Journal of Financial Economics 108 (2013) 213–230

Contents lists available at SciVerse ScienceDirect

Journal of Financial Economics

journal homepage: www.elsevier.com/locate/jfec

Does shareholder coordination matter? Evidence from private placements ☆

Indraneel Chakraborty [a], Nickolay Gantchev [b,*]

[a] Southern Methodist University, Cox School of Business, United States
[b] The University of North Carolina at Chapel Hill, Kenan-Flagler Business School, United States

ARTICLE INFO

Article history:
Received 16 April 2012
Received in revised form
6 June 2012
Accepted 11 June 2012
Available online 13 October 2012

JEL classification:
G32
G33
G34

Keywords:
Private placements
Equity issuance
Shareholder coordination
Debt renegotiation
Firm distress

ABSTRACT

We propose a new role for private investments in public equity (PIPEs) as a mechanism to reduce coordination frictions among existing equity holders. We establish a causal link between the coordination ability of incumbent shareholders and PIPE issuance. This result obtains even after controlling for alternative explanations such as information asymmetry and access to public markets. Improved equity coordination following a private placement leads to favorable debt renegotiations within one year of issuance. Mitigating coordination frictions among shareholders ultimately decreases the odds of firm default in half.

1. Introduction

Private investments in public equity (PIPEs) involve the unregistered sale of publicly traded securities such as common or preferred stock and convertibles to a small group of sophisticated private investors. Despite their more complex contract structure, frequently including reset provisions and warrants, PIPEs have become an increasingly important means of raising equity for troubled firms with limited access to the public equity market. As a result, the share of private placements in secondary equity issuance has increased from 4% in 1995 to 27% in 2007.[1]

One of the most puzzling features of private equity placements is their positive announcement return. For example, the $(-3, 1)$ cumulative average daily return during 1995–2007 is 2.12%. This positive price reaction contrasts with the negative announcement returns of secondary equity offerings (SEOs) and implies that PIPEs are viewed by the market as beneficial to existing shareholders. This is even more surprising considering that the average private equity placement is offered at a large discount to current market prices (13% in our sample period) and results in significant dilution of the holdings

☆ We thank Bill Schwert (the editor), Ilya Strebulaev (the referee), Christos Cabolis, Paolo Fulghieri, Diego Garcia, Pab Jotikasthira, Swaminathan Kalpathy, William Maxwell, Paige Ouimet, Christopher Parsons, Rex Thompson, Anil Shivdasani, Johan Sulaeman, Kumar Venkataraman, and seminar participants at the Lone Star Conference 2011 and the University of North Carolina at Chapel Hill for helpful comments.

* Corresponding author. Tel.: +1 919 962 4926; fax: +1 919 962 2068.
E-mail addresses: ichakraborty@cox.smu.edu (I. Chakraborty), gantchev@unc.edu (N. Gantchev).

[1] The total volume of private equity issuance during the sample period was $164 billion versus $715 billion of public equity offerings (see Table 1).

0304-405X/$ - see front matter © 2012 Elsevier B.V. All rights reserved.
http://dx.doi.org/10.1016/j.jfineco.2012.10.001

of incumbent equity holders (30% on average in 1995–2007).[2]

The existing literature has provided several competing interpretations of the positive announcement effect of PIPEs. Wruck (1989) establishes a relation between the market's positive reaction to private placements and the increase in ownership concentration following PIPE issuance. She interprets the positive price effect of PIPEs as evidence that changes in ownership concentration better align the interests of managers and shareholders. Hertzel and Smith (1993) consider the role of private placements in resolving asymmetric information problems about firm value. They view a private issue as a seal of approval by sophisticated institutional investors on the current valuation of a firm.[3]

Typical PIPE issuers are troubled firms with more dispersed shareholders and more concentrated debtholders than the average firm. Building on the Wruck (1989) contribution, this paper argues that PIPE issuance allows dispersed equity holders to concentrate their control rights by bringing in a new blockholder with a large incentive to improve firm value. However, unlike the Wruck (1989) emphasis on improved monitoring reducing agency conflicts within the firm, we focus on an alternative channel whereby private placements serve as a mechanism to mitigate coordination frictions among existing equity holders in their choice of firm policy.

