

International capital flows into private equity funds

Armin Schwienbacher

SAMENVATTING In this study the investment behavior of US institutional investors in selecting private equity funds is analyzed. The results show that, while this group of investors predominantly selected US funds, their interest in directly investing in foreign funds has increased over time. Insurance companies, financial corporations (banks), and public pension funds in the US are 'global players' that are likely to invest directly in foreign private equity funds. This conclusion holds for investments in European funds as well as for investments in Asia. More experienced funds providers are more likely to invest abroad, and when doing so they are more likely to invest in venture capital funds as opposed to buyout funds.

1 Introduction

Private equity (PE) has become an important asset class for a growing number of large institutional investors, such as insurance companies, banks, public and private pension funds, university endowments, and foundations.¹ These institutions tend to allocate up to 5% (sometimes more) of their capital to PE via limited partnerships that typically last at least 10 years

The author is assistant professor of Finance at the Universiteit van Amsterdam Business School and associate professor of Finance at the Université catholique de Louvain (Belgium). He teaches courses on venture capital and Entrepreneurial Finance. Dr. Schwienbacher obtained his PhD at the University of Namur (Belgium). His PhD dissertation focused on exit strategies of venture capitalists and was awarded the Best PhD Thesis prize in 2002 at the FMA European annual conference. In 2001-2002, he was a visiting scholar at the Haas School of Business, UC Berkeley. He has presented his research at many universities, financial institutions, and international conferences, and his work has been published in several international academic journals.

(Gompers and Lerner, 1996). Corporations also invest in venture capital (VC) funds or even set up their own PE vehicle.² At the same time, the private equity market is a highly intermediated one, in which managers of PE funds (so-called general partners, GPs) intermediate between investors (so-called limited partners, LPs) and portfolio companies. LP investments are based on a memorandum that states the types of investments the GP is expected to undertake according to industry type, geographical location, and stage of company development.

While most PE activities have taken place in the US (except perhaps for buyouts, which are also common in the UK), financial markets have become increasingly international, allowing institutional investors to diversify globally (Megginson, 2004). Also, recent trends in capital flow suggest a recovery of the main PE markets around the world. PE investors seem to have put aside the negative experience of the IT bubble burst, which led to a sharp decline in their interest in PE as an asset class. These trends raise important questions as to which PE funds will be able to re-attract sufficient capital, in the US but also abroad.³ Given the general trend towards global diversification, one might also expect important worldwide capital flows in PE funds as PE has become an important asset class of major institutional investors.

The first question addressed in the present study is: Which US limited partners invest abroad directly into funds, in particular European PE funds? In other words, which LPs are "global players", and which type of fund is more likely to attract international capital? The second question is: Are more-established fund providers more likely to invest in foreign funds? Since data were available for US LPs only, the analysis was refined by investigating US institutional fund providers. The results add to our understanding of the

types of institutional investors likely to seek global diversification through direct investments into international PE funds. For European funds, this information is particularly important since seeking capital from international investors is a critical component of long-term survival.

Little is known about how different types of institutional investors affect the supply of capital to the PE sector (exceptions include Lerner, Schoar and Wong, 2007, and Jeng and Wells, 2000), in particular in the international context of PE fund selection. However, certain types of investors are expected to be more prone than others to actively seek PE investments directly into funds. This is likely to be the case for LPs that already engage in global diversification for more traditional asset classes through direct (non-intermediated) investments. This provides them with a comparative advantage in accessing valuable information and selecting better investment opportunities directly. Specifically, financial institutions, such as insurance companies, banks, and pension funds, are assumed to have better direct access to PE funds internationally than other investors, such as corporations, university endowments, and governmental agencies. Moreover, the latter institutions may be constrained in that they typically pursue objectives other than pure profit maximization. Thus, the primary objective of this study is to test the hypothesis that financially related institutional investors (such as insurance companies, banks, and pension funds) are more likely than other types of institutions to act as global players in direct PE fund investments.

