to-market ratio, and momentum, measured as of the month prior to the PIPE deal. Momentum is computed as returns during the 12 months preceding the closing date of the PIPE transactions. The control sample consists of companies that did not issue a PIPE transaction for at least two years, and that exhibit the smallest sum of the absolute deviations of market cap, book-to-market ratio and momentum returns, conditional on being in the same Fama-French industry. If the returns for the event PIPE firm are missing, we set them equal to the returns of the matched-control firm. If the returns of the matched-control firm are missing, we replace this firm with the company that achieved the next smallest sum of deviations index. The returns are expressed in percentage form and reported in Table 7.

We report the mean raw buy-and-hold returns (Panel A) and the abnormal buy-and-hold returns (Panel B), ordered in four PIPE subsamples based on investor identity and our two contractual terms (i.e., strategic investor-led PIPEs with board seat(s), strategic investor-led

PIPEs with pre-registered stock, hedge fund-led PIPEs with board seat(s), and hedge fund-led PIPEs with pre-registered stock). The buy-and-hold returns are computed over three different time periods, starting always three trading days post-announcement of the PIPE transaction ([3, 100], [3, 250], [3, 500]).

First, we see in Panel A that the average raw return is positive for all three windows for PIPEs involving strategic investors requesting board seats, and it is insignificant in all other cases. These results are quite different from Brophy, Ouimet and Sialm (2009), who find the raw returns are generally negative for PIPEs from the earlier era. Turning to the excess returns in Panel B, we see only one case of significant excess returns: that for the strategic-board seat PIPEs over the one-year window [3,250]. All other average excess return figures are insignificant. This is in stark contrast to earlier findings based on early era PIPEs, and it suggests that the PIPE market has evolved substantially from its early period. Overall, these results suggest that inferences based on wealth effects around PIPE announcements are more comprehensive in capturing the value of the financial relationship for our later time period PIPEs.

6. Conclusion

We use a rich database on PIPE transactions to explore the importance and conditional nature of investor identity and contract terms. Focusing on the interaction of investor identity and contract terms to see how they influence firm value, we find that contract terms have a pronounced influence on the market *conditional* on the investor's identity. For example, the market reaction to strategic investor-led PIPEs ranges from 8.93% when the investor obtains control rights to -6.71% when the investor obtains enhanced liquidity via pre-registration

requests. This suggests that strategic investor-led PIPEs are more likely to be perceived as an arms-length relationship when the strategic investor can more easily exit the relationship. In contrast, hedge funds (which are typically thought to be arms-length/short-term investors) may be perceived as playing a strategic role when they obtain control rights. The inclusion of control rights, in a hedge fund-led PIPE, associates with an average CAR of 9.95%, compared to -1.57% without control rights (and compared to -4.76% when the hedge fund obtains liquidity terms). These results, and those based on our multivariate tests, suggest that the influence of contact terms on the value of a financial relationship depends on the investor's identity.

Our study contributes to both the financial contracting as well as the PIPEs literature. We show that investor identity and contract terms play an important role, and also that their interaction is critical to understanding the value of financial agreements.

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Appendix A

Sample Descriptives For Two Database Sources

Appendix A presents the sample descriptives (Panel A) and the distribution of the various security types (Panel B), ordered by the source database PlacementTracker and PrivateRaise. We focus only on the time period 2001-2008 for which we have available PIPE deal information from both PlacementTracker and PrivateRaise. Both sample characteristics as well as security types are ordered according to whether they appear in both databases, only in PrivateRaise or only in PlacementTracker, respectively. Specifically on the sample descriptives, we report the frequency of observations, the median PIPE gross proceeds amount (in $ M) raised, the PIPE issuer median market capitalization at closing (in $ M), the median price discount computed as the purchase/conversion price as a % of the closing day stock price and the median stock price as the closing sale price of issuer's common stock on the date immediately preceding the PIPE closing date.

Additional note: PlacementTracker and PrivateRaise seem to follow different methodologies in gathering closing date information. In PrivateRaise, the accuracy of the closing date is subject to the extent and clarity of disclosures (via press releases and SEC filings) made by the PIPE issuer and/or the PIPE investors related to the PIPE transaction. If a specific closing date is not disclosed in the SEC filings, the date of the announcement/disclosure (via press release or SEC filing) is used as a proxy date until PrivateRaise is able to confirm a specific closing date (subject to supplemental public disclosures). On the other hand, in PlacementTracker, the closing date can either be the date that the purchase agreement for the private placement transaction was signed by both parties, and/or the date that the actual funding of the private placement took place (depending on what information was provided by the company in its public filings). For this reason, apart from matching on the trading symbol and closing date, we also hand-check 7% PlacementTracker and PrivateRaise overlapping PIPE transactions, when matching on the trading symbol and gross proceeds amount, noting that the closing dates differ by up to one calendar week. For all these cases, we hand-check the accompanying SEC documents and manually match all PIPE transactions from PlacementTracker and PrivateRaise after making sure that they refer to the same PIPE transactions. We conclude that the majority (76%) of PIPE transactions overlap in the two PIPE databases. Second, we find that PlacementTracker covers the rather small-cap PIPE issuers, issuing smaller gross proceeds amounts, heavily discounted at lower stock market prices. Third, we conclude that common stock is the dominant security type appearing in either PIPEs database with a noticeable higher percentage of convertible securities (debt or preferred stock) covered only by PrivateRaise.

