Acquisitions of Private Equity-Backed firm, does it matter?

Saloua El Bouzaidi*

Abstract

In this paper, I explore the characteristics and acquirer's market reaction to an acquisition of a private equity-backed firm. I find that, deal value and acquirer size are larger when the target is a private equity backed firm. Compared to non private equity backed firm, acquirer's investors fare less well to an acquisition announcement of a private equity backed one. The effect remains after controlling for a large set of deal and acquirer characteristics. This suggests that private equity investors increase the negotiating power of their targets and thus obtain a higher price.

JEL Classification: G24, G23, G14.

Keywords: private equity, mergers and acquisition, event study.

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*Ph.D Student, department of economics, university Evry Val d'Essonne/EPEE. 4, Boulevard François Mitterrand, 91025, Evry Cedex. Tel: + 33 1 69 47 70 78. Fax: + 33 1 69 47 70 50. E-mail: saloua.elbouzaidi@univ-evry.fr.

1 Introduction

In this article, I'm interested in the strategic acquisition of venture for which the private equity investor gets "immediate" cash in return. Therefore, it represents a change in ownership and a loss of control for the entrepreneur. Economics theories give many possible reasons to explain why mergers occur: efficiency-related reasons often involve economies of scale or other synergies; attempts to create market power; and to take advantage of opportunities for diversification.

After the establishment of the European Union, European governments generally encouraged enterprises to engage in MA activities. European country's MA activities became more flourishing, especially in recent years. The European community was also aware of the lack of access by new technology-based firms to suitable finance. Effort was made to encourage private investment into innovative, young firms by the creation of European venture capital association, the launch of Venture Consort program in co-operation with the European Communities, and creation of cross-border syndicates of private equity investor [1].

Private equity investors (therefore PE) are active investors who invest important funds in start-up companies for which they obtain an equity position. The PE investors stay involved in the development of his portfolio firm until the exit. The term "exit" refers to the divestment of the company from the PE's portfolio. This is the stage when The PE investor sells the shares they hold in their portfolio companies and earn money from their investments. it can occur through an IPO, with a subsequent sale of the PE stake in the public market, through a sale of the firm to another investor (secondary sale), or through the sale of the firm to a larger company (trade sale).

The motivation behind exit decision may diverge between the private equity investors and the entrepreneur. As financier PEs are not long-term investors. When investing, they need to assure an exit option within the next few years with the most profitable opportunity. The exit outcome can be a signal of the PE's quality; it's a way to evaluate the PE investors.

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[1]In This paper, I do not distinguish between venture capital (VC) and buyout investment (LBO). VC provides financing to young firms whereas LBO gives funds to more mature companies.

And it's may determine the success of the follow-up fundraising (see, e.g., Gompers and Lerner (2000) [13]). Thus the PE investors choose between the exit alternatives based on financial considerations ("cash flow benefits"). In contrast entrepreneurs care also about his personal benefits. In the case of an IPO exit, the entrepreneur may continue as the CEO of a stand-alone firm, and then will be able to maintain a substantial extent of his benefits of control. Which he is likely to lose after an acquisition. Acquirers usually do important managerial and organizational restructuration in the acquired target. This may create an agency problem between managers of acquirer firm and the entrepreneur of private equity target firm. This can be anticipated by acquirer's firm investors, and thus react less well to an acquisition of a private equity backed firm.

Exit outcomes are also related to the relationships and networks. Lindsey (2008) [16] shows that strategic alliances are more common among companies that share a common Venture Capitalist, and that such alliances are associated with higher exit rates. Sahlman, 1990 [23]argue that Venture capitalists lean on their networks of contacts to help the company succeed. Sorenson and Stuart (2001) [26], using Thomson One data, argue that networks among Venture Capitalists contribute to diffusing information about potential investments across geographic and sector boundaries. PE firms' extensive network of contacts should therefore help them in locating potential acquirers. Due to their role as powerful repeated players in the public market, PE investors develop long-term relationships with various participants in the public market (institutional investors, and analysts). These networks enable them to attract greater participation by principal market players in the sales of their backed firms; this may increase the bidding competition and the negotiating power to obtain higher price. Thus decreasing acquirer's returns.