Direct investments into PE funds were examined by documenting the increased interest by US institutional investors in taking a global perspective for their investments in PE and thus in diversifying their portfolio by investing in foreign PE markets. The results show that insurance companies, financial corporations (banks), and public pension funds are indeed “global players” that are more likely to invest directly into foreign PE funds. This result holds for investments in European funds and for investments in Asia. Moreover, more-experienced fund providers are more likely to invest abroad, and when doing so they are more likely to invest in VC funds and less in private funds.

The present analysis is related to a number of other studies on PE, the more recent of which have focused on international markets. Others have taken a broad look at VC and PE markets outside the US as well as

issues pertaining to the legal environment, fund structures, and differences in contracting practices (e.g., Kaplan and Stromberg, 2003; Kaplan, Martel and Stromberg, 2006; and Lerner and Schoar, 2005).⁴ However, most of these studies on PE have largely focused on the relationship between VC funds and portfolio companies, rather than on the relationship between LPs and GPs. To our knowledge, no existing study examined so far the selection process of LPs for direct foreign PE fund investments.

Another strand of the literature that has emerged recently has examined diversification into alternative asset classes and the impact on international capital flows (Froot, O’Connell and Seasholes, 2001, and Froot and Teo, 2004). These studies have highlighted trends towards style investments that consider assets as classes, rather than focusing on individual investment opportunities (Wermers, 2002, and Barberis and Shleifer, 2003). Cumming, Fleming, and Schwienbacher (2005), however, indicated that PE fund managers often deviate from their promised “style” during the development of companies. This style-drift effect is most pronounced for well-established PE firms.

The remainder of the article is structured as follows. Section 2 describes the investment process of institutional investors in PE funds. Section 3 discusses data and sample issues. Section 4 provides stylized facts on the internationalization of the PE markets. Section 5 presents the study results. Section 6 concludes with final remarks and suggestions for avenues of future research.

2 Investment in PE funds by institutional investors

Given the growing amount of capital under management, institutional fund providers increasingly categorize their investments in asset classes in order to make investment decisions, as opposed to considering investment opportunities individually. Among other reasons, this allows providers to better assess and control their overall portfolio risk and to more easily designate comparable performance benchmarks for assessing the performance of each fund manager.

When considering investment in a fund, institutional investors evaluate funds along several dimensions according to which they aim at achieving diversification. For PE, these include industry focus, geographical span, and the stage of development of a portfolio com-

pany (e.g., whether it is a VC or buyout fund). Since institutional fund providers make investment decisions according to “classes,” it is critical that fund managers invest the committed capital in the defined style.

The relationship between fund providers and VC managers (GPs) is governed by the limited partnership agreement that stipulates the rights and duties of these managers. Given that fund providers are LPs and thus have little access to the day-to-day management of the fund, the inclusion of covenants that limit the VC manager’s behavior is critical to mitigating agency problems.⁵ A detailed empirical analysis of the covenants included in limited partnership agreements was provided by Gompers and Lerner (1996). Another important component of the relationship that affects the incentives of the VC manager is performance-based compensation. While the 2-20 rule has long been the standard (i.e., 2% management fee on managed capital plus 20% of profits for the VC manager), more recent agreements have varied in this respect (Gompers and Lerner, 1996; Litvak, 2004).

A few studies have sought to assess the performance of PE funds, but have acknowledged the difficulty in obtaining unbiased data (Kaplan and Schoar, 2005; Cochrane, 2005; Phalippou and Gottschalg, 2006; and Hege, Palomino and Schwienbacher, 2003). Various approaches have been adopted to correct for these biases. Nonetheless, among other findings, it was noted that, in Europe, the lack of sufficient risk-adjusted performance seems to have deterred the supply of VC, especially for early-stage investments. Moreover, buyout funds were found to provide better returns, although the perceived risk is lower than that of VC.

