

Thomson Venture Economics (TVE™)

European Benchmark Performance Statistics

Produced in Co-operation with the European Private Equity
and Venture Capital Association (EVCA)

Frequently Asked Questions



An EVCA Statistics & Performance Working Group Paper

March 2005

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In association with



European Private Equity &
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Association

About EVCA

The European Private Equity and Venture Capital Association (EVCA) was established in 1983 and is based in Brussels. EVCA represents the European private equity sector and promotes the asset class both within Europe and throughout the world.

With over 925 members in Europe, EVCA's role includes representing the interests of the industry to regulators and standard setters, developing professional standards, providing industry research, professional development and forums facilitating interaction between its members and key industry participants including institutional investors, entrepreneurs, policy makers and academics.

EVCA's activities cover the whole range of private equity: venture capital (from seed and start-up to development capital), buyouts and buyins.

About Thomson Venture Economics

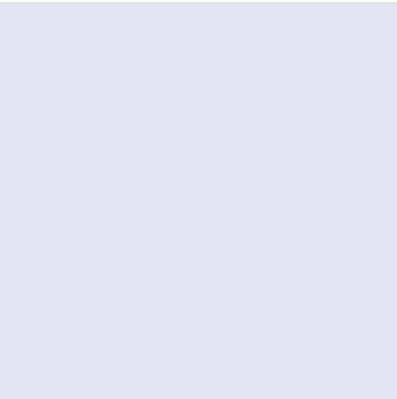
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Contents

1. Background on the European Benchmark Performance Statistics	3
2. Data Universe	4
3. Data Collection	6
4. Data Analysis	7
5. Presentation of the Data	9
6. Confidentiality	9
7. General	9
Appendix	10
Pan-European Survey of Performance - From Inception to 31 December 2003	



Background

1. Background on the European Benchmark Performance Statistics

What are the TVE™ Performance Statistics Benchmarks?

Thomson Venture Economics (TVE), a division of Thomson Financial, produces and publishes the industry-standard performance statistics for the private equity/venture capital industry. The performance statistics are based on net internal rates of return (IRR) calculated by Thomson Venture Economics (TVE) from cash flows contributed by industry participants.

How can the Performance Statistics Benchmarks be used?

The benchmarks are widely used for fundraising, portfolio monitoring and asset allocation. As the industry standard, these benchmarks enable General Partners (GPs) and Limited Partners (LPs) alike to manage and monitor their performance. The benchmarks also provide critical visibility to the asset class further enabling not only industry participants, but other key stakeholders and industry observers to understand the private equity/venture capital industry at large and compare performance against other asset classes.

Who produces them?

TVE has been producing the European Benchmarks Performance Statistics since 1997 with the full co-operation of EVCA. The European Benchmarks Performance Statistics are currently produced on an annual basis. TVE has also produced US Performance Benchmarks quarterly with the full co-operation of the National Venture Capital Association since 1988.

What is the TVE benchmarking approach?

TVE currently produces performance figures for both the US and Europe, using a consistent methodology and providing a comprehensive view of the global industry. TVE calculates net IRRs directly from cash flows and Net Asset Values (NAVs) provided by both GPs and LPs.

Data Universe

2. Data Universe

How is the sample derived?

The universe of potential contributors is identified from the private equity and venture capital firms researched and included in the TVE VentureXpert™ database. A team of dedicated research analysts update the TVE database daily to ensure accuracy and completeness. EVCA and TVE regularly reconcile contact information to validate the survey universe.

Is the performance data only collected from EVCA members?

The performance data is collected from the largest sample of the European private equity and venture capital universe possible. Data is collected from both GPs and LPs. The data covers private equity/venture capital funds managed by GPs located in Europe, or investing in Europe, irrespective of EVCA or national trade association membership.

Which countries are included as “Europe” in the Performance Statistics Benchmarks?

“Europe” is defined by the list of 28 countries currently covered in the EVCA Annual Survey of Pan-European Private Equity and Venture Capital, which captures fundraising, investment and divestment activity¹.

Which funds are included in the data sample?

The included funds are ones in which the GPs:

- Invest primarily in private companies.
- Conduct direct investments.
- Use mainly equity financial instruments for investments.

Vehicles managed by the GP may be:

- Private or listed
- Fixed life closed-ended, evergreen or open-ended
- Independent or captive.