Finally, using a detailed sample of more than 20,000 investment rounds, Giot and Schwienbacher (2007)[24] analyzed the dynamics of exits for different exit routes. They evidence an inverse U-shaped pattern for IPOs exits and a time-varying probability for trade sales, which vary very little over time. This suggests that the trade sale is a broad exit channel, not only limited to the most successful ventures. Schwienbacher (2008) [25] shows that in various

competition settings, an IPO can be more profitable than a trade sale when the new product is sufficiently innovative. This implies that highly innovative and profitable ventures are more likely to go public than ventures with more imitative products. The same idea was developed in Chemmanur et al (2010) [6],they argue that "when IPO market investors assess a larger prior probability that the firm is viable in the product market, the firm is more likely to be go public". This suggest that IPO exit may be limited to the most promising ventures while a trade sale seems to represent the more general exit route, for both more and less promising ventures. This difference in the exit route depending on firm's quality can be viewed as a negative signal about the quality of the PE backed acquired firm. Thus may give a negative reaction to the announcement of their acquisition.

From the above we can suppose that acquisition of a private equity backed firm is a relative good news where acquirer's stock return will response in a less positive manner, compared to the reaction to the acquisition of a non private equity firm.

The most statistically evidence on whether mergers create value for shareholders comes from traditional short-window event studies, where the average abnormal stock market reaction at merger announcement is used as a gauge of value creation or destruction. In a capital market that is efficient with respect to public information, stock prices quickly adjust following a merger announcement, incorporating any expected value changes. In this article, I will use the abnormal return as an indicator of the unexpected future economic arising from the acquisition deal. In other words, a positive abnormal return reflects a positive rate of return on the merger investment from the acquirer's point of view. The objective is to compare acquirer's abnormal return of PE backed firm to acquirer's abnormal return of a non PE backed one. I expect to find a positive abnormal return for acquirers of the PE backed and for acquirers of the non PE backed sub-sample, with a greater reaction to the acquisition of non PE backed.

The remainder of the paper is organized as follows. Section 2 reviews the related literature. Section 3 presents the sample and methodology. Section 4 analyses the empirical results. In Section 5, I will conclude and give suggestions for future research.

2 Literature review

Empirical papers show divergent results regarding the announcement effect for bidding firms depending on target status, acquirer and deal characteristics. Faccio et al. (2006) [9] find on a sample of acquisitions in Western European countries that acquirers of listed targets earn an insignificant average abnormal return of -0.38%, while acquirers of unlisted targets earn a significant average abnormal return of 1.48%. Fuller et al. (2002) [10] posit that one explanation for the differing market reaction is that acquirers receive a better price when they buy unlisted firms. Which Officer (2007) confirm by finding a discounts for acquisitions of unlisted targets that average 15% to 30% relative to multiples paid to acquire comparable publicly traded firms.

Empirical evidence on leveraged acquirers' effect is mixed: whereas Linn and Switzer (2001),) find no significant relation between acquirer's leverage and post-merger operating performance. Ghosh and Jain (2000) [11], provide evidence that high leveraged acquirers may be subject to severe monitoring by banks such that unprofitable acquisition would be effectively prevented ex-ante. Leverage provides incentives for managers not to engage in value-destroying acquisitions and should prevent them from empire-building. Leverage might therefore have a positive effect on acquirer returns. This suggests that leveraged acquirers realize more profitable deals. Contrary to these authors, Moeller et al. (2004) [20], Masulis et al. (2007)[17], and Masulis and Nahata (2011)[18] find an insignificant impact of leverage on acquirer returns. Tobin's Q is an indicator of the quality of the acquiring firm's management and might therefore impact positively acquirer reaction to deal announcement. However, proxies for q have a negative significant coefficient with an economically trivial effect or an insignificant coefficient for both public and unlisted targets (Moeller et al., 2004; Masulis et al., 2007; Masulis and Nahata, 2011). Moeller, Schlingemann, and Stulz (2004) show that acquirer size is an important determinant of bidder returns, Larger acquirers earn lower announcement returns than do smaller acquirers (Moeller et al., 2004; Masulis et al., 2007), which is also true for unlisted target acquisitions (Gompers and Xuan, 2006).