Appendix A: Sample Descriptives by Source Database

Panel A

Descriptives for PIPE Transactions Over the Time Period 2001-2008 Appearing in both PlacementTracker and PrivateRaise

Frequency	Median Gross Proceeds ($ M)	Median Market Cap ($ M)	Median Discount (%)	Median Stock Price ($)
12004	4.54	43.44	26.72	1.55

Panel B

Security Types Requested for PIPE Transactions Over the Time Period 2001-2008 Appearing in both PlacementTracker and PrivateRaise

Frequency	Common Stock	Non-Convertibles (Debt or Preferred Stock)	Convertibles (Debt or Preferred Stock)	Structured Equity Lines	Warrants
12004	7260	347	3635	579	172

Security Types Requested for PIPE Transactions Over the Time Period 2001-2008 Appearing Only in PrivateRaise

Frequency	Common Stock	Non-Convertibles (Debt or Preferred Stock)	Convertibles (Debt or Preferred Stock)	Structured Equity Lines	Warrants
1127	507	95	318	102	82

Security Types Requested for PIPE Transactions Over the Time Period 2001-2008 Appearing Only in PlacementTracker

Frequency	Common Stock	Non-Convertibles (Debt or Preferred Stock)	Convertibles (Debt or Preferred Stock)	Structured Equity Lines	Warrants
2650	2252	17	325	56	0

Appendix B

Correlations and Conditional Probabilities Among PIPE Contract Terms

Panel A presents the description, frequency of occurrence and a characteristic example for each PIPE contract term. Panel B reports the Pearson pairwise correlation coefficients for PIPE contract terms. Panel C reports conditional probabilities between PIPE contract terms for 12,666 completed PIPE transactions spanning the entire time period (2001-2010). In Panel B, the Pearson correlation coefficients are presented on the first row and the associated p-values are presented on the second row. The conditional probabilities in Panel B refer to the probability of observing a contract term in row i conditional on the presence of a contract term in column j.

Panel A: Contractual terms' description, frequency of occurrence and example

Contractual term granted	Description	Frequency of Occurrence (%)	Example
Board seat(s)	The PIPE investor retains its Board representation rights and will have the right to designate at least one representative to attend meetings of PIPE issuer's Board of Directors, usually in a non-voting observer capacity.	11.78	According to the terms of the Securities Purchase Agreement, the PIPE issuer has agreed to appoint XXX to PIPE issuer's Board of Directors within 30 days following the closing date and then also nominate XXX as director (or a nominee designated by the holders of a majority of the Common Stock/Warrant Units purchased in this transaction in the event XXX is no longer willing or able to serve as a director) at PIPE issuer's next four annual stockholder's meetings. PIPE issuer's obligations will expire if the PIPE investors in this private placment cease to own at least XXX% of the Common Stock/Warrant Units purchased in this transaction.
Voting right(s)	Holders of preferred stock will be entitled to vote with PIPE issuer's common stockholders as a single class on all matters brought before issuer's shareholders for consent or consideration on an as-converted basis. Usually voting rights refer to votes granted to preferred stockholders.	10.07	Holders of the Series XXX Preferred Stock will be entitled to vote on with PIPE issuer's Common Stockholders as a single class on all matters brought before PIPE issuer's shareholders for consent or consideration and will be entitled to XXX of a vote for each 1/XXXth of a share of Series XXX Preferred Stock held.
Pre-registered stock(s)	Private Investments in Public Equity that involve the issuance of pre-registered equity and equity-linked securities (e.g., shelf sale) by a PIPE issuer to a limited number of accredited Investors.	13.91	The holders of PIPE-issued shares can resale the shares to any public investors as of the date that the PIPE transaction becomes effective.
Hard floor	Minimum purchase/conversion price, which remains in-force throughout the life of the investment and is not subject to certain conditions or adjustments (upward/downward) and does not provide PIPE investors with a remedy to be "made whole" in the event the market price of the Issuer's Common Stock falls below the hard floor price. It is only available for variable-priced placements.	5.23	PIPE investor may not purchase shares of PIPE issuer's common stock issuable pursuant to the equity line at a price below $XXX per share (provided that in the event of a reorganization or reverse split of PIPE issuer's common stock, the hard floor price may never exceed $XXX per share).
Soft floor	Minimum purchase/conversion price, which may be subject to certain conditions, time limitations or adjustments, and/or provides alternative means for the Investors to be "made whole" in the event the market price of the PIPE issuer's common stock falls below the soft floor price (e.g., redemption-at-premium or cash-in-lieu-of-conversion rights). It is only available for variable-priced placements.	4.30	PIPE issuer will have the right to establish a minimum per-share purchase price at which the selling agent may sell common stock pursuant to any individual placement notice under the facility.

