

On the heterogeneity of private equity investors

Preliminary and incomplete

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We conduct a comprehensive survey of private equity investors. To our knowledge, it is the largest to date in terms of number of respondents, geographical coverage and scope. Our goal is to explain investor heterogeneity. We focus on how investors' size, type (pension fund, family desk, etc.), location, experience, and compensation structure influence both investor's efforts and investor favoritism. We find that investor size is the dominant variable. Large investors exert more efforts and are favored by PE funds. Experience or investors' type play no role once size is taken into account. While preliminary, our results have clear implications for those investors that aim at entering this asset class. We are in the process of completing the data collection and of refining the analysis.

We are grateful to the many investors who provided us with the data. We especially thank James Bachman and Peter Cornelius for their help in designing the survey. Our research assistants provided invaluable help in collecting the data: Jan Peter Gabrielse, Marlon de Haas, Mark du Maine, Jacco Vogels, and especially Joris Hoendervangers and Yves Kessels.

1. Introduction

Lerner, Schoar and Wongsunwai (2007) show that different types of institutional investors achieve very different returns in Private Equity (PE). Endowments have the highest returns while banks have the lowest returns. This heterogeneity across investors' type is puzzling and Lerner et al. (2007) conjecture that these differences may be driven by three factors. They hypothesize that endowments may have lower employee turnover, steeper salary incentives, and less (or no) conflicting objectives (see also Lerner, Schoar and Wang, 2009).

In this paper, we provide evidence on investor heterogeneity by means of a survey (shown in the appendix). To our knowledge, it is the largest to date in terms of number of respondents, geographical coverage and scope. We obtain 157 responses from 30 different countries. We have 46 US respondents, 73 European respondents and 38 Asian respondents. We span all type of institutions, with an over-representation of fund-of-funds.

We divide the PE investment process into three dimensions. The first dimension is the investor's effort level. Effort level is measured by two indices, one based on variables relating to the intensity of the fund selection process (i.e. due diligence) and one based on variables relating to the intensity of fund monitoring. The second dimension is on investor activism. It is similar to investor's effort but we find that these two dimensions have relatively low correlation. There too, we use two proxies; whether the investor has ever refused to re-invest with a fund manager and whether the investor takes into account the investment decisions of other investors. We argue that the later variable measures the tendency to free-ride on other investor's due diligence. The third dimension captures investor favoritism by PE fund managers. We use three proxies: i) whether the investor obtains favorable contractual terms (regarding fees or covenants), ii) whether the investor has ever experienced some fund access restrictions and iii) whether the investor has ever been offered co-investment opportunities.

These three dimensions should eventually relate to performance and, as a result, shed light on the investor heterogeneity puzzle mentioned above.¹ To explain these three dimensions, we use a number of explanatory variables. First we use dummy variables for investor type. This is to replicate in a way the results of Lerner et al. (2007). We want to see whether efforts, activism and favoritism are related to the type of institutions (e.g. endowment, family desk). Second, we include variables mentioned by Lerner et al. (2007) as potential explanations. From our survey, we obtain a measure of employee turnover, conflicting goals and incentive pay. Third, we introduce a number of other explanatory variables that explain heterogeneity. We include investor size, experience, location (in a financial center or not), workload, decision process (majority voting or not) and hierarchy.

We find that investor size is the single most important characteristic. Larger investors engage in more intense due diligence and monitoring. Larger investors are more likely to refuse to re-invest in a fund and are less likely to free-ride on other investor's due diligence. Larger investors are also found to be significantly favored by PE funds, although we have the effect to be present only for favorable

¹ In our survey, we cannot obtain reliable responses from investors about their performance.

terms and conditions. However, size does not seem to confer an advantage for fund access and co-investment opportunities.

These results have important implications. They indicate that there may be significant economies of scale when investing in private equity. This implies that there are significant benefits for investors pooling resources either directly or via fund-of-funds. However, this pooling means an extra layer of fees (or costs) and investors thus face a trade-off. We document here the benefit side.

Our results therefore indicate that small investors could free ride on large investors by simply copying them. In practice, this is usually feasible because investment decisions of large investors are observable. We find, however, that small investors do not pay significant attention to the allocation of other investors.

In addition, a number of investors have recently contemplated entering this new asset and many have done so over the last 5 years. Oftentimes investors start with small allocations and increase little by little their allocation and staff. Our results warn that this strategy may be costly. The size advantage we document is equivalent to a barrier to entry for PE investors; thus one may start with a large commitment and a large and experienced team or do not start at all.

We are not aware of any study of LP investment practices with a similar scope and breadth. The most closely related studies is that of Groh and Liechtenstein (2009). They study how investors select Venture Capital funds, similar to what we do in the later part of the survey. They have a sample of 75 investors (predominantly funds-of-funds and Asset Managers from Europe and the US) and a 7% response rate. We have more than twice as many respondents and a higher response rate (18%). Importantly, our focus is different.

Some papers study and describe the relationship between PE investors (LPs) and PE fund managers (GPs). Gompers and Lerner (1996) describe the contracts between LP and GP. Metrick and Yasuda (2009) document and quantify the fee structure in buyout. Sahlman (1990) describes some agency problems in venture capital organizations and how the contracts and operating procedures have evolved in response. Kaplan and Stromberg (2009) provide an overview. Phalippou (2009) emphasizes the lack of incentive alignment between LPs and GPs, particularly in buyout.

The rest of the paper is organized as follows. Section 2 describes the data collection process, the coverage and the construction of our variables. Section 3 provides some preliminary empirical evidence on the link between investor characteristics and either investor efforts or investor favoritism. Section 4 provides some robustness checks we intend to run, and section 5 briefly concludes.

2. Data

We conduct an online survey of Private Equity (PE) investors, a.k.a Limited Partners (LPs). The survey instrument is provided in the Appendix. Our questions relate mostly to how investors carry their due diligence for their investments in PE funds, which are run by PE firms, a.k.a General Partners (GPs). In this section, we first describe how we contacted LPs, the response rate and an overview of the different questions we ask. Section 1.2 compares the characteristics of the respondents to that of the universe. Section 1.3 and 1.4 describe our dependent variables: investor effort index and favoritism index. Finally, section 1.5 describes our explanatory variables, i.e. investors' characteristics.

2.1. The survey

To construct our sample, we use the 2008 PEI directory of Limited Partners. We emailed 700 of the 1,100 non-US investors listed in the directory to introduce the survey and provide the website address. We also contacted 150 of the 1,200 US investors. We are currently contacting the remaining investors.²

After sending the email, we contacted each investor by phone to ask whether they received the email, intended to participate and had any questions. Investors who respond to the survey can leave their contact details and about half of them do so. For investors who left their contact details and did not answer some of the questions, we follow up by phone. Half of these investors completed the whole survey following this follow-up requests.

At the moment, we have 157 responses. This response rate of 18.3% is high for a survey, and particularly so for a demanding survey like ours.³ This suggests a significant interest in the investor community about learning how others perform due diligence.

The survey contains ten parts. In *Part 1*, we ask general questions about the investor's organization. In particular, we ask for the organization's type (e.g. pension fund), location of the main office, and foundation year. Next, we ask questions related to PE activity such as when they started investing in buyout and venture capital and how many fund advisory board sits they have.

Part 2 is dedicated to asset allocation and the number of investment professionals. In *Part 3*, we inquire about fund access. It is commonly thought that investors are sometimes not able to invest in certain funds, so we intend to see whether this is true.

Part 4 inquires about co-investment opportunities. We ask whether investors are offered such opportunities and how they perceive them. *Part 5* asks about the investment committee. We ask information about its working, composition and turnover.