Concerning deal characteristics, empirical evidence suggests that the form of payment is

an important determinant of the wealth effects. The method of payment is associated with different effects on acquirer returns in acquisitions of public versus private firms. Acquirer returns associated with stock deals are more positive than those associated with cash deals for the acquisitions of private firms, while the literature on acquisitions of public targets show that stock deals trigger more negative abnormal returns (Chang, 1998 [5], Fuller et al., 2002;. Sectorial diversification acquisitions are expected to create operational and synergies, but need more monitoring as the acquisitions is made outside of acquirer's main activities. Moeller et al. (2004) find evidence that acquirer abnormal returns are higher in within-industry acquisitions than in diversifying acquisitions. Although the results for unlisted target acquisitions do not seem supportive of a focus-increasing effect on acquirer returns (Fuller et al., 2002; Masulis and Nahata, 2011). Cross-border acquisitions are also expected to have more positive reaction than the domestic acquisitions due to the internalization of synergies based on intangible assets. But cross-border acquisition may also come with difficulties in managing the post merger process due to regulatory and national cultural differences (see Conn et al. (2005) for a literature review). Fuller et al. (2002) show that U.S. acquirers of private targets have lower acquirer returns when buying a foreign firm.

Empirical event studies on returns to acquirers of unlisted targets in Europe are rare. For instance, Faccio et al. (2006) find that the method of payment, the acquirer size, and the relative size of the deal have a significant effect on returns to acquirers of unlisted acquisitions, while the cross-border, within-industry and acquirer Tobin's Q variables are insignificant. Last, Faccio et al. (2006) observe that U.K. acquirers achieve lower announcement returns than do acquirers from other Western European countries. To control for the possibility that acquisitions by firms of English legal origin could overwhelm the results from other countries, I include a dummy Acq English law indicating whether the acquirer is from a country with an English legal tradition (La Porta et al. 2000), i.e., in the context of this paper, Austria and the United Kingdom.

The objective of this paper, in addition to re-examine the role of the status of the target in acquirer returns and testing the impact of acquirer and deal characteristic, is to focus in the

impact of an acquisition of a private equity backed firm. By separating targets that received private equity backing from targets with no private equity shareholders. a number of studies investigate the role played by VC/PE investors during the initial public offerings process and report their certification capacity. Analyses of the role of PE investors in trade sales are almost nonexistent. However, trade sales of portfolio companies are by far the largest exit routes in Europe. In 2010, according to the European Private Equity and Venture Capital Association (EVCA), trade sales comprised approximately 41,2% in Venture capital market and 20,1% in the buyout market. while divestments by public offerings represent 13,7% for the venture capital market and 10% for the buyout market.

In fact, the literature considered the effects of PE-backing on acquisition returns is recent and focus only in the US market. Gompers and Xuan (2009) find that when there is a common Venture Capitalist for the acquirer and target, a successful acquisition is more likely. The presence of a common Venture Capitalist affects the structure of the acquisition deal (important stock component); induce a more positive market reaction to the announcement of the acquisition; and a higher acquirer's long run stock returns. Masulis and Nahata (2011), using a sample with important portion of high-tech targets find that Venture Capital backing leads to significantly higher acquirer announcement returns, averaging 3%.

In this paper I will investigate the effect of PE financing in the market reaction to an acquisition of a private equity backed firm. I will focus in the European market using a new database from Bureau van Dijk Zephyr.

3 Data and methodology

3.1 Data description and sample selection

I obtain a sample of completed acquisitions involving European private targets from the Bureau van Dijk Zephyr database. The target must be a privately European incorporated company. And acquirers a public European incorporated company, their stock is publicly listed on one European public market and available in DataStream. I exclude deals where

the acquirers or targets are a regulated utility or a financial institution. I keep only deals where acquirer has no toehold position prior to the deal announcement, and where the buyer acquires 100% of target firm shares. I also exclude clustered acquisitions by a single acquirer within 5 days. After applying the above criteria to the initial sample of transactions, a sample of completed offers contain 2000 acquisitions of non private equity backed firms and 195 acquisitions of private equity backed firms.

Since deals of PE targets acquisition are larger and PEs invest more in high tech sector, I use the propensity score matching method to keep in the non PE sub sample the more comparable firm, where the PE backed firms are the "treatment" group and the non PE backed sub-sample the "control" group. The final sample comprises 143 PE targets firms and 1407 non PE targets.

A standard event procedure is used to assess whether the stock prices of the listed acquirer change at the announcement of the acquisition. Efficient market hypothesis suggests that a securities price instantly absorbs all information and reflects it in the current market price. In semi-strong-form efficiency, it is implied that share prices adjust to publicly available new information very rapidly, so that no excess returns can be earned by trading on that information. I thus examine this by investigating acquirers's shareholder's wealth effect.