Call options	PIPE investors' right (not an obligation) to purchase additional securities from the PIPE issuer during a specified time period. The type and purchase/conversion price is identical to the securities originally purchased by PIPE investors.	3.16	PIPE issuer has granted the PIPE investor a XXX-year option to purchase up to XXX shares of PIPE issuer's common stock at $XXX per share. If the PIPE investor call option is exercised in full, the PIPE issuer would realize an additional $XXX in gross proceeds.
Investor redemption right(s)	PIPE investors' right, under certain specified conditions, to force the PIPE issuer to redeem all or a portion of the securities originally purchased by PIPE investors.	39.86	Upon the approval and recommendation by the PIPE issuer's board of directors of a change of control transaction (in which the aggregate consideration being paid for all of the PIPE issuer's capital stock and assets implies a valuation of less than $XXX and such change of control transaction is ultimately consummated), the PIPE stockholder(s) may require the PIPE issuer to redeem all or a portion of the outstanding preferred stock at a redemption price equal to XXX% of the face amount (but not apparently including accrued and unpaid dividends).
Liquidation right(s)	In the event of any voluntary or involuntary liquidation, dissolution or winding up of the PIPE issuer, PIPE stockholders will be entitled to be paid out of the assets.	2.20	In the event of any voluntary or involuntary liquidation, dissolution or winding up of the PIPE issuer, PIPE stockholders of the Series XXX preferred stock then outstanding will be entitled to be paid out of the assets of the PIPE issuer available for distribution to its stockholders in an amount equal to the amount such holder would receive if its preferred stock had been converted into issuer's common stock at the time of the applicable liquidation.
Rights of first refusal	PIPE investors' right to participate in any future issuances of securities by the PIPE issuer after the closing of an equity private placement. Investor purchase rights may apply to future issuances of various types of securities or may be limited to securities, which are similar to the securities originally purchased by PIPE investors. Investor purchase rights are typically applicable for defined time periods.	30.50	If, at any time prior to the later of (i) the XXX-year anniversary of the final closing date and (ii) the date a majority of the common stock issued at applicable closings under the offering is no longer held by the PIPE investors, the PIPE issuer proposes to issue shares of its common stock or securities, which are convertible into common stock (subject to certain excepted issuances) in a subsequent financing; the PIPE issuer is required to first give the PIPE investors an opportunity to purchase up to that amount of securities issued in such subsequent financing equal to the amount of common stock/warrant units purchased in this private placement (up to XXX% of the subsequent financing securities) on the same terms as provided for in the proposed subsequent financing.
Price resets	Purchase price of the common stock or the conversion price of a convertible security set either (i) at closing or (ii) on a specified date after closing and is subject to adjustment downward (or upward), based on various criteria including fundamental performance, a specified event, or the stock price of the issuer at a given point in time after closing.	4.57	Subject to certain conversion restrictions, the face amount of the preferred stock is convertible into PIPE issuer's common stock at an initial nominal conversion price of $XXX per share (subject to reset). Therefore, each $XXX face amount share of preferred stock is initially convertible into approximately XXX shares of PIPE issuer's common stock. Since the preferred stock was issued at an original issue premium (to the face amount of $XXX per each $XXX face amount preferred share), the initial effective conversion price of such preferred stock is $XXX per share (subject to reset).