² In addition, our survey was advertised in the United States by Burgiss LLC, a professional services company for private equity investors. In addition, the authors used their personal networks in the investor community to increase investor awareness of the survey.

³ The fraction of the questions that are answered is also high. The median respondent files 72% of the questionnaire.

Part 6 is dedicated to human resources and, more specifically, to the compensation of the PE professionals. We ask the relative importance of the fixed and variable part in investor compensation. *Part 7* asks about contracting issues. In particular, we assess to what extent different investors obtain different fees, and negotiate other contractual terms.

In Parts 8 and 9, we cover due diligence issues. We ask investors to rate the different criteria they may use when choosing funds. They also determine which one is the most important. We also ask how much time is spent on due diligence, why they invest (or not) in first-time funds, and whether they delegate part of this task to a consultant. We also look at why investors may have decided not to re-invest with a PE firm (if ever). Finally, part 10 asks how investors monitor PE funds.

2.2 Sample representativeness

Table 1 shows the breakdown of investors by type and compares it to the PEI directory population. Our sample is similar to the population. Two notable exceptions are our over-representation of funds-of-funds and a lower representation of corporate investors and asset managers.

We conjecture that funds-of-funds may find such our survey more important because due diligence is at the core of their business and because they can use this type of report for marketing purposes. We also notice the presence of both investors that have a long tradition of PE investing (like pension funds and endowments) and investors that are thought to be less familiar with this asset class (like family offices and banks).

Table 1

An outstanding feature of our study is that it provides a global perspective as it spans 23 different countries. Table 2 shows the sample composition and response rate by country. All the countries with large private equity markets are well covered: US, UK, Germany, Japan, Canada, The Netherlands and France. Interestingly, emerging markets like South Africa, South Korea and Mexico are also represented.

Table 2

A third dimension that is relevant to assess sample representativeness is investor size. Statistics related to size are shown in both Tables 1 and 2. Our median respondent has a PE allocation not significantly different to that of the median PE investor. However, we have fewer very large investors than there are in the population. As a result, the average PE allocation is smaller in our sample than in the population. It seems natural that investors for which portfolios are more tilted towards PE are more eager to answer this type of survey. In terms of total asset under management (not just PE), our respondents are smaller than the population.

We also look at differences in PE experience. The median starting year for PE investing is 1997 in the population and it is 1999 in our sample. Hence respondents are slightly less experienced than the median PE investor.

2.3 Investor effort

As mentioned in the introduction we want to capture the effort deployed by investors. Ideally, we would like to measure both efforts and skills but the later is difficult to observe. In a future version we plan to use a measure of experience and work background of the members of the investment committee that can be used as proxy of skills accumulated on the job.

We use four different measures of effort. The first two are indices of activities performed in the screening and monitoring of PE funds We build indices to not only obtain more accurate measures but also to avoid problems with missing answers. We assign a score of 1 or 0 for each variable and the index is simply the average score across all the questions that are answered. The indices we propose for investor effort could also be seen as a mix of effort and skills.

The Monitoring Index includes six components, each corresponding to one possible action by the LP: (i) monitoring the performance of the PE funds it invests in; (ii) tracking the portfolio of PE funds; (iii) tracking the cash flows of PE funds; (iv) visiting the fund's portfolio companies; (v) benchmarking the proposed contractual terms; and (vi) negotiate the proposed contractual terms.

The Due Diligence Hours Index includes three components, being whether the LP exerts an above or below median number of hours in its typical due diligence process. We consider differently the cases of due diligence for a first time PE fund, a seasoned PE fund, and the reinvestment in a fund raised by a GP in which the LP already invested. We obtain similar results if we use the average number of hours instead of dummy indicators.

We the use two dummy variables that look at specific actions. One is whether the LP has in the past decided to refuse re-investment in a PE fund. The idea is that refusing to re-invest requires an active approach to evaluate the performance of the previous fund. A passive investor may always re-invest Second, we look at whether the LP decides whether to invest in a fund based on the participation of other 'top LPs'. The idea is that relying on others' decision reflects a more passive attitude. In a future version we will also measure the intensity of such reliance on the presence of top LPs. In a future version we also plan to build an measure of activism on PE funds' advisory boards. These boards do not have the legal obligations and powers of those of listed companies, but allow LPs to discuss relevant issues with GPs and put pressure when there is disagreement. Since they require physical presence and preparation, they are clearly attended only by LPs who want to actively monitor their investments.

We display a correlation matrix for all the scores to see which one are most correlated.

Table 3

2.4 Investor favoritism

As mentioned in the introduction, a second dimension we want to capture is investor favoritism. We measure favoritism with three variables: fund access, co-investment invitations, favorable contractual terms by GPs.

2.4.1 Fund access

In the third part of the survey, we ask whether investors have ever been refused capital and if so, how often. It is frequently mentioned in the literature that many funds refuse capital. For example, Lerner et al. (2005) report that particularly so in venture capital, new and small investors would not be able to invest in the top tier funds and would have to invest with firms with less reputation. Yet, there is no empirical evidence on this. Hochberg et al. (2009) compare planned size versus actual size as a proxy. While potentially a good proxy for the cross-section, the average may not be informative of the real frequency of rationing. This is because investors may anticipate that the total commitments will exceed the actual size and so ask for more than they really want to. Or funds may target too low an amount to create some buzz. In addition, it is not easy to obtain clean data on planned and closing size.

We find that relatively few investors report that they ever got capital refused. There is a remarkably similar rate in buyout and venture capital. Only 10% of the investors report having faced a full refusal. The rate is the same in buyout in venture capital. For partial refusals, they seem more frequent in buyout, with 23% of the investors reporting so. In venture capital this figure is only 10%.

We build an indicator of fund access refusal that is equal to one if the LP experienced refusal by either buyout or venture funds in the past five years, and zero otherwise. In a future version we will exploit new data that also measures the extent of such refusals.

2.4.2 Co-investment opportunities

The PE literature has studied compensation contracts between LPs and GPs (Gompers and Lerner, 1996, and Metrick and Yasuda, 2009, Phalippou, 2009, Phalippou and Gottschalg, 2009). The literature has shown that fees in private equity are surprisingly large. The puzzle is particularly acute because the average performance of private equity funds is rather low. So discussions focus on why institutional investors accept large fees for low performance. However, an important aspect that has not been mentioned in the literature is the existence of co-investments by LPs.⁴ Co-investment means that a GP may invite an LP to co-invest with the fund without charging any fees. This can have a dramatic impact on fees and help explaining the puzzle mentioned above. Some investors may pay significantly less fees than documented in the literature because they do substantial co-investments.

Anecdotally, a large investor recently told one of the authors that the reason why they invested in the buyout funds raised at the pick of the buyout boom (2005-2007) was because if they would not have participated, the large private equity firms would not have invited them to co-invest

⁴ Partial exception is Phalippou (2009).

anymore. So it looks like co-investment is a sizeable carrot used by PE firms to reward or retaliate some of their investors.

Part 4 of the survey is dedicated to co-investments. Question 4.1 asks whether the investor has ever been offered a co-investment. 53% of the respondents say that they have. This is a remarkably large number, which shows how widespread this phenomenon is.

We build a simple indicator that measures whether the LP has been invited to co-invest in the past five years.

2.4.3 Favorable terms

We ask how often contract terms are negotiated. 43.7% of the investors often negotiate terms and only 13.5% never negotiate. This is in sharp contrast with the commonly held belief that PE contracts are a take-it-or-leave-it offer. It is frequently said that investors have to accept contracts they know do not align interests because they have no choice. It is possible however that investors often negotiate but these negotiations are only on small parts of the contracts.