3.2   Descriptive statistics

Over the period 2000 to 2011, I reported 143 PE-backed targets versus 1407 non PE-backed targets. I report in Table 1 the acquisition sample across years and I distinguish between PE-backed firms and non PE-backed ones. This table shows that 2005-2007 represent the highest number of acquisition where about 50% of our sample acquisition occurs during this period. The market then underwent a cold period where the number of acquisition dropped with only 88 acquisitions in 2009. We observe a renewal of activity from 2010, but again a small decrease in 2011.

[Insert Table 1 about here]

Table 2 gives the number of acquisitions by home country of the acquirer. The sample is dominated with acquisitions by U.K. firms (50% of the acquisitions of PE-backed firms and 18% of the acquisitions of PE-backed firms). This result is in line with the proportion of U.K. acquirers of unlisted companies in Europe found by Faccio et al. (2006). Only 2% of our sample acquisitions are cross-border deals, where the acquirer and the target are from different European country (see Table 2)

[Insert Table 2 about here]

Table 3 gives summary statistics for our variables and shows that some deal and acquirers characteristics are different across the two subsamples, I find that acquisitions of PE-backed firms significantly differ from other unlisted acquisitions in deal values (both in euro value and relative value). Deal value is three times larger when a PE-backed target is involved. Acquirers of PE backed targets are much larger, have higher Tobin's Qs, and is less leveraged than the acquirers of non PE targets firms. However, the two subsamples do not differ significantly in the proportion of deals that are at least partially stock-financed, or in the frequency of within-industry acquisitions.

[Insert Table 3 about here]

3.3 Methodology

I use event study methodology to capture acquirer share price reaction. For each completed acquisition the announced date is the event date. in the sample, I use the market model to estimate normal returns. The five steps of this methodology are the following:

- I start by estimating a market model for each firm's stock returns during an estimation period prior to the announcement date (i.e. t=0). The model parameters are thus estimated using OLS regressions over a period of 260 days; the calculations are starting 40 days prior the announcement date. Then I estimate the following market model for

each stock:

$$r_{it} = \alpha_i + \beta_i r_{mt} + \epsilon_{it} \tag{1}$$

Where r_{it} denotes the daily return for firm i on day t, r_{mt} represents the corresponding daily return for the value-weighted local price index, α_i and β_i are firm-specific parameters and ϵ_{it} are independent and identically distributed (i.i.d) errors.

- Then, I use the estimated coefficients from this model, (α_i and β_i), to predict daily returns for each firm i over the "event window" - $[-2, 2]$i.e. the five days immediately surrounding the announcement date:

$$R_{it} = \alpha_i + \beta_i R_{mt} \tag{2}$$

Where R_{it} denotes the predicted daily returns for each incumbent firm i on day t.

- I calculate the abnormal returns (AR) for each acquirer firm i on each day of the event window by subtracting the predicted return R_{it} from the actual return r_{it}.

- I finally compute the cumulative abnormal returns (CAR) for each acquirer firm i which is the sum of the daily abnormal return over the event window (i.e. from m days before the event to n days after it):

$$CAR_{imn} = \sum_{t=-m}^{t=n} R_{it} \tag{3}$$

4 Empirical results

I first start by analyzing the results of the cumulative abnormal returns. Then I examine the results of the regressions.

4.1 Cumulative abnormal return

My main hypothesis states that acquirers react positively to acquisition. This reaction is expected to be more important when the target firm is not backed by a PE investor. In this part, I will analyze the effect of an acquisition on acquirer's stock market return. This is an evidence of the short-term effect.

Table 4 tabulates the CAR from day -2 to day +2 for both PE and non PE targets. In addition to tabulating total sample average CARs, I tabulate average CARs based on whether the deal contain cash or equity as well as if the deal was related to the acquirer's business or not. A deal is classified as related if the target and the acquirer have the same two-digit SIC code.

The results in Table 4 show that the market has very different reactions to the announcement of an acquisition of a PE company. The CAR is 1.4% for PE acquisitions, smaller than the 2.08% CAR for non PE acquisitions. There are also differential effects of deal structure on these two sub-samples. The abnormal return for deal with cash is larger for PE targets while deals with stock create a more positive reaction for the non PE targets. Both types of deals have average positive CARs. Surprisingly, the market views PE cash transactions as being more interesting than non PE cash transaction. Relatedness has a positive effect on the abnormal return of both PE and non PE companies. But unrelated deals have higher, (more positive) CARs than do related deals for the PE targets. This suggests that acquirer's investors view the PE target firm as unable to stand-alone and to face competition in its sector (case of an IPO exit). While an unrelated acquisition is better perceived.