Panel B: Pearson pairwise contractual terms' correlation coefficients

	Contract Term Dummy Variables	1	2	3	4	5	6	7	8	9	10
1	Voting Rights	1	0.29	0.23	-0.03	0.06	-0.07	0.04	0.32	0.30	0.05
			<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
2	Board Seats	0.29	1	0.21	-0.05	0.01	-0.09	0.03	0.15	0.13	0.05
		<.0001		<.0001	<.0001	0.0807	<.0001	<.0001	<.0001	<.0001	<.0001
3	Rights of first refusal	0.23	0.21	1	-0.009	0.04	-0.08	0.08	0.40	0.10	0.09
		<.0001	<.0001		0.2526	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001
4	Soft floor	-0.03	-0.05	-0.009	1	0.27	0.04	0.14	-0.035	-0.01	0.005
		<.0001	<.0001	0.2526		<.0001	<.0001	<.0001	<.0001	0.2433	0.541
5	Hard floor	0.06	0.01	0.04	0.27	1	0.03	0.14	0.07	0.02	0.22
		<.0001	0.0807	<.0001	<.0001		0.0004	<.0001	<.0001	0.0454	<.0001
6	Pre-registered stock	-0.07	-0.09	-0.08	0.04	0.03	1	0.06	-0.15	-0.02	-0.03
		<.0001	<.0001	<.0001	<.0001	0.0004		<.0001	<.0001	0.0055	<.0001
7	Call options	0.04	0.03	0.08	0.14	0.14	0.06	1	0.06	0.01	0.02
		<.0001	<.0001	<.0001	<.0001	<.0001	<.0001		<.0001	0.1465	0.0563
8	Investor redemption rights	0.32	0.15	0.40	-0.03	0.07	-0.15	0.06	1	0.11	0.07
		<.0001	<.0001	<.0001	<.0001	<.0001	<.0001	<.0001		<.0001	<.0001
9	Liquidation rights	0.30	0.13	0.10	-0.01	0.02	-0.02	0.01	0.11	1	0.007
		<.0001	<.0001	<.0001	0.2433	0.0454	0.0055	0.1465	<.0001		0.389
10	Price resets	0.05	0.05	0.09	0.005	0.22	-0.03	0.02	0.07	0.007	1
		<.0001	<.0001	<.0001	0.541	<.0001	<.0001	0.0563	<.0001	0.389	

Panel C: Probability of a Contract Term in Row i Conditional on a Contract Term in Column j

	Contract Term Dummy Variables	1	2	3	4	5	6	7	8	9	10
1	Voting Rights		0.325	0.233	0.0364	0.1923	0.0305	0.1831	0.257	0.839	0.1803
2	Board Seats	0.4171		0.2659	0.0316	0.1478	0.0237	0.2	0.2093	0.4927	0.2084
3	Rights of first refusal	0.4683	0.4165		0.1699	0.2854	0.0931	0.4102	0.4625	0.5122	0.3911
4	Soft floor	0.0107	0.0072	0.0248		0.2652	0.0489	0.1932	0.0181	0.0146	0.0328
5	Hard floor	0.0676	0.0405	0.0499	0.318		0.0504	0.2068	0.0555	0.0585	0.2646
6	Pre-registered stock	0.0285	0.0172	0.0432	0.1553	0.1336		0.2169	0.0157	0.0341	0.0351
7	Call option rights	0.0548	0.0494	0.0591	0.034	0.2287	0.0115		0.0504	0.039	0.0328
8	Investor redemption right	0.6754	0.4287	0.6048	0.1626	0.415	0.0443	0.4441		0.6341	0.4356
9	Liquidation right	0.1224	0.056	0.0372	0.0073	0.0243	0.0053	0.0237	0.0352		0.0187
10	Price resets	0.0954	0.0327	0.0428	0.1383	0.1235	0.0489	0.0475	0.0355	0.0139	

Table 1

Frequency of PIPE Transactions by Investor Type and Year

Panel A presents the total number of PIPEs for the entire sample period (1995-2010) ordered by leading investor type. We tabulate all strategic investor types (buyout firms, VC firms, and corporations) as well as hedge funds available in PlacementTracker and PrivateRaise. Panel B shows the number of closed PIPEs led by corporations/VC/private equity or by hedge funds, respectively, for each calendar year over the entire sample period (1995-2010). The information on contractual terms is solely drawn from PrivateRaise.

Panel A	Total Number of Observations by Leading Investor Type
Leading Investor Type	Frequency
Private Equity/VC/Buyout	1,121
Corporation	1,130
Strategic investors	2,251
Hedge Fund investors	6,667

Panel B	Number of Observations by Year and by Leading Investor Type															
Lead Investor Type	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Strategic Investor-led PIPEs	5	17	26	41	86	172	200	143	171	152	185	180	216	227	213	217
Hedge Fund-led PIPEs	27	109	205	225	268	479	375	294	557	926	850	789	646	347	243	327

Panel C	Number of Observations by Year and by Contract Terms									
Contract Term Request	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Board Seats	8	52	89	77	112	130	158	183	170	156
Preregistered stock	70	76	93	85	92	119	123	111	273	294