Lerner, Schoar, and Wong (2007) documented significant differences in the returns achieved by different institutional investors. In particular, they found that endowments realize about 14% higher returns than other LP types. A significant unexplained residual remained, however, even after controls for (among other things) differences in the risk profiles of funds. Moreover, the analysis of these authors did not allow concluding that endowments realize higher returns only because they have better access to well-established funds.

3 Data and sample selection

Data used for this analysis were taken from the Venture Economics database of Thomson Financials. The primary sample selection procedure was to draw

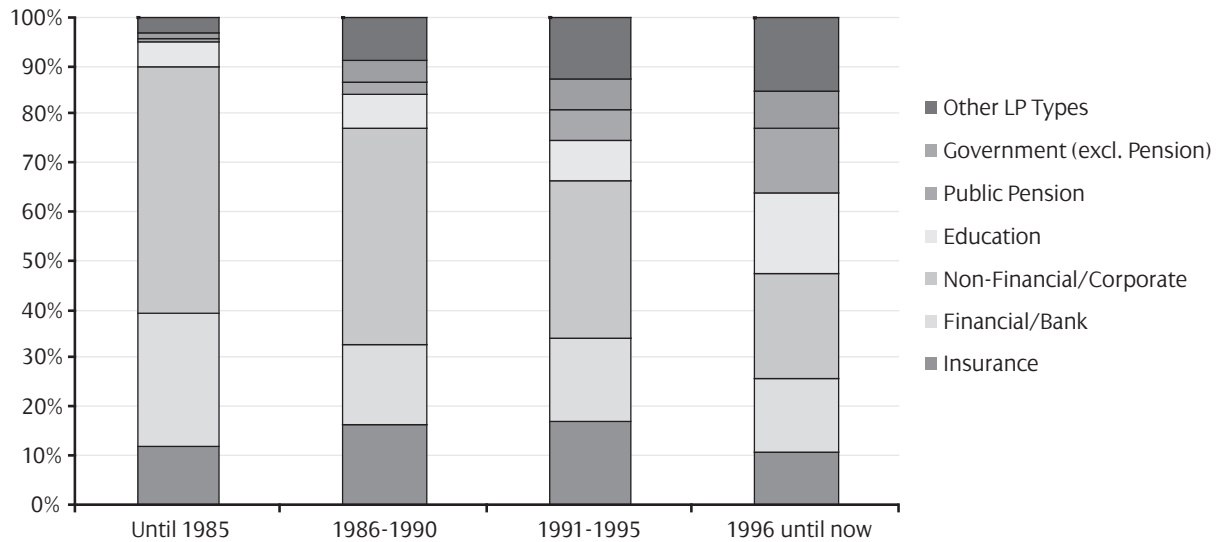
on the capital commitments (except for commitments into fund-of-funds) made by all of the US LPs included in the database. This comprised investments from 1960 until 2005 (based on vintage years), with proportionately more observations in the most recent years. The Venture Economics database is made up of most of the major US institutional investors investing in PE. The data consisted of information on LP type and experience and on GP fund type, size and experience. After several observations were eliminated due to incomplete information, the remaining sample comprised 4,119 transactions (LP-GP pairs), of which 284 were in non-US funds.

It should be noted that our sample consisted of only those investments in VC and buyout funds⁶ by US LPs in the Venture Economics that were made directly into funds. Consequently, this excluded all investments done by these same LPs in funds-of-funds, which may also invest a fraction of their capital into PE. A reliance on funds-of-funds may, in fact, be even more pronounced for international diversification, as LPs may know less about foreign GPs than about national ones and thus rely on funds-of-funds for international investments. Since it was not possible to control for this alternative investment strategy, an important limitation of this study is its exclusive focus on direct investments.