We thus ask the terms that are most commonly negotiated. Fees are the most important item. Key man rules are also important (mentioned by 10% of the respondents). Interestingly, fund governance is mentioned only by a minority of investors. A few investors also mentioned limiting GPs' discretion over strategy, by constraining the diversification by region or industry, or by limiting the amount to be invested in a single company. A common way to influence fees is to obtain side letters.

A similar picture for the Most Favored Nation clause, which also covers the vast majority of the funds invested (on average of 81%, median 90%). More than two thirds of the investors either obtain one or both type of clauses.

This shows important inequalities across investors in terms of fees. Also the fact that an investor either obtain favorable terms for all funds or for none means that certain investors are identified as special in the private equity industry; or, that some investors are systematically more successful at obtaining favorable terms (although if true we would see more gradual variations).

We build an index which averages the use of Most Favored Nation clauses and side letters. In a future version we will employ additional data on the extent to which these terms are used by LPs.

2.5 Investor characteristics

As mentioned in the introduction, our objective is to see whether different types of investors exert different level of efforts or are favored differently by PE funds. A first set of characteristics are investor type as suggested by Lerner et al. (2007). We include eight investor types: pension funds, corporate investors, foundations and endowments, insurance companies and banks, government-owned investors, family offices, and others (including asset managers and secondary funds).

Next, we measure the three variables, Lerner et al. (2007) propose as explanation for the better performance of some investors: turnover, incentive pay and conflicting objectives. We measure

turnover by the percentage of members of an LP's investment committee that left the job in the five years to December 2008. In a future version we will use additional data to build a turnover measure for those LPs that have a autocratic decision process centered on one person. Incentive pay is measured by the presence of pay bonuses linked to the LP financial performance.

Next, we measure investors' size, both across all asset classes and PE. In the current version we only use the allocation to PE because of data limitation, but we plan to obtain more data on the overall amount under management in the future. We also identify the country in which the LP is headquartered. In the current version we assign each LP to a broad region: North America (Canada and US), Western Europe, Asia and Rest of the World. We plan to use more fine grained geographical controls in a future version.

Another important dimension is investor experience. We measure it by counting the number of years the LP has been investing buyout or venture funds. We are also compiling data on the number of years the LP has been investing in any asset class, and we will use this measure in future versions. We are also compiling data on the average experience and professional background of the members of the investment committee, to capture the set of skills and experience available to the LP.

We also want to capture the nature of decision making process within the investment committee. For this, we use a dummy variable that is one if decisions are taken by an investment committee with majority voting rule, zero otherwise. In future versions, we will link this to work on the optimal decision rule in committees.

Another dimension that is important in the decision making process is organizational structure, that contributes to how information is generated and processed. In the current version we take a very preliminary stab by including a measure of the proportion of investment committee members that have voting power, which we take as a measure of the degree of hierarchy within the LP. If only few members can vote, power is concentrated in few hands, while more people contribute to gathering information. In future versions we will elaborate on this notion, and add other measures of hierarchy.

We also plan to employ measures of workload, that we can measure both in terms of dollars per investment professional, as well as in number of PE funds per investment professions. The dollar measure is more common in the banking and mutual funds literatures, but in PE it can be argued that managing 100 millions investing in a single fund may be less demanding than investing 50 millions in five different funds.

A final characteristics we control for is the location of the LP. This may matter if location gives preferential access to information or networks. For this, we use a dummy variable that identifies financial centers, defined as a country's main financial city where a stock exchange is also located (for the US we employ the official list of stock exchanges provided on the SEC website).

In the future, we may include more variables. For example, we may measure what investors find important in due diligence. This may relate to size and effort/activism/favoritism. We need to need z-scores for each option. Also, the variance of the scores may provide a measure of confidence

3. Empirical results (preliminary)

We find that investor size is the single most important characteristic. Larger investors engage in more intense due diligence and monitoring. Larger investors are more likely to refuse to re-invest in a fund and are less likely to free-ride on other investor's due diligence. Larger investors are also found to be significantly favored by PE funds, although we have the effect to be present only for favorable terms and conditions. However, size does not seem to confer an advantage for fund access and co-investment opportunities.

Tables 4, 5 and 6 report results from linear and probit regression models for different sets of dependent variables. For each variable we present four specifications. The first column includes the variables used by Lerner et al. (2007), size (PE allocation) and the indicator for conflicting objectives (Conflicting goals); we also include the use of incentive pay to motivate PE professionals (Incentive pay). The next two columns include the dummy for whether the LP is located in a financial centre, and two measures of the decision making process within the investment committee (Hierarchy and Majority Voting). The last column also includes the measure of turnover at the Investment Committee. We include this variable only in the last specification because it causes a large drop in observations, even more than for the other investment committee variables.

Overall, we find that PE allocation positively and consistently affects investor effort. Size also decreases free riding on other investors, and appears to have a positive effect on the decision to refuse investment, as conjectured, though this effect is not precisely estimated in the current sample. We also find that large investors are favored by GPs with respect to contractual terms. Our results are at present not conclusive for the other measures of favoritism.

Interestingly, PE allocation appears to absorb any differences across investor categories. This is a novel and important result, that we hope to confirm with an enlarged dataset. Most of the additional explanatory variables that we have included on top of those proposed by Lerner et al. (2007) are also mostly insignificant, although often only marginally. We hope to be able to add more results on them as more data becomes available.

Table 4

Table 5

Table 6

4. Robustness

In future versions, we will perform a number of robustness tests. As of now, we have identified the following checks.

A first set of checks involve changing the sample.

- i. Delete those that outsource more than x%
- ii. Delete those we do not know if they outsource or not
- iii. Do both i and ii
- iv. Separate VC and BO investors
- v. Exclude tiny investors
- vi. US investors only
- vii. Exclude those investing more than x% in fund-of-funds
- viii. Exclude observations where less than xx% of the variables are missing in the index.

A second set of checks involve changing the definitions of the indices.

5. Conclusion

We conduct a comprehensive survey of private equity investors. To our knowledge, it is the largest to date in terms of number of respondents, geographical coverage and scope. Our goal is to provide a rigorous portrait of the average investor, and to document differences across investors. We focus on how investors' size, type (pension fund, family desk, etc.), location, experience, and compensation structure influence their actions. The actions we consider are investor's efforts and investor favoritism.

These results have important implications. They indicate that there may be significant economies of scale when investing in private equity. This implies that there are significant benefits for investors pooling resources either directly or via fund-of-funds. However, this pooling means an extra layer of fees (or costs) and investors thus face a trade-off. We document here the benefit side.

In terms of implications, our results indicate that small investors could free ride on large investors by simply copying them. In practice, this is usually feasible because investment decisions of large investors are observable. We find, however, that small investors do not pay significant attention to the allocation of other investors.

In addition, a number of investors have recently contemplated entering this new asset and many have done so over the last 5 years. Oftentimes investors start with small allocations and increase little by little their allocation and staff. Our results warn that this strategy may be costly. The size advantage we document is equivalent to a barrier to entry for PE investors; thus one may start with a large commitment and a large and experienced team or do not start at all.