Table 2

Summary Statistics of PIPE Issuer Characteristics by Investor Identity From 2001-2010

The table compares median values of financial variables measured one year before all corporation/VC/private equity-led PIPEs to those measured one year before all hedge fund-led PIPEs. *Assets* is the natural logarithm of total assets, *cash ratio* is the ratio of cash over total assets, *leverage ratio* is the firm's total debt divided by total assets, *cash ratio* is the ratio of cash over total assets, *sales ratio* is the ratio of total revenues over total assets, *Operating Income ratio* is the EBITDA (operating income) over total assets, *CAPEX ratio* is the capital expenditures divided by total assets and the *R&D ratio* is the R&D expenditures divided by the total assets (we apply zeroes to all PIPE issuers with missing R&D expenditures values). The last column reports Wilcoxon *z*-statistics with *p*-values in parenthesis. All information is retrieved from Compustat.

Variables	Hedge fund-led PIPE	Corporation/Venture Capital/Private Equity fund-led PIPE	Wilcoxon rank sums z-statistic
Size	3.62	4.17	7.40
N	1,068	709	(<.0001)
Cash/total assets (in %)	29.80	29.24	-0.36
N	1,031	662	(0.7179)
CAPEX/total assets (%)	2.38	3.20	4.25
N	1,026	661	(<.0001)
R&D expense/total assets (%)	0.00	13.79	12.59
N	1,940	682	(<.0001)
Total debt/total assets (in %)	37.38	44.43	3.66
N	1,020	658	(0.0003)
Sales/Total assets (%)	45.27	42.79	-0.0019
N	1,030	662	(0.9985)
Operating Income/Total assets (%)	-6.57	-7.68	-0.1271
N	1,030	662	(0.8989)

Table 3

Association Between Issuer Characteristics, Contract Terms, and Investor Identity From 2001-2010

The table presents the logistic regression estimates, explaining the choice of the leading investor identity (corporations, VC firms, private equity firms vs. hedge funds) in the first PIPE transaction. The subsample includes all PIPE transactions that have been identified as either strategic (corporation/VC/private equity)-led or hedge fund-led PIPE transactions. The dependent variable is an indicator equal to *one* if the first PIPE transaction is a strategic investor-led PIPE and equal to *zero* if it is a hedge fund-led PIPE. *Size* is the natural logarithm of total assets, *cash ratio* is the ratio of cash over total assets, *leverage ratio* is the firm's total debt divided by total assets, *sales ratio* is the firm's total revenues divided by total assets, *ROA* is the ratio of net income over total assets, *CAPEX ratio* is the capital expenditures divided by total assets, and the *R&D ratio* is the R&D expenditures divided by the total assets (we apply zeroes to all PIPE issuers with missing R&D expenditures values). All annual financial variables are retrieved from Compustat the previous PIPE transaction fiscal year. Contract terms are represented by binomial dummy variables taking the value of *one* when each of the terms is requested in the PIPE transaction. In more detail, the following dummy variables are used: board seat dummy taking the value of *one* when investors request board seat representation and *zero* otherwise and pre-registered dummy taking the value of *one* when investors request that the newly offered shares are registered by the PIPE closing date and *zero* otherwise. The estimates are reported in log-odds form. Chi-square-statistics are reported in parentheses. ***, **, * indicate statistical significance at the 1, 5, and 10% level.

Dependent Binomial Variable (0/1): Hedge Fund-led PIPE Versus Strategic Investor-led PIPE	
Intercept	-2.90***
	<.001
Cash	1.20***
	<.001
Size	0.33***
	<.001
Leverage	0.28***
	0.0004
R&D	0.22*
	0.089
CAPEX	1.26*
	0.072
ROA	-0.24***
	0.0035
Sales	-0.12
	0.21
Board seat	1.61***
	<.001
Preregistered	-1.16***
	<.001
Sample Size (1/0)	1,489 (475/1,014)
Max-rescaled R-Squared	0.218

Table 4

Wealth Effects of PIPE Announcements From 2001-2010 By Investor Identity and Contract Term

Panel A reports the mean cumulative abnormal returns (CARs) of PIPE-issuing firms surrounding the PIPE announcement, ordered by the leading investor identity. CARs are ordered by the leading investor identity when certain contract terms are (are not) requested. Panel B reports the CARs absolute and statistical difference when comparing our findings for the corporation/VC/private equity-led and hedge fund-led PIPE subsamples. Statistical significance is based on the Patell t-test. The number of observations is presented on the last row. Returns are computed over the five-day event window [-2, +2] according to a one-factor market model using the CRSP equal-weighted index as the market proxy. The announcement returns focus only on all strategic (corporation/VC/private equity)-led and all hedge fund-led PIPEs, respectively. ***, **, * and indicate statistical significance at the 1, 5, and 10% level.