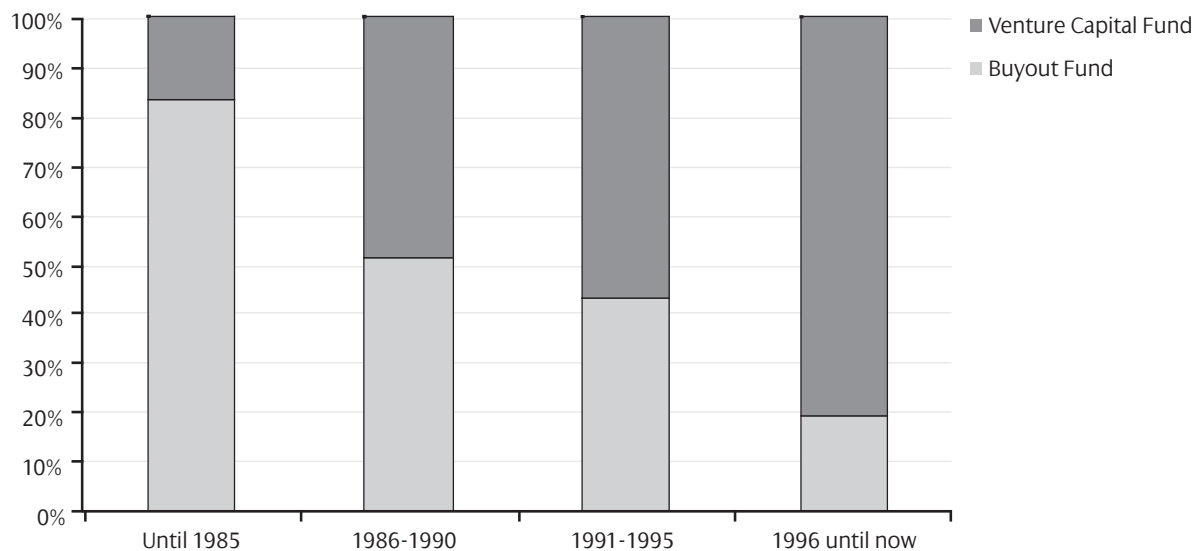
4 Internationalization of PE markets

This section describes developments in PE investments by US institutional investors over time and emphasizes current trends towards the internationalization of those investments.⁷

Figure 1 shows the trends in direct investments into PE funds over time by different types of LPs. It considers all the sample of fund investments based on vintage year (i.e., the year that the fund raised the capital). For each time interval, the relative importance of each type of LP is given in percent. As can be concluded from the figure, there has been an increase in public pension fund LPs (corporate pension funds are usually too small to play a meaningful role as LPs and are thus not included in this category). In the US, this phenomenon has been largely attributed to the legal changes that occurred in the late 1970s, which allowed pension funds to invest more in risky assets such as PE (Gompers and Lerner, 1999) and which triggered significant capital inflows throughout the 1980s and 1990s. Indeed, a reassessment in 1979 of the prudent man rule included in the Employee

Figure 1 Investments in US and non-US PE funds by US limited partners

The sample used in this figure comprised all investments in PE funds according to their vintage year (i.e., the year in which the fund raised the capital). For each considered time interval, the relative importance (in percent of total number of funds raised in each time period) of each type of LP is given.

Figure 2 Composition of investments in foreign PE funds by US LPs over time

The sample used in this figure comprised all investments in foreign PE funds by US LPs. The relative allocation to venture capital as opposed to buyout is shown. The proportions reported were based on the number of funds (i.e., not weighted by fund size).

Retirement Income Security Act (ERISA) made it possible for pension managers to improve diversification of their portfolio and thereby to allocate a small percentage to riskier assets such as PE. There is also weak evidence that reductions in capital gains taxation further contributed to the attractiveness of PE investments (Gompers and Lerner, 1999).

A positive trend is also observed for education-related LPs, which are essentially university endowments. Government-related LPs, such as state investment boards, have gained in importance over time as well. The increase in other types of LPs is largely attributable to the increased interest of foundations in PE vehicles as an alternative asset class. These various positive trends contrast with the constant reduction (in relative terms) of investments by non-financial LPs, i.e., corporations.