[Insert Table 4 about here]

These results provide first evidence for the acquirer's reaction to the acquisition of private firms. I will investigate if this effect persist after controlling for deals and acquirers characteristics

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4.2 Regression results

Our approach is to model CAR as a function of deals and acquirer's characteristics (i.e. PE-backed target or non PE-backed target), I'm also controlling for the industry and the crisis periods. I estimate the following regression model:

$$
\begin{aligned}
\text{CAR} \;=\;& \beta_0 + \beta_1(\text{PE backed firm or non PE backed firm}) + \beta_2(\text{acquirer's characteristics}) \\
&+\; \beta_3(\text{characteristics}) + \epsilon
\end{aligned}
\tag{4}
$$

– PE-backing dummy: dummy equals one if the target company is backed by private equity firm, zero otherwise.

– Competitor's characteristics: Size in terms of acquirer's market capitalization one month before the deal announcement (in million euro). Tobin Q is the ratio of the book value of acquirer's assets minus book value of equity plus market value of equity over the book value of assets, Leverage is book value of debts, scaled by book value of debts plus market value of equity in the year before the deal announcement. Book values are as of last fiscal year-end prior to deal announcement. Acquirer stock return volatility denotes the standard deviation of the acquirer's excess stock returns measured from 6 days to 270 prior to the announcement date. Acq engh law dummy equals 1 if the acquirer is from a country with an English legal tradition, and equals 0 otherwise. Acq gr law dummy equals 1 if the acquirer is from a country with a German legal tradition, and equals 0 otherwise. Acq fr law dummy equals 1 if the acquirer is from a country with a French legal tradition, and equals 0 otherwise. Acq scand law Indicator equals 1 if the acquirer is from a country with a Scandinavian legal tradition, and equals 0 otherwise.

– deal characteristics:Deal Value is the total value of consideration paid by the acquirer,(in million euro). Relative Size Ratio of the consideration paid for the acquisition over acquirer's market capitalization one month before the acquisition announcement day. Stock dummy equals 1 if the deal is at least partially stock-financed, 0 otherwise.

Related deals is a dummy equals 1 if the acquirerŠs and the targetŠs primary 2-digit SIC code coincides, and equals 0 otherwise. Crisis year dummy equals one if the acquisition occurs in a crisis year, zero otherwise. in country acquisition dummy equals 1 if the acquirerŠs and the targetŠs are located in the same home country, and is 0 otherwise. High-tech sector dummy equals one if the acquirer operates in high-tech sector, zero otherwise.

The results in Table 5 show that the price reaction for larger acquirer is more negative. The effect is not driven by relative transaction size as I control for how large the acquisition was relative to the firm's market value. A potential explanation maybe that the market believes that the acquisition will have a larger positive effect on the value of the smaller acquirers. I found also a positive correlation between the CARs and leverage of the acquirer firm in the year prior to the acquisition. This confirms that leverage provides incentives for managers to improve firm's performance. It is also interesting that related acquisitions have a more positive announcement reaction. The market may believe that acquirer enjoy more market power when the acquirer is in the same sector. I also find a positive and significant positive relation between stock payment and the price reaction at the announcement of the acquisition. As targets accept acquirer stock for deal payment after their due diligence investigations. This suggests that the market consider stock payment as favorable information about acquirer stock values. Concerning acquirers country, I find that acquirer from country with an English legal tradition achieve lower announcement period CARs than do continental European acquirers, in line with the results of Faccio et al. (2006). On the other hand, the presence of PE investors in the target firm leads to lower abnormal returns for the acquirer on announcement of the acquisition. Because PE investors have considerable experience with selling firms and repetitive relationships with public market participant, they may be able to negotiate better terms for their backed firm and, hence obtain higher price for the target.

[insert Table 5 about here]

Next, In table 6, I examine the reaction of the market for the venture PE sample of acquisitions. Much like the entire sample, larger size for the acquirer appears to be asso-

ciated with lower abnormal returns. The stock payments appear to be negative but not significant than they were in the full sample, the market may view equity acquisitions as signals of market acquirer stock's overvaluation. The positive and significant effect of leverage and related deals hold for the PE sample acquisition. In addition to the previous results, CARs are positively related to the acquirer's Tobin's Q ratio, confirming the intuition that the quality of the acquiring firm's management impact positively acquirer reaction to deal announcement. Country with an English legal tradition still achieve lower announcement period CARs, contrary to Scandinavian country's law origin, who appear to achieve higher return reaction.