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Table 1: Coverage by investor type

Panel A: Number and AUM of investors									
	Number observations			Median AUM (\$ millions)			Mean AUM (\$ millions)		
	Our sample	PEI directory	Coverage (%)	Our sample	PEI directory	Spread	Our sample	PEI directory	Spread
Fund-of-funds	33	244	14%	641	2,000	-1,359	2,718	14,096	-11,378
Pension fund	33	392	8%	779	4,215	-3,436	3,569	20,394	-16,825
Foundation & endowment	22	370	6%	83	772	-689	430	20,883	-20,453
Insurance	18	155	12%	412	18,694	-18,282	752	72,690	-71,938
Government	12	93	13%	400	4,591	-4,191	912	74,596	-73,684
Bank	11	289	4%	256	19,400	-19,144	440	135,538	-135,098
Family office	9	68	13%	275	2,000	-1,725	385	3,921	-3,536
Corporate	6	410	1%	66	5,700	-5,634	113	19,078	-18,965
Asset manager	6	394	2%	293	2,441	-2,148	250	63,762	-63,512
Other	7	14	64%	250	1,275	-1,025	643	11,887	-11,244
<i>Total</i>	<i>157</i>	<i>2,429</i>	<i>7%</i>	<i>346</i>	<i>6,109</i>	<i>-5,763</i>	<i>1,021</i>	<i>43,685</i>	<i>-42,663</i>

Panel B: PE allocation and experience of investors									
	Median PE allocation (\$ millions)			Mean PE allocation (\$ millions)			Median Year start PE investing		
	Our sample	PEI directory	Coverage (%)	Our sample	PEI directory	Coverage (%)	Our sample	PEI directory	Spread
Fund-of-funds	820	1,134	72%	1,510	9,709	16%	2001	1999	2
Pension fund	293	183	160%	2,330	1,124	207%	2000	1999	1
Foundation & endowment	92	77	119%	200	830	24%	1998	1995	3
Insurance	310	574	54%	399	1917	21%	1999	1996	3
Government	481	234	206%	537	11,176	5%	2001	1996	5
Bank	330	556	59%	938	8,980	10%	2000	1998	2
Family office	146	194	75%	146	257	57%	1998	1994	4
Corporate	115	216	53%	132	618	21%	2001	1997	4
Asset manager	357	650	55%	1,698	6,358	27%	2002	1997	5
Other	700	730	96%	677	3,202	21%	2002	1995	2
<i>Total</i>	<i>364</i>	<i>455</i>	<i>80%</i>	<i>857</i>	<i>4417</i>	<i>19%</i>	<i>2000</i>	<i>1997</i>	<i>3</i>

Table 2: Coverage by country

Panel A: Number and AUM of investors									
	Number observations			Median AUM (\$ millions)			Mean AUM (\$ millions)		
	Our sample	PEI directory	Coverage (%)	Our sample	PEI directory	Spread	Our sample	PEI directory	Spread
U.S.A	46	1,162	4%	320	2,400	2,080	1,585	42,768	41,183
Germany	17	85	20%	293	3,966	3,673	873	72,432	71,559
U.K.	16	201	8%	435	3,116	2,681	910	39,767	38,857
Japan	14	90	16%	443	14,532	14,089	717	87,983	87,266
Canada	10	70	14%	405	10,216	9,811	4,374	60,530	56,156
Netherlands	7	40	18%	293	4,977	4,684	2,927	35,498	32,571
France	5	51	10%	1,171	2,927	1,756	2,078	72,631	70,553
Spain	5	32	16%	300	18,482	18,182	464	110,956	110,492
Australia	5	99	5%	200	2,340	2,140	231	12,037	11,806
Austria	4	12	33%	176	20,492	20,316	164	43,704	43,540
Switzerland	4	66	6%	375	5,522	5,147	1,440	18,162	16,722
Sweden	4	28	14%	447	8,000	7,553	1,760	14,182	12,422
Denmark	4	35	11%	2,561	7,026	4,465	2,599	20,842	18,243
New Zealand	3	3	100%	275	NA	NA	275	NA	NA
South Korea	3	40	8%	55	6,792	6,737	55	56,735	56,680
Belgium	2	21	10%	37	6,294	6,257	37	40,745	40,708
Ireland	2	12	17%	1,111	30,884	29,773	1,111	79,491	78,380
Italy	1	37	3%	NA	4,977	NA	NA	59,754	NA
Finland	1	37	3%	3,366	2,913	-453	3,366	10,187	6,821
Norway	1	23	4%	389	2,655	2,266	389	39,277	38,888
Singapore	1	18	6%	NA	1,800	NA	NA	56,789	NA
South Africa	1	21	5%	121	7,472	7,351	121	24,044	23,923
Mexico	1	3	33%	220	2,220	2,000	220	4,220	4,000
<i>Total</i>	<i>157</i>	<i>2,186</i>	<i>7,2%</i>	<i>1,170</i>	<i>3,299</i>	<i>2,129</i>	<i>7,477</i>	<i>44,238</i>	<i>36,761</i>

Table 2: Coverage by country (continued)

Panel B: PE allocation and experience of investors									
	Median PE allocation (\$ millions)			Mean PE allocation (\$ millions)			Median Year start PE investing		
	Our sample	PEI directory	Spread	Our sample	PEI directory	Spread	Our sample	PEI directory	Spread
U.S.A	300	250	50	1,210	3,338	-2,128	1997	1994	3
Germany	293	871	-578	705	1,806	-1,101	2000	2001	-1
U.K.	458	237	221	1,261	4,607	-3,346	2001	1998	3
Japan	86	400	-314	556	9,353	-8,797	2000	1999	1
Canada	469	649	-180	1,632	2,761	-1,129	1999	2000	-1
Netherlands	168	263	-95	168	2,522	-2,354	2000	1997	3
France	NA	2,474	NA	NA	8,645	NA	1998	1998	0
Spain	585	578	7	615	578	37	2000	2002	-2
Australia	64	79	-15	64	995	-931	1998	2000	-2
Austria	212	286	-74	219	374	-155	2001	2001	0
Switzerland	350	403	-53	1,787	2,447	-660	2004	1997	7
Sweden	315	303	12	2,154	799	1,355	1996	2000	-4
Denmark	4,245	484	3,761	4,245	684	3,561	2001	2000	1
New Zealand	400	NA	NA	400	NA	NA	2003	2004	-1
South Korea	NA	90	NA	NA	1,431	NA	2002	2004	-2
Belgium	NA	410	NA	NA	38,246	NA	2000	1994	6
Ireland	801	590	211	801	494	307	2005	1996	9
Italy	2,196	146	2,050	2,196	395	1,801	1998	2001	-3
Finland	NA	229	NA	NA	519	NA	1989	1995	-6
Norway	106	137	-31	106	271	-165	2001	1997	4
Singapore	NA	227	NA	NA	2,628	NA	1983	1998	-15
South Africa	121	231	-110	121	1,005	-884	1985	1996	-11
Mexico	220	200	20	220	200	20	2006	1999	7
<i>Total</i>	<i>275</i>	<i>321</i>	<i>-46</i>	<i>457</i>	<i>359</i>	<i>98</i>	<i>1999</i>	<i>1999</i>	<i>0</i>

Table 3: Correlations

	First Funds	Seasoned Fund	Reinvestment			
First Funds	1.000					
Seasoned Fund	0.825	1.000				
Reinvestment	0.794	0.833	1.000			

	Sideletters	Most Preferred Nation				
Sideletters	1.000					
Most Preferred Nation	0.785	1.000				

	Monitor performance	Track portfolio	Track cash flows	Benchmark terms	Visit companies	Negotiate terms	
Monitor performance	1.000						
Track portfolio	0.353	1.000					
Track cash flows	0.007		1.000				
Benchmark terms	0.225	0/234	0.096	1.000			
Visit companies	0.246	0.124	-0.037	0.036	1.000		
Negotiate terms	0.074	0.122	0.048	0.336	0.157	1.000	