How many funds/firms are included in the data sample?

As of March 2005, the European data sample consisted of over 949 funds formed between 1980 and 2004 (including 911 mature funds²) representing over €159.4bn of committed capital. Each year, the number of funds and capital under management included in the TVE data population has increased.

¹ Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Norway, Poland, Portugal, Slovakia, Spain, Sweden, Switzerland, The Netherlands, United Kingdom. Extra countries only covered since 2000: Bulgaria, Croatia, Estonia, Latvia, Lithuania, Romania, Slovenia. Country covered since 2004: Cyprus.

² Mature funds are those having two years of activity, which mitigates the “j-curve” effect when benchmarking.

Does this include all funds or only “mature” funds?

In the past, “mature” funds were defined as more than 2 years for venture capital and buyout funds. Following the boom of the late 1990s, those restrictions were removed and in the early 2000s, all funds were included. This methodology was adapted to reflect the change in the marketplace and to ensure globally consistent methodology is applied.

What happens if a GP or LP who did not report on a fund originally wants to do so later?

TVE maintains an “open” historical data population, meaning that GPs of funds that do not respond initially can participate later and can always be included in the data population. This ensures that TVE always captures the most robust information for all vintages.

Why is this “open” historical data population method used?

TVE seeks to build the most complete data population possible. This method can most accurately be compared to a census rather than a statistically representative sample of the overall universe. This approach is more labour intensive than sampling a statistically relevant sub-set of the data population. However, it is difficult to apply a statistical sampling method to the private equity asset class, which is heterogeneous and constantly evolving and in which succeeding funds managed by a given GP tend to perform differently than their respective peer group.

What is the representativity of the European data sample?

The coverage for the early vintage years (1979 through 1986) is lower than average given that the performance survey data collection only began in 1996. Most of those funds were already closed by that time and few general partners provided the historical data for those funds. For the vintage years from 1987 to 1999, the coverage in terms of number of funds averaged 51% and by capital under management, 77%. However, for the most recent vintages (2000-2003) the numbers are understandably lower given the fact that GPs are less likely to provide performance figures on funds in the first few years of existence as those figures, due to the j-curve effect, are normally negative. That said, the data population today is well represented by young funds and continues to improve. External experts who review the Performance Statistics Benchmarks on a periodic basis consider the representativity of the data population excellent. Such experts have confirmed that the quality of the data and the robustness of the TVE methodology leads to a reliable set of data which allows both GPs and LPs to benchmark their performance against that of the entire private equity sector, segments of the industry or other asset classes.

How can one help to further improve the representativity of the data sample?

Going forward both TVE and EVCA will focus on increasing the participation of smaller and early stage funds, improving the coverage in France and Germany and securing a higher response from companies with captive funds, evergreen funds and open-ended funds. EVCA encourages GPs to participate and LPs to contribute and encourage their GPs to participate in the data collection.

Data Collection

3. Data Collection

How is the data collected?

Data is collected from two primary sources: GPs and LPs. The majority of the European data is collected directly from GPs by TVE via two mechanisms: paper-based questionnaires sent via e-mail, fax or postal mail and a PDF questionnaire sent via e-mail and accessible on the EVCA website.

Wouldn't it be easier for the fund managers to send financial statements rather than filling out a survey?

The survey questionnaire is relatively short and straightforward. In addition, after participating once, respondents receive a pre-populated questionnaire for update and approval. Financial documents provide an extremely useful supplement to the questionnaire. However, they cannot be used as a replacement given the difficulties with regard to standardization in reporting, management fees (i.e. capitalized or expensed), and carried interest deduction from the net asset value reported on the basis of future exits. In the US, fund managers are asked to provide supplemental financial statements to enable TVE to verify the questionnaire response and the same may be done for Europe in the future.

Are there any new developments to make it easier for fund managers to respond?

Many respondents have indicated that an online questionnaire would be more efficient and secure. As a result, TVE is developing an online questionnaire. TVE has also recently put considerable resources into its London based team to enable closer proximity to the European private equity community. This proximity, combined with a stronger cooperation with EVCA, will help to improve the effectiveness of the process.

Data Analysis

4. Data Analysis

How are the Performance Statistics Benchmarks calculated?