[insert Table 6 about here]

5 Conclusion

From a methodological perspective, this paper is related to the literature on capital market transactions and their valuation effects on firms operating in the same industry. The results of this paper should be of interest to different agents including public investors, acquirers firms, PE investors and their limited partners. Though PE represents only a small group of institutional investors, a large proportion of mergers and acquisition in the recent years were backed by PE investors[2]. Thus, the exit decisions of PE could have a significant impact in the marketwise.

I find that acquirers of private firms in this European sample are more likely to use stock payment and to purchase companies in related industries. In addition,.acquirers of private equity backed firms tend to be larger and have higher Tobin's Q than do acquirers of other private firms. The results of the present paper confirm our assumptions, the announcement of the acquisition of private companies is a good news for the acquirers investors. Acquirers firms experience a positive announcement period return on average, but the market reacts more negatively to the purchase of private equity backed target. The results seem to indicate that the market either believes that private equity investors are better at negotiating higher prices for their firms in the public market. A further part of this research will be interested in the analysis of acquisition long- term operating performance.

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[2]see EVCA 2011 year book.

References

[1] Amit, Raphael, Brander, James and Zott, Christoph, 1998, Why do venture capital firms exist? Theory and Canadian evidence, *Journal of Business Venturing*, 13(6), 441-466.

[2] Bascha, Andreas and Walz, Uwe., 2001, Convertible securities and optimal exit decisions in venture capital finance, *Journal of corporate finance*, 7(3), 285-306.

[3] Bayar, Onur and Chemmanur, J. Thomas, 2010, IPOs versus Acquisitions and the Valuation Premium Puzzle: A Theory of Exit Choice by Entrepreneurs and Venture Capitalists, *Journal of Financial and Quantitative Analysis*, Forthcoming.

[4] Black, S. Bernard and Gilson, J. Ronald, 1998, Venture capital and the structure of capital markets: banks versus stock markets, *Journal of Financial Economics*, 47, 243-277.

[5] Chang, S., 1998, "Takeovers of Privately Held Targets, Method of Payment, and Bidder Returns", Journal of Finance 53 (2), 773-784.

[6] Chemmanur, Thomas J.,He, Shan, and Nandy, Debarshi K., 2010, The going-public decision and the product market, *Review of Financial Studies*, 23, 1855-1908.

[7] Cumming, Douglas and MacIntosh, G. Jeffrey, 2003, Venture Capital Exits in Canada and the United States, *University of Toronto Law Journal*, 53, 101-200.

[8] Faccio, M. and R. Masulis, 2005, "The Choice of Payment Method in European Mergers and Acquisitions", Journal of Finance 60 (3), 1345-1388.

[9] Faccio, M., McConnell, J. and D. Stolin, 2006, "Returns to Acquirers of Listed and Unlisted Targets", Journal of Financial and Quantitative Analysis 41, 197-220.

[10] Fuller, K., Netter, J., and M. Stegemoller, 2002, "What Do Returns to Acquiring Firms Tell Us? Evidence from Firms That Make Many Acquisitions", Journal of Finance 57, 1763-1793.

[11] Ghosh, A., Jain, P.C., 2000. Financial leverage changes associated with corporate mergers. Journal of Corporate Finance 6, 377-402.

[12] Hsu, Scott H. C., Reed, Adam V. and Rocholl, Jörg, 2011, The New Game in Town: Competitive Effects of IPOs, *Journal of Finance*, Forthcoming.

[13] Gompers, P. A., and J. Lerner 2000, "The Determinants of Corporate Venture Capital Success: Organizational Structure, Incentives and Complementarities." In Concentrated Corporate Ownership, R. K. Morck, ed. Chicago, IL: University of Chicago Press for the National Bureau of Economic Research 17-50.

[14] Lerner, Josh, 1994a, Venture capitalists and the decision to go public, *Journal of Financial Economics*, 35(3), 293-316.

[15] Lerner, Josh, 1994b, The syndication of venture capital investments, *Financial Management*, 23(3), 16-27.

[16] Lindsey, L, 2008. "Blurring Firm Boundaries: The Role of Venture Capital in Strategic Alliances." Journal of Finance, 63, 1137-1168.

[17] Masulis, R., Wang, C., and F. Xie, 2007, "Corporate Governance and Acquirer Returns", Journal of Finance 62, 1851-89.

[18] Masulis, R. and R. Nahata, 2011, "Venture Capital Conflicts of Interest: Evidence from Acquisitions of Venture Backed Firms", Journal of Financial and Quantitative Analysis 46, 395-430.