Figure 2 charts the investments in foreign PE funds by US LPs only and shows the relative allocation to VC as opposed to buyout. The proportions reported were based on the number of investments made and are therefore un-weighted values (weighting on the amount invested would give more weight to buyout funds). There is a clear trend towards VC funds (compared to buyout, but not in absolute terms), as the fraction of investments rose from 16.7% prior to 1985 to 80.6% for the period after 1995. The fraction allo-

cated to buyout decreased accordingly. This is in line with recent developments in new PE markets, and especially VC, in Europe and Asia. It contrasts with earlier days, when the buyout market received a large amount of capital due to its well-developed markets, which originated in the 1980s (especially in the UK⁸). The shift towards proportionately more VC investments started well before the late 1990s, when capital inflow into VC literally exploded in Europe and in Asia (but also in the US).

Table 1 provides summary statistics on two important sub-samples. Panel A highlights the fraction of LP investments in foreign LP funds during different time periods. The data indicate a positive trend over time, not only in percent but also in absolute number. In relative terms, the proportion of foreign investments over total investments increased from 6.9% before 1986 to 8.3% during the period after 1995. Panel B presents further insights into the developments over time of investments by LPs into foreign PE funds. With respect to the type of PE fund, most foreign investments have continued to be in private funds, and there are no obvious trends over time, either along this dimension or in the fraction of LP investments in European funds relative to other non-US funds (mainly Asian). Indeed, according to our sample, over 80% of foreign funds have gone to Europe.

Table 1: International Capital Flows into PE Funds by LPs

This table shows the developments in international capital flows of US private equity investors into non-US funds over time. It covers only direct investments into funds and therefore excludes investments through funds-of-funds.

	All Time Periods	Until 1985	1986-1990	1991-1995	After 1995
Panel A: Proportion of Investments in Non-US (Foreign) PE Funds Compared to Total Direct Investments by US LPs					
In percent	0.069	0.011	0.070	0.067	0.083
Number of observations in sample	284	6	43	44	191
Panel B: Proportion of Direct Investments in Non-US (Foreign) PE Funds by US LPs (from the sub-sample of all non-US funds that have received capital from at least one US LP)					
PE fund is "independent" (private)	0.799	1.000	0.837	0.614	0.827
PE fund has "financial" affiliation (e.g., to a bank)	0.180	0.000	0.163	0.250	0.173
Other fund types (e.g., corporate)	0.021	0.000	0.000	0.136	0.000
PE fund is located in Europe	0.820	0.833	0.767	0.682	0.864

5 Direct investments in foreign PE funds by US fund providers

The analysis provided in the previous section raises a number of questions that should be further investigated in a multivariate setting. As mentioned in the Introduction, the objectives of this study were to identify those LPs that can be considered as 'global players' and to determine whether more-experienced LPs are more inclined to invest abroad.

When the dependent variable is a dummy (0/1) variable, standard ordinary least squares (OLS) estimation is not appropriate. This was the case for most of our estimations. Therefore, the Logit regression was used instead. This regression is defined by the following estimation equation:

$$\text{Prob}(Y = 1) = \exp(b_0 + b_1 x_1 + b_2 x_2 + \dots + b_n x_n) / [1 + \exp(b_0 + b_1 x_1 + b_2 x_2 + \dots + b_n x_n)]$$

where $\text{Prob}(Y = 1)$ is the estimated probability that the dependent variable Y is equal to one. The explanatory variables ($x_1, x_2, \dots, x_n$) depend on the specification used (see Tables 2 and 3 for complete details).

In the analyses used herein, control variables for changed market conditions were included. The first variable was the natural logarithm of the Nasdaq Composite Index and the second was a dummy variable equal to one if the fund was raised after 1997. The third set of control variables consisted of year dummies based on the vintage year of the PE fund (i.e., the year in which the fund was set up).