A distressed firm is likely to experience a shift of control rights from equity to debt, in which case any change in existing firm policy could require negotiations between equity holders and debtholders. We claim that PIPE issuance improves the coordination ability of equity holders and facilitates negotiations of firm policy with debtholders. We focus on debt renegotiation as a specific example of a major policy, which benefits from improved ability of a firm's stakeholders to come to an agreement.[4] Debt renegotiations are especially important for private placement firms because of their high level of distress and reduced ability to access public markets.

Two main contributions of this paper deserve attention. First, we use instrumental variables (IV) analysis to establish a causal link between the coordination ability of incumbent equity owners and PIPE issuance. This result obtains even after propensity score matching on alternative explanations of private equity issuance. Second, we show the effect of the coordination channel on a firm's post-issuance debt renegotiation and default likelihood. Reduced coordination frictions among shareholders following PIPE issuance substantially decrease the odds of default of PIPE firms compared with matched controls. PIPE issuers are also more likely to experience favorable debt renegotiations resulting in lower interest spreads and larger loan principals within one year of issuance.

Our empirical approach aims to differentiate the coordination channel proposed in this paper from the information asymmetry and monitoring hypotheses in the existing literature. Ideally, we would be able to conduct a randomized experiment in which firms with different coordination ability of incumbent equity holders are randomly chosen to issue equity in the secondary public market (SEO) or to private investors (PIPE). In the absence of such randomization, we need to effectively control for the potential selection bias resulting from the effect of firm characteristics (such as information asymmetry, access to public markets, and distress) on the choice of equity financing.

We use propensity score matching techniques to reduce the confounding effects of firm attributes on the mode of equity issuance. We look for conditioning variables among the firm characteristics suggested by alternative explanations of private equity issuance. Specifically, we compare each PIPE issuer to its SEO counterparts in terms of pretreatment differences in information asymmetry, access to public markets, and predicted default probability. Our propensity score analysis corrects for selection bias in terms of observable characteristics that could affect the decision to issue private equity. We also use instrumental variables analysis to address potential self-selection concerns in terms of unobservable firm heterogeneity.

Our measure for shareholder concentration directly reflects the level of coordination necessary to reach a decision based on shareholder voting. We use a firm's total Shapley value to proxy for existing coordination frictions among incumbent equity holders. The Shapley value captures the relative importance of each voting shareholder in terms of her expected ability to have a pivotal vote in changing firm policy.[5] A low Shapley value of current shareholders suggests larger coordination benefits from adding a PIPE investor. Our univariate results show that PIPE issuers have 51% lower Shapley values of incumbent equity than their non-PIPE counterparts.

To account for the pre-issuance balance of power between equity holders and debtholders, we also measure a firm's concentration of public debt claimants by the Herfindahl Index of its bond issues. This proxy captures the distribution of par values of outstanding bonds. A higher bond Herfindahl Index indicates more concentrated bondholders, which increases the benefit of improving the coordination ability of a firm's equity holders. We observe that PIPE firms have 33% more concentrated bondholders than SEO firms.

[2] Hertzel, Lemmon, Linck, and Rees (2002) discuss the positive price effect of private placements and their negative long-run performance. Huson, Malatesta, and Parrino (2010) investigate the recent decline in the PIPE discount.

[3] Both Hertzel and Smith (1993) and Wu (2004) provide cross-sectional evidence at odds with the Wruck (1989) monitoring hypothesis. Barclay, Holderness, and Sheehan (2007) interpret the PIPE discount as compensation to investors for their implicit support of management entrenchment.

[4] The coordination hypothesis we propose builds on previous theoretical work, which considers the role of debt contracts in transferring state-contingent control rights to creditors (e.g., Aghion and Bolton, 1992; Dewatripont and Tirole, 1994). Recent empirical work has explored the importance of control right dynamics for firm policy (see Chava and Roberts, 2008; Nini, Smith, and Sufi, 2009).

[5] Using Shapley value instead of alternative measures such as total institutional ownership also differentiates our coordination mechanism from the Wruck (1989) monitoring hypothesis.