[19] Megginson, L. William, and Weiss, A. Kathleen, 1991, Venture capitalists certification in initial public offerings, *Journal of Finance*, 46, 879-903.

[20] Moeller, S., Schlingemann, P., and R. Stulz, 2004, "Firm Size and the Gains from Acquisitions", Journal of Financial Economics 73, 201-28.

[21] Puri, Manju and Zarutskie, Rebecca, 2011, On the lifecycle dynamics of venture-capital- and non-venture-capital-financed firms, *Journal of finance*, forthcoming.

[22] Ranko, Jelik and Wright, Mike, 2011, Exists, Performance, and Late Stage Private Equity: the Case of UK Management Buy-outs, *European Financial Management*, 17(3), 560-593.

[23] Sahlman, W, 1990, "The Structure and Governance of Venture Capital Organizations,Journal of Financial Economics 27, 421-473.

[24] Schwienbacher, A and P. Giot 2007, "IPOs, Trade Sales and Liquidations: Modelling Venture Capital Exits Using Survival Analysis," Journal of Banking Finance 31 (3), pp. 679-702.

[25] Schwienbacher, A. (2008). "Innovation and venture capital exits". Economic Journal 118, 1888-1916.

[26] Sorenson, O., Stuart, T. 2001, "Syndication networks and the spatial distribution of venture capital investments". American Journal of Sociology 106, 1546-1588.

[27] Spiegel, Matthew, and Tookes, Heather, 2007, Dynamic Competition, Innovation and Strategic Financing, *Working Paper, Yale University*.

[28] Stoughton, M. Neal, Wong, Kit Pong and Zechner, Josef, 2001, IPOs and Product Quality, *Journal of Business*, 74(3), 375-408.

Table 1: **Sample composition 1 -number of acquisition in the period 2000-2011**
PE-targets represent the acquisition of PE-backed firms, whereas non PE-targets concern acquisition of non PE-backed firms.

Acquisition Year	PE-targets	Non PE-targets	Total Acquisition
2000	6	25	31
2001	0	15	15
2002	4	52	56
2003	6	75	81
2004	19	125	144
2005	22	199	221
2006	23	210	233
2007	23	253	276
2008	6	130	136
2009	7	81	88
2010	15	139	154
2011	12	103	115
Total	**143**	**1407**	**1550**

Table 2: **Sample composition 2 -number of acquisition by acquirer country**
PE-targets represent the acquisition of PE-backed firms, whereas non PE-targets concern acquisition of non PE-backed firms.

Acquirer's country	PE-targets	Non PE-targets	Total Acquisition
Austria	1	4	5
Belgium	1	14	15
Switzerland	2	52	12
Germany	8	27	35
Spain	3	31	34
Finland	6	21	27
France	16	101	117
United Kingdom	83	253	1036
Italy	2	67	69
Netherlands	5	18	23
Norway	4	39	43
Poland	4	44	48
Sweden	8	78	86
Total	**143**	**1407**	**1550**

Table 3: **Descriptive Statistics**

The sample is acquisitions of private companies for the period 2000 - 2011, where the acquirers are European public companies and the targets are European private companies, differentiated by whether or not they are PE-backed. I present the characteristics of the transactions. A deal is classified as related if the target and the acquirer have the same 2-digit SIC code. a deal is qualified "'in-country"' if the acquirer firm and the target are located in the same country. I reports the characteristics of the acquirers. Q is the Ratio of the book value of acquirer's assets minus book value of equity plus market value of equity over the book value of assets.

	Mean	St. Dev	Minimum	Maximum
Full Sample				
Deal Characteristics				
Deals Value	46	191	0.04	3900
Relative size	6.1	132	.0	5090
Stock in payment	.44	.49	0	1
in-country	.98	.08	0	1
High-Tech Target	.3	.45	0	1
Related-Industry	.5	.51	0	1
Acquirer Characteristics				
Acquirer size	1330	4770	0	76700
Acquirer Leverage	-.15	12	-410	41.38
Acquirer Q	-68.95	899	-14700	158
non PE sub-sample				
Deal Characteristics				
Deals Value	37	139	0.04	3180
Relative size	2.51	24	0	774
Stock in payment	.43	.5	0	1
in-country	.99	.09	0	1
High-Tech Target	.28	.45	0	1
Related-Industry	.5	.5	0	1
Acquirer Characteristics				
Acquirer size	1320	4780	0	76700
Acquirer Leverage	-.17	13.61	-410	41.38
Acquirer Q	-76	948	-14775	158
PE sub-sample				
Deal Characteristics				
Deals Value	134	445	0.9	3900
Relative size	41	428	0	5090
Stock in payment	.38	.48	0	1
in countryr	.99	.08	0	1
High-Tech Target	.33	.47	0	1
Related-Industry	.51	.50	0	1
Acquirer Characteristics				
Acquirer size	1420	4780	.2	44500
Acquirer Leverage	-.01 20	2.07	-18.39	2.7
Acquirer Q	.2	2.64	-23.54	10