The primary method used for measuring performance is based on net IRRs, calculated from cash flows and net asset values. While there are generally accepted industry guidelines for the valuation of assets in Europe³, applications of these methods can vary. The Performance Statistics Benchmarks are based on net internal rates of return (IRR) calculated by TVE from cash flows provided directly by GPs and LPs. This approach of calculating returns directly from the cash flows and the net asset values allows for the most consistent and accurate IRR figures as all returns are calculated on the same basis.

What quality assurance is taken to ensure that the fund cash flow data is accurate?

In order to ensure that accurate and valid statistics are generated from the database, a series of rigorous checks are performed by TVE to identify anomalies in the output data. These checks are of both a quantitative as well as heuristic nature. Most checks are automated but many qualitative validations are performed manually by senior members of the TVE team. TVE contacts respondents whose performance appears to be uncharacteristic to check and verify the data. Any uncharacteristic responses that are not verified or any forms that are not complete are not included in the sample.

What data is used to calculate the IRRs?

- Cash flows into a fund
- Cash flows out of a fund
- Net Asset Value at the end of the reporting period.

What types of IRRs are calculated?

TVE calculates three main types of IRRs: cumulative return from inception, horizon returns and time-weighted returns.

The cumulative return since inception is an IRR calculation from the inception of the fund to a certain reporting time period. It takes into account all of the inflows and outflows in the calculation.

The horizon return is an IRR calculation between points in time where the beginning point is variable and the end point is fixed. An example would be the 3, 5, and 10 year returns ending 12/31/99, with 12/31/99 as the end point.

The time-weighted return is calculated by calculating the rate of return between two or more periods and multiplying those returns together geometrically, then taking a geometric mean of the result. It is an approximation of the IRR.

³ *EVCA Valuation Guidelines (March 2001), AFIC Valuation and Reporting Guidelines (December 2002) and BVCA Reporting and Valuation Guidelines (December 2003). Unified international private equity and venture capital valuation guidelines have recently been agreed upon with application as of the reporting period starting January 2005.*

What about the role of multiples?

Multiples are necessary when interpreting indices based on IRRs. If one compares two funds, the fund returning money to the investors earlier will have a higher IRR, but due to the short holding period, may produce a lower multiple. Utilizing a combination of the two categories of indicators, IRRs and multiples provides a good understanding of the relative performance of funds and therefore allow performance measuring of general partners.

What types of multiples are used?

The following multiples are currently presented in the Performance Statistics Benchmarks produced by TVE:

- **Distribution to paid-in (DPI)**

The DPI measures the cumulative distributions returned to investors as a proportion of the cumulative paid-in capital. DPI is net of fees and carried interest. This is also often called the “cash-on-cash return”. This is a relative measure of the funds’ *realised* return on investment.

- **Residual Value to paid-in (RVPI)**

The residual value is the estimated value of the assets of the fund, net of fees and carried-interest. The RVPI measures the value of the investors’ interests held within the fund, relative to the cumulative paid-in capital. RVPI is net of fees and carried interest. This is a measure of the funds’ *unrealised* return on investment.

- **Total Value to Paid-In (TVPI)**

TVPI is the sum of the DPI and RVPI. TVPI is net of fees and carried interest.

What about the NAV?

Reported NAV results from the valuation of the remaining portfolio conducted by the GPs, net of management fees and carried interest. The relative significance of asset valuation in the IRRs remains cause for discussion, particularly as the NAVs are subjective as they are reported by respondents using a variety of methods. Ongoing discussions on accounting standards around the world have pushed the development of reporting based on the fair value of financial instruments, including non-quoted assets.

What about the impact of currency on the Performance Statistics Benchmarks?

The Performance Statistics Benchmarks published by TVE for Europe are calculated in euro. Although the adoption of the euro has reduced significantly the currency issue, it is also true that the exchange rates euro/Pound Sterling and euro/US dollar still play an important role. As a matter of example, the following gives an idea of the impact of the evolution of the exchange rate on the performance of the funds end 2001 formed 1980 to 2001: 10.5% in euro; 11.5% in Pound Sterling and 9.9% in US dollars.

Data Presentation

5. Presentation of the Data

How is the data segmented in the Performance Statistics Benchmarks?