Table 4: Investor effort

Dep. variable	Time spent on due diligence				Monitoring intensity			
Financial centre			-0.101	0.057			-0.008	0.012
			(-0.514)	(0.255)			(-0.180)	(0.254)
Hierarchy			-0.137	0.299			0.137	0.160
			(-0.232)	(0.610)			(1.121)	(1.151)
Majority voting			-0.081	-0.004			-0.012	0.027
			(-0.510)	(-0.021)			(-0.251)	(0.589)
Incentive pay	-0.523**		-0.246	-0.201	-0.001		-0.006	-0.012
	(-2.533)		(-1.679)	(-0.974)	(-0.023)		(-0.136)	(-0.221)
Employee turnover				-0.217				-0.057
				(-0.434)				(-0.402)
Conflicting goal	-0.194		-0.117	-0.236	0.075*		0.069	0.047
	(-0.833)		(-0.647)	(-1.103)	(1.942)		(1.415)	(0.969)
Experience	-0.020		-0.002	-0.018	0.004		-0.000	0.000
	(-0.939)		(-0.139)	(-0.808)	(1.076)		(-0.009)	(0.009)
PE allocation	0.377***		0.144**	0.184***	0.023**		0.049***	0.052***
	(4.005)		(2.462)	(3.202)	(2.232)		(3.158)	(3.283)
Pension fund	-0.874*	-1.270**	-0.584	-0.116	-0.025		-0.093	-0.066
	(-1.837)	(-2.221)	(-1.446)	(-0.227)	(-0.230)		(-1.317)	(-0.603)
Corporate	0.271	0.375	0.449	0.287	0.042		-0.003	0.006
	-1,065	(1.395)	(1.455)	(1.214)	(0.359)		(-0.041)	(0.079)
Foundation/Endow.	-1.403**	-2.590***	-0.731*	-0.313	-0.211*		-0.238**	-0.050
	(-2.386)	(-2.745)	(-1.941)	(-0.541)	(-1.748)		(-2.576)	(-0.538)
Bank/Insurance	-0.547	-0.828*	-0.338	0.002	0.028		-0.113	-0.107
	(-1.475)	(-1.884)	(-0.993)	(0.003)	(0.301)		(-1.642)	(-1.006)
Government	-0.175	-0.441	0.009	0.698	0.201**		0.041	0.123*
	(-0.534)	(-1.158)	(0.028)	(0.664)	-2,232		(0.673)	(1.732)
Family Office	-0.898*	-0.403	-0.273	0.018	-0.128		-0.137**	-0.103
	(-1.723)	(-1.024)	(-0.778)	(0.039)	(-1.218)		(-2.031)	(-1.085)
Fund-of-Funds	-0.306	-0.707*	-0.190	-0.150	0.135*		0.001	0.012
	(-0.996)	(-1.907)	(-0.655)	(-0.363)	-1,655		(0.024)	(0.207)
North America	-0.228	-0.380	-0.180	-0.104	0.075		0.062	0.005
	(-0.754)	(-1.156)	(-0.879)	(-0.354)	(1,077)		(1.444)	(0.071)
Europe	-0.277	-0.644**	0.476	-0.352	0.128**		0.058	0.071
	(-1.002)	(-2.149)	(-1.487)	(-1.655)	(2,016)		(1.142)	(1.037)
N	82	70	47	39	130		88	60
Wald stat	45.34	42.69	3.64	--	49.03		4.02	3.08
p-value	0.000	0.000	0.000	--	0.000		0.000	0.002
Pseudo R-square	0.0452	0.1246	0.4395	0.5377	0.0067		0.3931	0.457

Table 5: Investor activism

Dep. variable	Refuse to re-invest				Free-ride on other investors			
Financial centre		0.054	-0.038			-0.867	0.031	
		(0.326)	(-0.166)			(-0.855)	(0.283)	
Hierarchy		0.156	0.391			-1,310	-0.442*	
		(0.383)	(0.987)			(-0.697)	(-2.014)	
Majority voting		0.078	-0.005			1,047	0.080	
		(0.499)	(-0.022)			(1,242)	(1.029)	
Incentive pay	-0.745	-0.089	0.147		-0.036	0.591	-0.165	
	(-1.076)	(-0.487)	(0.666)		(-0.307)	(0.819)	(-1.034)	
Employee turnover			-0.239				-0.022	
			(-0.472)				(-0.156)	
Conflicting goal	0.390	0.088	0.073		-0.062	-4.796***	0.274	
	(0.638)	(0.752)	(0.440)		(-0.582)	(-2.681)	(1.249)	
Experience	0.007	-0.012	-0.036**		-0.004	-0.089	0.018	
	(0.143)	(-0.690)	(-2.278)		(-0.546)	(-0.784)	(1.306)	
PE allocation	0.069	0.072	0.111*		-0.054*	-3.893***	-0.107**	
	(0.503)	(1.478)	(1.915)		(-1.926)	(-2.984)	(-2.215)	
Pension fund	0.990	0.853	0.459	1.121*	0.005	0.072	14.257**	-0.558**
	(1,154)	(0.795)	(1.115)	(1.787)	(0.008)	(0.317)	(2.375)	(-2.368)
Corporate	--	--	0.364	0.974*	0.216	0.048	-1.768*	-0.484
	--	--	(1.034)	(1.777)	(0.271)	(0.172)	(-1.728)	(-1.471)
Foundation/Endow.		-0.069	0.612	1.270*	0.034	0.021	--	-0.594**
		(-0.054)	(1.526)	(2.025)	(0.053)	(0.081)	--	(-2.147)
Bank/Insurance	1.559*	1.664*	0.317	0.992*	0.489	0.178	7.221**	-0.347*
	(1,739)	(1,767)	(0.915)	(1.833)	(0.819)	(0.746)	(2.456)	(-1.729)
Government	--	--	0.317	0.973*	--	0.292	--	-0.206
	--	--	(1.261)	(1.938)	--	(1.350)	--	(-1.575)
Family Office	--	--	0.427	1.028*	--	0.253	--	-0.313
	--	--	(1.160)	(1.935)	--	(1.086)	--	(-1.452)
Fund-of-Funds	0.482	0.087	0.204	0.546	0.218	0.149	5.005**	-0.217
	(0.614)	(1.033)	(0.556)	(1.211)	(0.380)	(0.738)	(2.426)	(-1.611)
North America	0.845	1.796**	0.210	0.299	-0.589	-0.042	-13.08***	-0.153
	(1,520)	(2.079)	(0.941)	-1,031	(-1.156)	(-0.468)	(-3.578)	(-1.140)
Europe	1.021*	1.018	0.167	0.092	-0.624	-0.018	-8.240***	-0.001
	(1,686)	(1,447)	(0.837)	(0.303)	(-1.186)	(-0.223)	(-4.462)	(-0.010)
N	58	47	41	34	90	88	46	49
Wald stat	6.96	7.20	--	--	2:46	1.23	2.32	0.64
p-value	0.324	0.707	--	--	0.930	0.2736	0.000	0.8358
Pseudo R-square	0.1032	0.215	0.317	0.5052	0.0408	0.1526	0.507	0.4084