Table 4: **Cumulative Abnormal Returns of acquirer's investors for PE-backed and non PE-backed targets**

This table reports the cumulative abnormal returns (CAR) of acquirers firms around announcement dates for both PE and non PE-backed targets. The Wilcoxon z-statistic are reported and *** indicates significance at the 1%.

Event Windows	CAR for PE-backed targets	CAR for non PE-backed targets
Full sample	1.40%***	2.08%***
	(3.278)	(9.400)
Equity deals	1.00%	3.47%***
	(0.921)	(8.144)
Cash deals	1.76%***	1.14%***
	(3.065)	(4.258)
Related deals	0.7%*	2.70%***
	(1.839)	(7.824)
Unrelated deals	2.0%***	1.46%***
	(2.955)	(5.366)

Table 5: **The effect of acquisition of private firms on acquirer's CAR**

This table reports the cumulative abnormal returns (CAR) of acquirer's firms around the announcement date of PE and non PE-backed firms.acquisition The **We estimate our regressions using OLS with robust standards errors. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.**

CAR	(1)	(2)
PE dummy)	-.0123652**	
	(-1.79)	
stock	.0229482***	.023012***
	(3.86)	(3.86)
deal value	0.0000001	0.00000004
	(0.52)	(0.35)
relative size	0.0000005	0.0000007*
	(-1.39)	(-1.99)
acquirer's size	-0.00000009*	-0.00000009*
	(-1.79)	(-1.76)
leverage	.0003116***	.0003103***
	(8.22)	(7.99)
volatility	-.066277	-.0661364
	(-0.26)	(-0.26)
related deal	.0107437**	.0108428**
	(1.97)	(1.99)
cross border	.0056909	.0043459
	(0.25)	(0.19)
acq engh law	-.0326896***	-.0441201***
	(-3.57)	(-6.97)
acq fr law	.0014709	.0010541
	(0.22)	(0.15)
acq scand law	.0045635	.0038829
	(0.45)	(0.38)
acq gr law	.0226188	.0207477
	(1.28)	(1.17)
high tech sector dummy	-.0017979	-.001561
	(-0.28)	(-0.24)
crisis year dummy	.0051372	.0051837
	(0.68)	(0.68)
contant	.0044517	.0046589
	(0.19)	(0.20)
R-squared	0.0342	0.0322
Observations	928	928

Table 6: **The effect of acquisition announcement on acquirers's CAR for the PE backed target subsample**

This table reports the cumulative abnormal returns (CAR) of acquirers firms around the announcement date of PE backed target acquisition. The **We estimate our regressions using OLS with robust standards errors. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.**

CAR	(1)	(2)
stock	-.0172666	-.0001895
	(-1.20)	(-0.01)
deal value	-0.00000001**	-0.00000005
	(-2.24)	(-0.57)
relative size	-0.0000006*	0.0000002*
	(-1.78)	(-0.55)
acquirer's size	-0.00000004*	-0.00000008*
	(0.34)	(0.58)
leverage	.0061089**	.0012573
	(2.54)	(0.35)
acquirer Q)	.0159025***	
	(3.77)	
volatility	-.3763201	-.488599
	(-1.13)	(-2.57)
related deal	-.0143575	-.0287924**
	(-1.33)	(-2.21)
acq engh law	-.043632***	-.031272**
	(-3.30)	(-1.99)
acq fr law	.0288668	.0093212
	(1.51)	(0.49)
acq scand law	.0302291**	.0128991
	(2.22)	(0.74)
acq gr law	.0347811	.0175285
	(1.31)	(0.57)
high tech sector dummy	.0038781	.0038772
	(0.27)	(0.24)
crisis year dummy	-.0169561	-.0230598*
	(-1.55)	(-1.79)
contant	.0224757	.0355766
	(2.19)	(3.88)
R-squared	0.2907	0.1398
Observations	86	93