	All	No terms	Board seat			Pre-registered		
			Yes	No	Difference	Yes	No	Difference
Strategic Investors								
CAR(-2,+2)	5.46%***	5.06%***	8.93%***	2.95%***	5.98%***	-6.71%***	4.8%%***	-11.54%***
t-stat	(7.67)	(3.85)	(3.28)	(3.22)	(3.19)	(-2.82)	(4.84)	(4.55)
N	743	134	176	311		27	472	
Hedge Funds								
CAR(-2,+2)	-0.63%**	1.82%	9.95%***	-1.57%***	11.52%***	-4.76%***	0.42%	-5.18%***
t-stat	(-2.02)	(1.55)	(5.64)	(-3.78)	(3.67)	(-4.62)	(0.07)	(4.85)
N	1,108	332	90	1,018		225	883	
Difference								
CAR	6.09%***	3.24%**	-1.02%	4.52%***		-1.95%	4.41%***	
t-stat	(7.06)	(1.95)	(-0.46)	(3.66)		(0.76)	(4.19)	

Table 5

Multivariate Analysis of PIPE Wealth Effects From 2001-2010

The table presents the fixed effects regression models explaining the five-day CARs around the announcement of a PIPE. Right-hand side variables are defined as in the legend of Table 3 with all 10 contact terms defined in Appendix B. Gross proceeds equals amount of PIPE offering divided by the market capitalization three days prior to announcement. Discount equals Gross proceeds multiplied by the percent discount of the shares issued. The Surprise Board seat (Surprise Pre-registered) variable is the difference between the board seat (pre-registered stock) binomial dummy value, and the predicted value estimated in a logistic regression explaining the choice of a board seat term (pre-registered term) where the logit includes the firm characteristics shown in Table 2. We include either firm or investor-name fixed effects, depending on the specification. Coefficient estimates are displayed in the top row and the respective t-statistics in the lower row. ***, **, * indicate statistical significance at the 1, 5, and 10% level. Adjusted R-squared and the number of observations are reported on the bottom of the table.

	1	2	3	4	5
Intercept	-0.0295	-0.0234	-0.0257	0.0051	-0.0375
	(-1.13)	(-0.79)	(-0.92)	(0.17)	(-0.89)
Cash	0.0739***	0.0666**	0.0768***	0.0357	0.0870**
	(3.12)	(2.48)	(3.14)	(1.33)	(2.42)
Leverage	0.0049	0.0138	0.0062	0.0141	0.0005
	(0.40)	(1.13)	(0.51)	(1.16)	(0.04)
R&D	-0.0438**	-0.0206	-0.0437**	-0.0225	-0.0905***
	(-2.19)	(-0.96)	(-2.15)	(-1.04)	(-2.89)
CAPEX	0.0916	0.1123	0.1011	0.1114	0.2269
	(1.28)	(1.32)	(1.41)	(1.31)	(1.47)
Sales	0.0078	0.0072	0.0115	0.0073	-0.0013
	(0.87)	(0.60)	(1.18)	(0.61)	(-0.08)
size	-0.0037	-0.0045	-0.0030	-0.0075	-0.0029
	(-0.76)	(-0.83)	(-0.62)	(-1.34)	(-0.39)
ROA	-0.0093	0.0095	-0.0065	0.0094	-0.0270
	(-0.79)	(0.74)	(-0.55)	(0.72)	(-1.36)
Strategic	0.0402**	0.0322	0.0270	-0.0143	0.0688***
	(2.20)	(1.60)	(1.32)	(-0.80)	(2.91)
Gross proceeds	-0.3459***	-0.0802	-0.3720***	-0.0764	-0.1324***
	(-3.79)	(-0.80)	(-4.08)	(-0.76)	(-3.78)
Discount	0.3873***	0.1128	0.4073***	0.1097	0.2026***
	(4.27)	(1.15)	(4.51)	(1.11)	(4.18)
Board seat	0.0925***	0.1102***	0.1000***		0.1180**
	(3.40)	(3.62)	(3.68)		(2.39)
Preregistered	-0.0402**	-0.0399**	-0.0435***		-0.0408*
	(-2.58)	(-2.39)	(-2.70)		(-1.76)
(Strategic)x(Board seat)	-0.0878**	-0.1320***	-0.1508***		-0.1219**
	(-2.15)	(-2.90)	(-3.43)		(-2.00)
(Strategic)x(Preregistered)	-0.1415***	-0.1507***	-0.1000**		-0.1443***
	(-3.15)	(-3.13)	(-2.08)		(-2.90)
Voting rights			-0.0347		
			(-1.37)		
Call option rights			-0.0041		
			(-0.15)		
Rights of first refusal			-0.0348**		
			(-2.02)		
Investor redemption rights			0.0247		
			(1.29)		
Price resets			-0.0529		
			(-1.27)		
Hard floors			-0.0186		
			(-0.63)		
Soft floors			0.0315		
			(1.09)		
Liquidation rights			0.0049		
			(0.07)		