Table 6: Investor favoritism

Panel A

Dep. variable	Favorable contractual terms				
Financial centre			-0.132 (-1.054)		-0.044 (-0.307)
Hierarchy			-0.017 (-0.055)		-0.146 (-0.482)
Majority voting			-0.062 (-0.619)		0.022 (0.197)
Incentive pay	0.262*** (2.076)	0.216 (1.679)	0.219* (1.986)		0.128 (1.009)
Employee turnover			-0.012 (-0.037)		0.192 (0.660)
Conflicting goal	-0.110 (-1.104)	-0.214* (-1.904)	-0.101 (-0.961)		-0.199* (-1.868)
Experience	0.002 (0.226)	0.005 (0.463)	-0.002 (-0.148)		0.002 (0.179)
PE allocation	0.074** (2.139)	0.085* (1.747)	0.140*** (4.303)		0.166*** (4.139)
Pension fund	0.033 (0.196)	0.069 (0.340)	-0.252 (-1.073)	-0.210 (-0.922)	-0.363 (-1.493)
Corporate	-0.341 (-1.566)	0.105 (0.671)	0.128 (0.797)	0.216 (0.795)	0.241 (0.995)
Foundation/Endow.	-0.251 (-1.295)	0.165 (0.723)	-0.332 (-1.194)	-0.104 (-0.357)	-0.288 (-1.007)
Bank/Insurance	-0.149 (-0.873)	0.197 (0.975)	-0.141 (-0.599)	0.022 (0.083)	-0.267 (-0.973)
Government	0.185 (0.958)	0.349 (1.656)	0.042 (0.198)	0.284 (1.235)	-0.014 (-0.063)
Family Office	-0.082 (-0.329)	0.131 (0.375)	-0.084 (-0.215)	0.037 (0.097)	-0.109 (-0.256)
Fund-of-Funds	0.191 (1,294)	0.268* (1.674)	0.054 (0.337)	0.190 (0.988)	0.036 (0.173)
North America	0.347*** (3,337)	0.350*** (2.887)	0.097 (1.062)	0.121 (0.848)	0.083 (0.593)
Europe	0.226** (2,145)	0.106 (1.183)	-0.080 (-0.661)	-0.107 (-0.933)	-0.094 (-0.746)
N	126	88	54	60	49
Wald stat	6.91	4.87	6.82	8.07	7.56
p-value	0.000	0.000	0.000	0.000	0.000
Pseudo R-square	0.243	0.368	0.502	0.6154	0.502

Panel B

Dep. variable	Experience fund access restrictions				
Financial centre				0.277 (1.642)	0.248 (1.052)
Hierarchy				-0.499 (-1.184)	-0.286 (-0.678)
Majority voting				0.268 (1.560)	0.302 (1.386)
Incentive pay		-0.011 (-0.088)	0.133 (0.974)	-0.069 (-0.396)	0.069 (0.317)
Employee turnover			-0.838** (-2.662)		-0.388 (-0.699)
Conflicting goal		-0.120 (-0.984)	-0.175 (-0.908)	-0.233 (-1.227)	-0.284 (-1.036)
Experience		-0.017* (-1.977)	-0.012 (-1.108)	-0.018* (-1.768)	-0.021 (-1.505)
PE allocation		0.077** (2.381)	0.059 (1.451)	0.035 (0.908)	0.045 (0.792)
Pension fund	0.322*** (3,086)	0.470*** (2.863)	0.556*** (3.076)	0.171 (1.079)	0.376 (1.618)
Corporate	0.109 (1,428)	0.204 (1.635)	0.755** (2.351)	0.185 (0.565)	0.634* (1.979)
Foundation/Endow.	0.352** (2,310)	0.604** (2.573)	0.762*** (3.126)	0.335 (1.655)	0.604* (1.982)
Bank/Insurance	0.327*** (2,834)	0.473*** (2.713)	0.755*** (3.187)	0.639** (2.799)	0.826** (2.616)
Government	0.286* (1,864)	0.306* (1.730)	0.181 (0.856)	0.153 (1.096)	0.171 (0.814)
Family Office	0.367 (1,647)	0.632** (2.165)	0.780** (2.159)	0.809** (2.281)	0.951* (2.031)
Fund-of-Funds	0.344*** (3,171)	0.355** (2.232)	0.400* (1.927)	0.392** (2.478)	0.392* (1.986)
North America	-0.159 (-1.300)	-0.097 (-0.741)	-0.338** (-2.514)	0.007 (0.029)	-0.094 (-0.237)
Europe	0.067 (0.604)	0.045 (0.364)	-0.260* (-1.944)	0.046 (0.265)	-0.062 (-0.251)
N	78	60	35	40	33
Wald stat	3.76	1.86	4.63	2.80	4.13
p-value	0.001	0.0619	0.001	0.0119	0.0042
Pseudo R-square	0.131	0.2966	0.5045	0.5227	0.6138

Panel C

Dep. variable	Offered co-investment opportunities				
Financial centre				0.251 (0.407)	0.976 (0.823)
Hierarchy				1,285 (0.673)	-0.080 (-0.033)
Majority voting				-0.214 (-0.501)	-0.167 (-0.230)
Incentive pay		1.139*** (2.981)	1.148** (2.155)	2.415** (2,329)	1,511 (1,220)
Employee turnover			-0.862 (-0.715)		1,513 (0.515)
Conflicting goal		0.029 (0.077)	-0.205 (-0.418)	-0.148 (-0.298)	-1,190 (-1.145)
Experience		0.003 (0.104)	0.121* (1.837)	0.093* -1,829	0.201* (1.781)
PE allocation		0.065 (0.667)	-0.184 (-1.468)	0.062 (0.370)	-0.278 (-0.532)
Pension fund	-0.140 (-0.283)	-0.156 (-0.217)	-7.414*** (-6.439)	-2.926*** (-2.631)	-- --
Corporate	-0.368 (-0.613)	0.256 (0.357)	-4.687*** (-4.436)	0.609 (0.534)	-5.012*** (-3.131)
Foundation/Endow.	-0.061 (-0.111)	1,048 (1.385)	-4.649*** (-3.504)	1,991 (1.367)	-5.655** (-2.501)
Bank/Insurance	0.131 (0.265)	1,042 (1.627)	-4.916*** (-4.299)	1,547 (1.458)	-5.847*** (-3.523)
Government	1,005 (1,357)	1.564* (1.931)	-4.987*** (-4.350)	1,613 -1,428	-5.558*** (-3.717)
Family Office	0.361 (0.481)	1,068 (1.167)	-5.125*** (-4.231)	1,288 (1.115)	-5.938*** (-3.541)
Fund-of-Funds	0.368 (0.682)	0.704 (1.099)	-4.486*** (-5.760)	1,471 (1.277)	-4.389*** (-3.394)
North America	0.821** (2,209)	0.787 (1.507)	0.383 (0.557)	1.942** -2,053	1,215 (1.344)
Europe	0.983*** (3,033)	0.862* (1.907)	1.269** (2.208)	1.951*** (3.067)	2.643** (2,348)
N	127	88	54	60	43
Wald stat	15.18	18.31	313.1	39.05	232.42
p-value	0.009	0.1462	0.001	0.0011	0.000
Pseudo R-square	0.1056	0.2197	0.4003	0.4675	0.3841

Appendix 1: The survey

There are 7 fixed menus that are offered with a drop down button:

Menu 1: [Select, 0, 1, 2, ..., 50, More than 50]

Menu 2: [Select, 0%, 1-10%, 10-20%,..., 90-99%, 100%]

Menu 3: [Select, 1980 and before, 1981, 1982,...,2008]

Menu 4: [Select, yes definitely, yes possibly, no, I do not know]

Menu 5: [Select, always, sometimes, never, I do not know]

Menu 6: [Select, largely irrelevant, somewhat important, very important, crucial]

Menu 7: [Select, use the NAV provided by the GP, compute your own fair value estimation of non-liquidated investments, look only at performance of liquidated investments]

Menu 8: radio button [yes, no]

If the “Other (please specify)” option is selected, then it opens a blank box to write in.