5.1 Which types of LPs invest more often abroad?

Table 2 shows the estimation results from an analysis of the type of US LPs that are more inclined to invest in non-US (i.e., foreign) PE funds (see regressions 1-3). Insurance, financial, and public pension funds

Table 2: Investments in Foreign/European Private Equity Funds by US LPs

This table examines the LP types that are more likely to invest abroad. For regressions 1-3, the dependent variable is a dummy variable equal to one if the PE fund is not based in the US, and zero if it is. For regressions 4-6, the dependent variable is a dummy variable equal to one if the PE fund is based in Europe, and zero otherwise. All regressions are Logit regressions and include a constant, the coefficient of which is not reported. The first five explanatory variables are dummy variables equal to one if the LP is of the given institutional type, and zero otherwise. The variable "LP Experience" gives the number of times the LP had already invested in foreign PE funds so far (according to our database), while the variable "First-Time Investment by LP" is a dummy variable that was equal to one if it was the first investment for the given LP. Robust standard errors were used. Significance levels: *** 1%, ** 5%, * 10%.

Variables	Investment in Foreign Fund			Investment in European Fund		
	1	2	3)	4	5	6
Insurance	0.675 ***	0.668 ***	0.611 ***	0.542 **	0.534 **	0.493 **
Financial/Bank	0.674 ***	0.685 ***	0.764 ***	0.736 ***	0.742 ***	0.806 ***
Non-financial/Corporate	0.209	0.224	0.235	0.156	0.168	0.177
Educational	-0.418	-0.460	-0.426	-0.494	-0.525	-0.499
Public Pension	0.857 ***	0.886 ***	0.896 ***	0.994 ***	1.011 ***	1.020 ***
LP Experience	0.047 ***		0.117 ***	0.045 ***		0.098 ***
First-Time Investment by LP		-0.566 ***			-0.529 ***	
"LP Experience" squared			-0.002 ***			-0.002 **
LN (Nasdaq Composite Index)	-1.239 ***	-1.145 ***	-1.291 ***	-1.502 ***	-1.392 ***	-1.517 ***
Post-1997 Dummy	4.418 ***	4.130 ***	4.255 ***	4.861 ***	4.511 ***	4.741 ***
Vintage Year Dummies Included?	Yes	Yes	Yes	Yes	Yes	Yes
Number of Observations	4119	4119	4119	4119	4119	4119
LR chi-squared	158.39 ***	144.63 ***	170.42 ***	199.51 ***	180.77 ***	205.35 ***
Pseudo R-squared	9%	8%	10%	11%	1%	12%

were identified as the major global investors. In fact, their propensity to invest in foreign funds was remarkably similar. These results contrast with those for all other types of LPs, and are in line with the notion that financially oriented investors (i.e., insurance, banks, and pension funds) have a stronger preference for diversification, while educational institutions may have more mixed objectives beyond pure-profit maximization and thus potentially more constraints. Corporations invest for the purpose of obtaining access to a technology, which requires investing in firms that create the most innovative products. Given the advantages of areas such as Silicon Valley and Route 128, the US will naturally receive the bulk of corporate investments, with the remainder going to other innovation clusters located in various areas in Europe and Asia.

Regressions 4-6 examine investments in European funds more specifically. The results are very similar to the ones discussed for foreign funds. However, it should be noted that in this study's sample a very large fraction of foreign investments were in European funds so it is not surprising that the results are not fundamentally different from those of the previous analysis.

In order to investigate whether more experienced LPs are more likely to invest abroad, two different measures of experience were used. The first, denoted 'LP Experience', was the number of times the LP had already invested abroad in PE funds (according in our database). The second, denoted 'First-Time Investment by LP', was a dummy variable equal to one if it was the first investment for the given LP.