For the production of the Performance Statistics Benchmarks as well as for other TVE product offerings, TVE segments the data according to classifications commonly used by GPs and LPs.

In summary these are:

- Stage of development of the companies targeted by the fund (early stage, development, balanced, buyout, generalist)
- Country focus (specific country, pan-European, global)
- Industry focus
- Size of the funds
- Vintage years of the funds
- Initial versus follow-on funds
- Country location of the general partner

Confidentiality

6. Confidentiality

Is the data contributed for purposes of Performance Statistics Benchmarks kept confidential?

All information contributed for purpose of producing the Performance Statistics Benchmarks is held strictly confidential and is only ever published in aggregated form. Clear and strict procedures are utilized within TVE in order to protect the confidentiality of the data.

Does EVCA have access to the individual fund data or cash flows?

EVCA does not have access to individual fund data and cash flows of funds disclosed to TVE.

General

7. General

How is the process and methodology monitored?

The process and analytics for creating the Performance Statistics Benchmarks have been institutionalized within TVE and are monitored on an ongoing basis. TVE has both internal and third-party processes in place for monitoring both the process and the quality of the data. TVE and EVCA also review the methodology and process on an ongoing basis to identify any possible areas for change and/or improvement.

Appendix

Pan-European Survey of Performance - From Inception to 31 December 2003

These are the main findings of the 2004 Pan-European Investment Benchmarks Study, which is carried out each year by Thomson Venture Economics with the full cooperation of the European Private Equity and Venture Capital Association (EVCA). All private equity performance terminology has been referenced at the end of this publication. This year, the performance sample consists of 881 funds (including 830 mature funds). The 881 funds represent €158.7bn of committed capital.

Executive summary

Since inception to 31 December 2003, the pooled IRR has been 9.9% for the 881 responding private equity funds, with a 7.2% return for venture funds and 12.2% return for buyout funds.

The Pooled IRR of the top quarter was 24.3% at the end of 2003 while the Pooled IRR of the top half was 15.5%. The two rankings (top quarter, and top half) generated higher returns for buyouts than for venture with a Pooled IRR of the top quarter at 30.2% for buyouts and 19.7% for venture, and a Pooled IRR of the top half at 22.2% for buyouts and 13.8% for venture.

The best performing funds in the sample are the large funds (those funds having a fund size of €100m to €250m for venture and of €500m to €1bn for buyouts). However, mega funds (fund size of more than €250m for venture and of more than €1bn for buyouts) performed quite low as most of these were formed in the last few years, thereby experiencing the J-curve effect.

Due to the difficult macroeconomic environment and the decrease in exit opportunities, the Five-Year Rolling IRR for both venture and buyouts are showing a decline. Long-term private equity returns continue to exceed the performance of the public markets as proven by both cumulative IRRs and ten-year Horizon IRRs.

Overall results

Since inception to 31 December 2003, the Pooled IRR has been 9.9% for the 881 responding private equity funds, with a 7.2% for venture and 12.2% for buyouts.

Returns since inception for all funds vary across the board with Pooled IRRs covering a range between 1.9% for early stage to 12.2% for buyouts. In terms of multiples, the total value to paid in (TVPI) was 1.31. Of this 54.2% has already been distributed to investors, while 46.6% is unrealised.

Figure 1: Annualised Pooled IRR since inception to 31 December 2003 (Funds formed 1980-2003)

Stage	No. of Funds	Pooled IRR	Multiples			Multiples (as % of TVPI)		
			DPI	RVPI	TVPI	DPI	RVPI	TVPI
Early Stage	229	1.9	0.43	0.63	1.06	40.6	59.4	100.0
Development	161	9.0	0.79	0.69	1.48	53.4	46.6	100.0
Balanced	125	9.0	0.66	0.61	1.26	52.4	48.4	100.0
All Venture	515	7.2	0.62	0.64	1.25	49.6	51.2	100.0
Buyouts	292	12.2	0.65	0.68	1.33	48.9	51.1	100.0
Generalist	74	9.1	0.98	0.37	1.34	73.1	27.6	100.0
All Private Equity	881	9.9	0.71	0.61	1.31	54.2	46.6	100.0

Source: EVCA/Thomson Venture Economics

Performance Ranking

The Pooled IRR of the top quarter was 24.3% at the end of 2003, while the Pooled IRR of the top half was 15.5%. The two rankings (top quarter, and top half) generated higher returns for buyouts than for venture with a Pooled IRR of the top quarter at 30.2% for buyouts and 19.7% for venture, and a Pooled IRR of the top half at 22.2% for buyouts and 13.8% for venture.