1. Organization characteristics

1.1 When was your firm created? If you feel uncomfortable with providing the exact year, please indicate a date range. [Open question]

1.2 What is the nature of your organization? [Public Pension Fund, Corporate Pension Fund, Corporate Investor, Family Office, Public Endowment, Private Endowment, Foundation, Insurance company, Bank, Government-owned bank, Asset manager, Fund-of-funds, Other]

1.3 In which city and country is the investment committee (or person making investment decisions) located? [Open question]

1.4 Have you ever invested in buyout funds? [Menu 8]

If yes:

1.4.1 In which year did your organization start investing in buyout funds? [Menu 3]

1.4.2 How many advisory boards of buyout funds does your organization currently sit on? [Menu 1]

If positive:

1.4.2.1 What proportion of the buyout funds’ advisory board meetings do you attend each year? [Menu 2]

1.5 Have you ever invested in venture capital funds? [Menu 8]

If yes:

1.5.1 In which year did your organization start investing in venture capital funds? [Menu 3]

1.5.2 How many advisory boards of venture capital funds does your organization currently sit on? [Menu 1]

If positive:

1.5.2.1 What proportion of the venture capital funds’ advisory board meetings do you attend each year? [Menu 2]

1.6 Does the team that manages buyout and venture capital investments also manages (multiple choices possible):

- . Real estate funds
- . Hedge funds
- . Debt instruments (e.g. mezzanine)
- . Direct co-investments

2. Allocation

Please fill in the following table. Please specify the currency you use [USD, Yen, Euro, GBP]

	2000	2008
	(or year you started to invest, if more recent)	
What was the amount (or range) of your organization Asset Under Management (not just PE) (in millions)?		
What was the amount (or range) of private equity funds under management at your organization?		
What was the amount (or range) of buyout investments under management at your organization (in millions)?		
What was the amount (or range) of venture capital investments under management at your organization (in millions)?		
What was the number of buyout funds directly held by your organization?		
What was the number of venture capital funds directly held by your organization?		
How many (full-time equivalent) investment professionals were working on these buyout and venture capital investments?		
What was the number of buyout and venture capital fund-of-funds directly held by your organization?		

3. Access to Funds

- 3.1 Over the last five years, what is the fraction of buyout funds for which you faced a **full refusal** of your capital commitment? [Menu 2]
- 3.2 Over the last five years, what is the fraction of buyout funds for which you faced a **partial refusal** of your capital commitment? [Menu 2]
- 3.3 Over the last five years, what is the fraction of venture capital funds for which you faced a **full refusal** of your capital commitment? [Menu 2]
- 3.4 Over the last five years, what is the fraction of venture capital funds for which you faced a **partial refusal** of your capital commitment? [Menu 2]
- 3.5 Over the last five years, have you refrained from offering a commitment to a buyout fund in which you would have liked to invest, because you expected a refusal? [Menu8]
If yes : 3.5.1 For how many funds? [Menu 1]
- 3.6 Over the last five years, have you refrained from offering a commitment to a buyout fund in which you would have liked to invest, because you expected a refusal? [Menu 8]
If yes : 3.6.1 For how many funds? [Menu 1]
- 3.7 In your experience, does investing in a fund give you priority over other investors when the GP raises subsequent funds? [Menu 5]
If yes:
Why do you think you get priority?
 - 3.7.1 If I would not re-invest, other investors would be suspicious and would not invest. [Menu 4]
 - 3.7.2 If the GP would not keep me in, I could replicate their strategy (myself or in cooperation with another GP). [Menu 4]
 - 3.7.3 Other reasons (please specify) [Open question]
- 3.8 If you think GPs constrain the size of their fund, why do you think they do so? [Open question]

4. Co-investments

- 4.1 Have you ever been offered a co-investment opportunity by a GP? [Menu 8]

If yes:

- 4.1.1 Which fraction of co-investment opportunities do you typically reject? [Menu 2]
- 4.1.2 What fraction of your PE portfolio was made of co-investment in 2008 (in value)? [Menu 2]
- 4.1.3 What are your firm's motivations for co-investing? (multiple choices possible)
 - . Improve performance before fees (we get invited to the best deals)
 - . Reduce total fees
 - . Customize portfolio (adjust exposure to country, industry...)
 - . Free-ride on GP due diligence
 - . Other (please specify)
- 4.1.4 Which of the above criteria is your firm's **main** motivation for co-investing?

5. Investment committee

5.1 Do you have an Investment Committee (IC)? [Menu 8]

If yes:

- 5.1.1.1 IC decisions are taken by [majority, consensus, other]
- 5.1.1.2 How many members did the IC have in 2008? [Menu 1]
- 5.1.1.3 How many members **with voting rights** did the IC have in 2008? [Menu 1]
- 5.1.1.4 How many members **with voting rights** did the IC have in 2003? [Menu 1]
- 5.1.1.5 How many IC members **with voting rights** left your organization between 2003 and 2008? [Menu 1]
- 5.1.1.6 How many professionals prepared due diligence in 2008? [Menu 1]
- 5.1.1.7 How many of these professionals also sat on the IC in 2008? [Menu 1]
- 5.1.1.8 Please fill in the following table for each IC member **with voting rights**: [age, year started working in PE, year started working in your organization, year joined the IC, professional background (consulting or corporate, finance, entrepreneur, other (please specify))].

If no:

- 5.1.2.1 What is the age of the person taking the investment decision? [Open question]
- 5.1.2.2 In what year did this person start working in PE? [Menu 3]
- 5.1.2.3 In what year did this person start working for your firm? [Menu 3]
- 5.1.2.4 How many people performed this job over the last 5 years? [Menu 1]

6. Human resources policy

6.1 Is part of the compensation of investment committee members directly related to financial performance? [Menu 8]

If yes:

- 6.1.1 Is such performance bonus larger than the fixed part of their compensation in a typical year? (This applies also to the person who makes investment decisions when there is not an investment committee) [Menu 8]

6.2 Do (some of) the investment professionals that do **not** sit on the investment committee receive a performance-related bonus? [Menu 8]

If yes:

- 6.2.1 Is such a performance bonus larger than the fixed part of their compensation in a typical year? [Menu 8]

6.3 Has the compensation policy changed over the last ten years? [Menu 8]

If yes:

- 6.3.1 Can you please briefly describe how? [Open question]

7. Contracting

- 7.1. Do you benchmark the contract between you and the GP? [Menu 8]
- 7.2. How much time do you spend on benchmarking the contract?
(full-time employee equivalent, number of days)
 - 7.2.1 Internally [Menu 1]
 - 7.2.2 Externally (consultants) [Menu 1]
- 7.3. Do you typically negotiate the contract terms? [Menu 5]
If always or sometimes:
 - 7.3.1 Which terms do you negotiate? [Open question]
- 7.4 Do you obtain side letters? [Menu 5]
If yes:
 - 7.4.1 For which fraction of the funds do you obtain side letters? [Menu 2]
- 7.5 Do you obtain 'most preferred nation' clauses? [Menu 5]
If yes:
 - 7.5.1 For which fraction of the funds do you invest in? [Menu 2]

8. Due diligence – General

- 8.1 Which pieces of information from GPs are crucial to your decision, i.e., you do not invest if you are not satisfied with them or do not obtain them? [Open question]
- 8.2 Do you (or your consultant) calculate your own aggregate performance measure based on the information you are provided with? [Menu 5]
- 8.3 Do you (or your consultant) benchmark GPs' track records? [Menu 5]
- 8.4. What do you (or your consultant) do to measure GP's past performance? [Menu 7]
- 8.5 Do you (or your consultant) interview the executives of the GP's portfolio companies?
[Menu 5]
- 8.6 Consider the set of funds for which you have received or requested a Private Placement Memorandum (PPM) over the last 5 years.
 - 8.6.1. What fraction went through due diligence? [Menu 2]
 - 8.6.2. What fraction did you financially commit to? [Menu 2]