Table 3: Type of Foreign/ European Private Equity Funds Receiving Capital from US LPs

This table addresses the question which type of foreign/European funds are more likely to obtain capital from US LPs. Regressions 1-3 examine US funds, regressions 4-6 foreign funds, and regressions 7-9 European funds. Regressions 1-2, 4-5, and 7-8 are Logit regressions, while the others are OLS estimations. "Private Fund" is a dummy variable equal to one if the fund is independent (LP structure), and zero otherwise. "VC Fund" is a dummy variable equal to one if the fund primarily invested in VC, and zero if in buyout. "GP Experience" gives the sequence of the fund raised by the PE firm (i.e., whether it was the first fund, second fund, third fund...), and thus proxies the VC manager's experience. The first five explanatory variables are dummy variables equal to one if the LP is of the given institutional type, and zero otherwise. The variable "LP Experience" is the number of times the LP already invested in foreign PE funds so far, while the variable "First-Time Investment by LP" is a dummy variable that is equal to one if it is the first investment for the given LP. All regressions include a constant, the coefficient of which is not reported. Robust standard errors were used. Significance levels: *** 1%, ** 5%, and * 10%.

Variables	Regressions On Sub-Sample Of US Funds			Regressions on Sub-sample of Foreign Funds			Regressions on Sub-sample of European Funds		
	Private Fund	VC Fund	GP Experience	Private Fund	VC Fund	GP Experience	Private Fund	VC Fund	GP Experience
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Insurance	-0.435 **	0.083	-0.597 **	-0.603	-1.549 **	0.819	-1.297	-1.790 **	1.323 *
Financial/Bank	-0.151	0.107	-0.761 ***	-0.197	-1.155 *	-0.120	-1.042	-0.686	0.100
Non-Financial/Corporate	-0.160	0.225 **	-0.197	0.25	-0.714	0.242	0.365	-0.18	0.498
Educational	0.057	-0.163	0.042	-0.262	-0.464	0.499	0.333	0.088	0.667
Public Pension	0.057	-0.145	-0.133	0.756	-0.494	0.767	-0.377	-0.222	0.750
LP Experience	-0.056 ***	-0.024 ***	-0.022	-0.059 **	0.061 **	0.055	-0.011	0.055 *	0.033
LN (Nasdaq Composite Index)	0.370	-0.500 ***	-0.283	1.271	1.392	1.797	1.735	2.122	4.938 ***
Vintage Year Dummies Included?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of Observations	3835	3835	3835	284	284	284	233	233	233
LR chi-squared	356.55 ***	614.85 ***		43.06 ***	72.22 ***		29.91 ***	56.18 ***	
R-squared (for OLS)			21%			38%			52%
Pseudo R-squared	13%	17%		19%	34%		21%	31%	

Accordingly, opposite signs were expected from these two measures, due to the lack of experience of the latter proxies. The results provided in Table 2 strongly support the hypothesis that more experienced LPs are more likely to invest in foreign funds. This is in line with the idea that they may possess better information, contacts, and skills to evaluate and select funds. However, the results from the inclusion of a quadratic term (i.e., 'LP Experience' squared) suggest that the positive impact of LP experience decreases as LP experience increases.

5.2 Which foreign funds are more likely to attract US LPs?

The next question was aimed at determining the types of foreign funds that are more likely to be the target of foreign investments by US institutional investors investing funds abroad. Table 3 shows the multivariate regression results with respect to type of fund (private vs. other types and VC vs. buyout) and experience of the PE firm (denoted 'GP Experience'). GP experience was measured using the fund sequence of a firm's particular fund (i.e., whether it was the first fund, second fund, third fund...). This information is directly reported in Venture Economics, and is given per LP (irrespective of fund). Since this last variable was not a 0/1 variable, OLS estimations were carried out. Regressions 1-3 pertain to the sub-sample of investments into US funds, regressions 4-6 into foreign funds, and regressions 7-9 into European funds only.