The Pooled IRR of the best performing 235 funds was 24.3% in 2003. The worst performer within the class had a 10.9% Pooled IRR, setting the Upper Quartile IRR. As per the definition, the pooled IRR of the top quarter would be systematically higher than the upper quartile IRR.

The best performers are the top quarter buyout funds with a pooled IRR of 30.2% followed by the balanced funds with a return of 23.9%. The performance of the top half shows the same ranking with a 22.2% Pooled IRR for buyout funds and 16.3% Pooled IRR for balanced funds.

Since the return of the median quartile private equity fund would strike 0%, the returns of lower half funds would be all negative. So only half of the funds actually managed to obtain a positive return, and the Pooled IRR for those would be 15.5% altogether.

Figure 2: Pooled IRR versus Upper Quartile IRR at Top Quarter and Top Half Levels (Top Funds formed 1980 – 2003)

Stage	Sample Size	Top Quarter Pooled IRR	Upper Quartile IRR	Sample Size	Top Half Pooled IRR	Median Quartile IRR
Early Stage	68	14.8	5.4	116	10.8	-1.7
Development	39	19.4	8.5	80	14.0	0.0
Balanced	35	23.9	11.2	63	16.3	0.0
All Venture	142	19.7	7.4	259	13.8	0.0
Buyouts	79	30.2	17.0	149	22.2	6.9
Generalist	14	12.8	6.9	29	10.4	0.1
All Private Equity	235	24.3	10.9	437	15.5	0.0

Source: EVCA/Thomson Venture Economics

Top Quarter

The top quarter comprises funds with Pooled IRR since inception equal to or higher than the upper quartile. The Pooled IRR of the top quarter was 24.3% and the Median IRR was 14.8%.

This is translated into a total value to paid in (TVPI) of 1.92 for all private equity. Remarkably, 65.6% of this money has already been returned to investors (DPI = 1.26) while 34.4% is unrealised (RVPI = 0.66).

The one-year Horizon IRR is a negative -6.5% for venture funds. The buyout and generalist funds are on the positive with a one-year Horizon IRR of 12.6% and 7.6% respectively. Despite the negative one-year Horizon IRR for the venture, funds included in the top quarter have been able to produce outstanding returns to their investors in the long-term (pooled IRR even for the top quarter balanced is 23.9%).

A five-year Horizon IRR for the top quarter showed a 34.5% return for all private equity, 21.0% return for all venture and 44.9% for buyouts.

The balanced funds show the biggest difference over the various Horizon IRRs: their five- and ten-year Horizon IRRs are the highest of all, their one- and three-year horizons are the lowest of all. The top quarter buyout funds present positive low variation return across horizons, with a one-year Horizon IRR of 12.6%, a 5-year Horizon IRR of 44.9% and Horizon ten-year IRR of 40.9%. The one-year return is higher than the three-year Horizon IRR for all top quarter private equity funds, which indicates that the top quarter funds have started recovering and head for ameliorated performance.

Figure 3: Annualised Pooled IRR since inception to 31.12.2003 (Top Quarter Funds formed 1980-2003)

Horizon IRR to 3.12.2003

Stage	No. of funds	Pooled IRR	Median IRR	DPI	Multiples RVPI	TVPI	1-Year IRR	3-Year IRR	5-Year IRR	10-Year IRR
Early Stage	68	14.8	7.8	0.83	0.68	1.51	4.8	-3.9	11.9	16.3
Development	39	19.4	10.6	1.75	0.58	2.33	2.5	-0.3	28.0	30.2
Balanced	35	23.9	13.9	1.00	0.69	1.69	-9.1	-5.3	31.9	45.3
All Venture	142	19.7	9.4	1.08	0.67	1.75	-6.5	-4.0	21.0	29.9
Buyouts	79	30.2	22.8	1.37	0.67	2.04	12.6	9.7	44.9	40.9
Generalist	14	12.8	5.2	1.06	0.44	1.50	7.6	7.9	11.9	18.6
All Private Equity	235	24.3	14.8	1.26	0.66	1.92	8.4	4.8	34.5	35.5