(Strategic)x(Voting rights)			-0.0063		
			(-0.10)		
(Strategic)x(Call option rights)			-0.0143		
			(-0.14)		
(Strategic)x(Rights of first refusal)			0.1253***		
			(3.00)		
(Strategic)x(Investor redemption rights)			-0.0483		
			(-1.26)		
(Strategic)x(Price resets)			-0.5266***		
			(-4.16)		
(Strategic)x(Hard floors)			-0.0433		
			(-0.31)		
(Strategic)x(Soft floors)			0.0909		
			(0.71)		
(Strategic)x(Liquidation rights)			0.4271***		
			(3.61)		
Surprise Board seat				0.1131***	
				(3.70)	
Surprise Preregistered				-0.0419**	
				(-2.47)	
(Strategic)x(Surprise Board seat)				-0.1339***	
				(-2.92)	
(Strategic)x(Surprise Preregistered)				-0.1135**	
				(-2.42)	
Fixed Effects					
Issuer	No	Yes	Yes	Yes	No
Financing sequence	No	Yes	Yes	Yes	No
Investor name	No	No	No	No	Yes
N	702	496	496	496	381
Adj. R^2	0.1051	0.1002	0.1667	0.0946	0.1707

Table 6

Wealth Effects of Sequential PIPE Transactions From 2001-2010

Panel A reports the mean cumulative abnormal returns (CARs) of PIPE-issuing firms surrounding the PIPE announcement ordered by the sequence of the PIPE transactions based investor identity. We use the seven first available PIPE transactions per PIPE issuer and include a PIPE sequence based on whether the identity stays the same or switches from one type to another. Panel B reports the mean CARs of PIPE-issuing firms within investor identity groups when contract terms change. We include PIPE sequences where the investor identity is unchanged, but the contract term is excluded in the early PIPE and included in the subsequent PIPE. Statistical significance is based on the Patell t-test. The number of observations is presented on the last row. Returns are computed over the five-trading day event window [-2, +2] according to a one-factor market model using the CRSP equal-weighted index as the market proxy. ***, **, * indicate statistical significance at the 1, 5, and 10% level. We retrieve the sequence of all PIPE transactions per PIPE issuer by analyzing the entire universe of PIPE transactions spanning the time period of 1995 to 2010. We present the percentage difference and the Satterthwaite paired t-test (counting on unequal variances) for all pairs of PIPE transactions presented.

Panel A: Comparing Wealth Effects Around Consecutive PIPEs (Not Controlling For Contract Terms)

Retaining Leading Investor Type Across Consecutive PIPEs				Switching Leading Investor Type Across Consecutive PIPEs			
Hedge Fund-Led PIPEs				**Hedge Funds in Earlier and Strategic Investors in the Later**			
Early PIPE Transaction		Following PIPE Transaction		Early PIPE Transaction		Following PIPE Transaction	
CAR [-2,+2]	0.26%	CAR [-2,+2]	0.62%	CAR [-2,+2]	1.08%	CAR [-2,+2]	5.26%***
Patell t-test	(0.47)	Patell t-test	(1.16)	Patell t-test	(1.03)	Patell t-test	(3.18)
N	833	N	825	N	134	N	127
Difference: 0.36% Paired t-test: 0.46 (0.6479)				Difference: 4.18% Paired t-test: 2.14 (0.0337)**			
Strategic-Led PIPEs				**Strategic Investors in Earlier and Hedge Funds in the Later**			
Early PIPE Transaction		Following PIPE Transaction		Early PIPE Transaction		Following PIPE Transaction	
CAR [-2,+2]	4.95%***	CAR [-2,+2]	9.18%***	CAR [-2,+2]	5.39%***	CAR [-2,+2]	2.02%
Patell t-test	(3.06)	Patell t-test	(6.66)	Patell t-test	(3.11)	Patell t-test	(1.18)
N	161	N	163	N	126	N	127
Difference: 4.24%** Paired t-test: 1.99 (0.0472)				Difference: -3.37%** Paired t-test: -2.16 (0.0316)			

Panel B: Comparing Wealth Effects Around Consecutive PIPEs (Controlling For Contract Terms)