The analysis, which controlled for market conditions (Nasdaq Composite Index and year dummies),⁹ indicated that most experienced LPs tend to invest less often in private funds than in any other fund type when investing in US and foreign funds. This is particularly true for foreign investments outside Europe, given that it was not significant for the sub-sample of European funds (regression 7). Moreover, more experienced LPs are less likely to invest in VC funds when investing in the US, in contrast to when they invest in Europe or in other countries.

6 Final remarks and future research

This article has documented the increased interest by US institutional investors in taking a global perspective for their investments in PE, and thus in diversifying their portfolio by investing in foreign PE markets. European and Asian funds have attracted some of this capital flow through direct investments. It remains possible, however, that US LPs investing in other con-

tinents invest through funds-of-funds. The focus of the present analysis was restricted to direct investments into PE funds in the US and abroad. Moreover, more-experienced fund providers are more likely to invest abroad, and when doing so they are more likely to invest in VC funds than in private funds.

This analysis raises a number of new questions that are worth investigation. One direct question concerns the true diversification of LP portfolios, even for direct investments. Since a number of PE funds themselves invest abroad (and mention in their prospectus that they aim at global investments), further diversification possibilities for fund providers are generated. In this context, LPs interested in international transactions have a choice between investing in a 'local' PE fund that focuses on international deals and investing in a foreign fund that focuses on its own "local" market. The choice of diversification strategy then depends on the relative comparative advantages of each type of fund in providing value-adding to their portfolio companies and thus higher returns to LPs.

A second avenue of research is related to actual returns accruing to fund providers. Studies pertaining to fund returns have not considered the differences between investments in national funds and those in foreign funds. For instance, at the portfolio company level, Hege et al. (2003) documented a strong performance gap between US and European VC investments. They also found no significant difference between US VCs investing in Europe and European VCs investing in Europe. However, if US VCs are not able to provide greater value-adding to European portfolio companies (compared to European VCs investing locally) do US institutional investors (LPs) have better access to best-performing European funds?

Private equity has grown worldwide as a viable asset class, and capital flows into PE funds strongly increased through the 1990s. While the burst of the IT bubble reduced the flow for a few years afterwards, recent developments (especially for buyout transactions) show strong renewed interest in PE investments worldwide. It therefore seems crucial to understand the behavior of fund providers and to be aware of which PE funds are more likely to attract newly available funds. ■

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Notes

- 1 In this article, private equity is defined as buyout and venture capital combined.
- 2 For instance, Siemens does both. It has its own venture capital funds and has also invested in various independent venture capital funds, such as Lightspeed Venture Partners, MedVenture Associates, and STAR Ventures (cf. www.siemensventurecapital.com/).
- 3 In a recent news release, Dow Jones VentureOne (published by VentureSource) reported that US venture capital funds raised nearly 25 billion dollars annually in 2005 and 2006 alone for venture capital. The average size of these newly raised funds has further increased. In 2006, 16% of them were valued at USD 500 million or more, and only 34% were smaller than USD 100 million. In Europe (EVCA Key Data), industry participants raised € 71.8 billion of new capital in 2005 (80% going to buyout funds) and € 27.4 billion the year before (65% buyout).
- 4 A more complete and recent overview of the different structures of PE funds and their international context was provided by Cumming, Fleming, and Schwienbacher (2007).
- 5 An instructive discussion of the benefits and limitations of the limited partnership structure of PE funds is provided in the Appendix of Lerner and Schoar (2004).
- 6 This excludes investments in other PE funds, such as those specialized in real estate or energy investments unrelated to VC or buyout transactions.
- 7 Megginson (2004) provides an excellent overview of the topic from an industry perspective more generally.
- 8 Indeed, many of the investments into buyout funds are into those located in the UK.
- 9 Here, the dummy variable 'Post-1997' was excluded due to collinearity problems during estimations of the sub-samples of foreign and European investments (Regressions 4-9). In order to make a comparison possible, this variable was also excluded from the three first regressions of the US sub-sample.