9. Due diligence – Investing in funds

- 9.1 Do you invest in **first-time** funds? [Menu 4]
If no:
 - 9.1.1 Why? [Open question]
 - 9.1.2 Would you invest if their fees were lower? [Menu 8]
- If yes:
 - 9.1.3 What are your firm's reasons for investing in **first-time** funds? (multiple choices possible)
 - . Because there was a credible special LP
 - . Given our size we cannot discard all the first-time funds
 - . Because we do not always invest for performance reasons
 - . Because we expect these first time funds to outperform
 - . Because we get priority access to follow-up funds if that team is successful
 - . Because the GP's partners made a sizeable financial commitment to the fund
 - . Because with these funds we can obtain stricter covenants
 - . Because we do not have access to seasoned funds
 - . Because of the presence of a credible strategic partner
 - . Other reasons [please specify]
 - 9.1.4 Which of the above reasons is your firm's **main** one for investing in **first-time** funds?
 - 9.1.5 How many such funds have you invested in since 1998? [Menu 1]
 - 9.1.6 Consider the criteria that your firm **typically** uses to select a **first-time** fund. Please tell us about their importance. [Menu 6 for all the options below]
 - 9.1.6.01 Partners' previous successes in PE
 - 9.1.6.02 Partners' previous successes in non-PE jobs (e.g., consulting, finance, industry, entrepreneurs)

- 9.1.6.03 Partners' previous experience in working together
- 9.1.6.04 Partners' quality of education
- 9.1.6.05 Quality of the partners' network of contacts
- 9.1.6.06 The advisor/gatekeeper's opinion
- 9.1.6.07 The proposed investment strategy
- 9.1.6.08 Commitments to this fund by top LPs
- 9.1.6.09 The fund's size
- 9.1.6.10 The level and structure of fees
- 9.1.6.11 Whether the fund provides exposure to a certain industry/geography/stage
- 9.1.6.12 The opportunity to access follow-on funds
- 9.1.6.13 Whether the fund may generate business (profits) for other divisions of my organization
- 9.1.6.14 Co-investment opportunities
- 9.1.6.15 Other (please specify)
- 9.1.7 Which of the above criteria is the most important?
 - 9.1.8 Please indicate any other criteria that are crucial for your decision to invest in a **first-time** fund. [Open question]
 - 9.1.9 How much time is spent on the typical due diligence for a **first-time** fund (full time employee equivalent, number of days)? (NB: **Not** how long the due diligence process)
 - 9.1.9.1 Internally [Menu 1]
 - 9.1.9.2 Externally (consultants) [Menu 1]
 - 9.1.10 What proportion of your time is spent on quantitative (vs. qualitative) due diligence for a **first-time** GP's fund? [Menu 2]
- 9.2 Consider funds raised by seasoned GPs in which your firm had **not** previously invested. How many such funds have you invested in over the last ten years? [Menu 1]

If more than zero:

 - 9.2.1 Consider the criteria that your firm **typically** uses to select these funds. Please tell us about their importance. Menu 6 for all the options below
 - 9.2.1.01 The GP's reported aggregate IRR on previous funds
 - 9.2.1.02 The GP's reported aggregate multiples on previous funds
 - 9.2.1.03 Partners' quality of education
 - 9.2.1.04 Quality of the partners' network of contacts
 - 9.2.1.05 The GP's reputation
 - 9.2.1.06 Stability of the team at the partner level
 - 9.2.1.07 The advisor/gatekeeper's opinion
 - 9.2.1.08 The proposed investment strategy
 - 9.2.1.09 Commitments to this fund by top LPs
 - 9.2.1.10 The fund's size
 - 9.2.1.11 The change in fund size from previous funds
 - 9.2.1.12 The level and structure of fees
 - 9.2.1.13 Whether the fund provides exposure to a certain industry, geography, or stage
 - 9.2.1.14 The valuation of unrealized investments (NAVs) in previous funds
 - 9.2.1.15 Whether the fund may generate business (profits) for other divisions of my organization
 - 9.2.1.16 Co-investment opportunities
 - 9.2.1.17 Renewed commitment to this fund by its existing LPs
 - 9.2.1.18 Other
 - 9.2.2 Which of the above criteria is the most important?
 - 9.2.3 How much time is spent on the typical due diligence for a **seasoned** GP's fund (full time employee equivalent, number of days)? (NB: **Not** how long the due diligence process)
 - 9.2.3.1 Internally [Menu 1]
 - 9.2.3.2 Externally (consultants) [Menu 1]
 - 9.2.4 What proportion of your time is spent on quantitative (vs. qualitative) due diligence for a **seasoned** GP's fund? [Menu 2]
- 9.3 Consider **re-investing in a seasoned GP**. How many such funds have you invested in over the last ten years? [Menu 1]

If more than zero:

9.3.1 Consider the criteria your firm **typically** uses for this decision. Please tell us about their importance.

[Menu 6 for all the options below]

Same criteria as in 9.2.1, with three additional ones:

9.3.1.1 The syndicate/club co-investors in previous funds

9.3.1.2 The quality of the GP's reporting on our previous investments

9.3.1.3 Renewed commitment to this fund by its existing LPs

9.3.2 Which of the above criteria is the most important?

9.3.3 How much time is spent on the typical due diligence for **re-investing in a seasoned GP's fund** (full time employee equivalent, number of days)? (NB: **Not** how long the due diligence process)

9.3.3.1 Internally [Menu 1]

9.3.3.2 Externally (consultants) [Menu 1]

9.3.4 What proportion of your time is spent on quantitative (vs. qualitative) due diligence for a **re-investing in a seasoned GP's fund**? [Menu 2]

9.3.5 How often did you refuse to re-invest with a GP over the last 5 years? [Menu 2]

If more than zero:

9.3.5.1 Please evaluate the following reasons for not re-investing and indicate their frequency. [Menu 5 for all options]

9.3.5.1.1 The fund's size increased too much

9.3.5.1.2 The GP deviated from their original strategy

9.3.5.1.3 The GP's fees increased too much

9.3.5.1.4 The GP had charged excessive company fees

9.3.5.1.5 The GP's performance had been disappointing

9.3.5.1.6 Some key professionals/partners left the GP

9.3.5.1.7 Other reasons (please indicate)

9.4 Do you invest in foreign GPs? [Menu 8]

If yes:

9.4.1 How many directly held foreign GP funds did you have running at the end of 2008? [Menu 1]

9.4.2 Do you use local sources of intelligence when investing abroad? [Menu 8]

If yes:

9.4.2.1 Please describe these sources. [Open question]

9.5 If you outsource some of the due diligence process, could you please evaluate the following reasons:

. Lack of experience in PE investing [Menu 5]

. Outsourcing gives access to unique information [Menu 5]

. Other reasons (please specify) [Menu 5]

9.6 Has your firm changed its main investment criterion over the last ten years? [Menu 8]

10. Monitoring

10.1 Do you actively monitor performance in the PE Funds you invest in? [Menu 8]

If yes:

10.1.1 Can you please briefly describe how? [Open question]

10.2 Has your fund monitoring policy changed over the last ten years? [Menu 8]

If yes:

10.2.1 Can you please briefly describe how? [Open question]

10.3 Do you keep track of the composition of your PE portfolio in terms of industry/size/country? [Menu 8]

10.4 How much time is spent to keep track of the cash flows realized on each fund? (in days, full-time employee equivalent)

10.4.1 Internally [Menu 1]

10.4.2 Externally (consultants) [Menu 1]

10.5 Do you provide any services (or support) to the GPs whose funds you invest in? [Menu 8]

If yes:

10.5.1 Can you specify which ones? [Open question]

10.6 Do you visit portfolio companies? [Menu 5]