Hedge Fund-Led PIPEs				Strategic Investors-Led PIPEs			
Switching From No-Board PIPEs to Board Requesting PIPEs				**Switching from No-Board PIPEs to Board Requesting PIPEs**			
Early PIPE Transaction		Following PIPE Transaction		Early PIPE Transaction		Following PIPE Transaction	
CAR [-2,+2]	-0.56%	CAR [-2,+2]	6.78%**	CAR [-2,+2]	2.72%	CAR [-2,+2]	10.27%***
Patell t-test	(-0.23)	Patell t-test	(2.07)	Patell t-test	(1.25)	Patell t-test	(3.67)
N	23	N	25	N	33	N	33
Difference: 7.34% Paired t-test: 1.80 (0.0782)*				Difference: 7.55% Paired t-test: 2.13 (0.0371)**			
Switching from No-Preregistered Stock PIPEs to Preregistered Stock Requesting PIPEs				**Switching from No-Preregistered PIPEs to Preregistered Stock Requesting PIPEs**			
Early PIPE Transaction		Following PIPE Transaction		Early PIPE Transaction		Following PIPE Transaction	
CAR [-2,+2]	-1.57%	CAR [-2,+2]	-3.55%***	CAR [-2,+2]	1.23%	CAR [-2,+2]	-6.47%***
Patell t-test	(-1.08)	Patell t-test	(2.43)	Patell t-test	(0.51)	Patell t-test	(-3.09)
N	72	N	70	N	13	N	14
Difference: -1.97% Paired t-test: -0.96 (0.3396)				Difference: -7.70%** Paired t-test: -2.41 (0.0240)			

Table 7

Post Announcement Buy-and-Hold Returns Following PIPEs From 2001-2010

We report the mean raw buy-and-hold returns (Panel A) and the abnormal buy-and-hold returns (Panel B), ordered in four PIPE subsamples, depending on investor type and the contractual term interaction (i.e., strategic investor-led PIPEs with board seat(s), strategic investor-led PIPEs with pre-registered stock, hedge fund-led PIPEs with board seat(s), or hedge fund-led PIPEs with pre-registered stock). The buy-and-hold returns are computed over three different time periods, starting always three trading days post-close of the PIPE transaction ([3, 100], [3, 250], [3, 500]). For the calculation of both raw and excess buy-and-hold returns, we count on monthly stock returns drawn from CRSP. Following Brophy, Ouimet and Sialm (2009), we compute abnormal returns by subtracting the raw return for companies matched in the month prior to the PIPE deal according to Fama-French industry, market capitalization, book-to-market ratio, and momentum from the return of PIPE companies. Momentum is computed as the returns during the 12 months preceding the closing date of the PIPE transactions. The control sample consists of companies that did not issue a PIPE transaction for at least two years, that exhibit the smallest sum of the absolute deviations of market cap, book-to-market ratio and momentum returns, conditional on being in the same Fama-French industry. If the returns for the event PIPE firm are missing, we set them equal to the returns of the matched-control firm. If the returns of the matched-control firm are missing, we replace this firm with the company that achieved the next smallest sum of deviations index. The returns are expressed in percentage form. The significance levels for each individual raw and abnormal return are denoted by '*', '**', and '***' and indicate whether the results are statistically different from *zero* at the 10, 5, and 1% significance levels. The t-statistic values are presented in parentheses.

Panel A. Raw buy-and-hold returns

	Strategic investor-led PIPEs		Hedge fund investor-led PIPEs	
	Board seat	Preregistered	Board seat	Preregistered
Observations with available data	71	19	44	162
Short-term [3,100]	10.34%**	7.56%	0.08%	2.71%
	(2.01)	(0.95)	(0.01)	(0.55)
Medium-term [3,250]	24.34%***	18.03%	1.23%	9.12%
	(2.61)	(1.60)	(0.10)	(1.02)
Long-term [3,500]	26.86%*	18.91%	-11.14%	3.28%
	(1.97)	(1.13)	(-0.85)	(0.47)

Panel B. Excess buy-and-hold returns

	Strategic investor-led PIPEs		Hedge fund investor-led PIPEs	
	Board seat	Preregistered	Board seat	Preregistered
Observations with available data	71	19	44	162
Short-term [3,100]	4.43%	5.49%	-11.25%	3.29%
	(0.85)	(0.51)	(-1.64)	(0.70)
Medium-term [3,250]	21.65%**	7.54%	-0.61%	8.71%
	(2.32)	(0.35)	(-0.05)	(0.93)
Long-term [3,500]	18.98%	-19.57%	-14.35%	-1.77%
	(1.26)	(-0.55)	(-1.21)	(-0.23)