Source: EVCA/Thomson Venture Economics

Appendix

Top Half

The annualised Pooled IRR for this 'best performing half' of private equity funds stood at 15.5% for all private equity and 13.8% for venture. Buyouts continued to perform well in this grouping returning 22.2% Pooled IRR. The one-year Horizon IRR for the top half was 6.4%, while the five-year Horizon IRR for the top half showed a 16.3% return for all private equity, 22.7% for buyouts and a 10.7% return for venture. The ten-year Horizon IRR for the top half was 21.1% for all private equity, 18.0% for venture and 25.3% for buyouts.

Figure 4: Annualised Pooled IRR since inception to 31.12.2003
(Top Half Funds formed 1980-2003)

Horizon IRR to 31.12.2003

Stage	No. of funds	Pooled IRR	Median IRR	DPI	Multiples RVPI	TVPI	1-Year IRR	3-Year IRR	5-Year IRR	10-Year IRR
Early Stage	116	10.8	2.8	0.69	0.72	1.41	7.9	-4.4	8.0	11.6
Development	80	14.0	7.1	1.11	0.68	1.79	-1.2	-3.5	11.8	19.0
Balanced	63	16.3	7.7	0.77	0.66	1.43	1.1	-6.6	12.5	23.9
All Venture	259	13.8	5.3	0.82	0.68	1.50	1.2	-5.2	10.7	18.0
Buyouts	149	22.2	16.6	0.94	0.70	1.64	8.1	6.4	22.7	25.3
Generalist	29	10.4	10.0	1.04	0.35	1.39	5.4	-10.5	9.7	17.4
All Private Equity	437	15.5	9.5	0.94	0.60	1.54	6.4	-0.7	16.3	21.1

Source: EVCA/Thomson Venture Economics

Fund Size

The best performing funds in the sample are the large funds (those funds having a fund size of €100m to €250m for venture funds and of €500m to €1bn for buyout funds). However, mega funds (fund size of more than €250m for venture funds and of more than €1bn for buyout funds) performed quite low as most of these were formed in the last few years, thereby experiencing the J-curve effect.

The best performing funds seem to be the large venture funds (€100 to €250m) with a pooled IRR of 9.2% and the large buyout funds (€500m to €1bn) with a pooled IRR of 21.8%. Top quarter funds within the large category register an Upper Quartiles IRR higher than 9.8% for venture and 22.4% for buyouts.

Within the fund size context, the rather low performance of the mega venture funds (fund size of €250m +) of 3.3% and of the mega buyout funds (fund size of €1bn +) of 3.8%, is mainly due to the more recent nature of these funds that places them still low on the J-curve. Within these mega categories only the top quarter ranked funds seem to manage to break even, as proved by the Upper Quartile IRR of 0% for mega venture funds and of 7.3% for mega buyout funds.

Figure 5: Venture Capital Funds Performance by Fund Size

Fund Size €	Sample Size	Pooled IRR	Quartiles IRR			DPI	Multiples RVPI	TVPI	1-Year IRR	3-Year IRR	5-Year IRR	10-Year IRR
			Upper	Median	Lower							
0-50m	319	7.9	7.6	0.0	-9.3	0.91	0.58	1.49	-18.8	-3.0	10.9	11.8
50m-100m	102	7.4	7.0	-1.8	-17.4	0.61	0.68	1.29	-9.3	-10.7	2.1	7.5
100m-250m	65	9.2	9.8	-1.6	-14.8	0.70	0.65	1.35	-8.9	-11.2	3.3	12.8
250m +	29	3.3	0.0	-7.0	-17.2	0.44	0.64	1.08	-4.1	-9.2	-2.0	2.7
All Venture	515	7.2	7.4	0.0	-11.9	0.62	0.64	1.25	-7.5	-9.0	2.3	8.3

Source: EVCA/Thomson Venture Economics

Figure 6: Buyout Funds Performance by Fund Size

Fund Size €	Sample Size	Pooled IRR	Quartiles IRR			DPI	Multiples			1-Year IRR	3-Year IRR	5-Year IRR	10-Year IRR
			Upper	Median	Lower		RVPI	TVPI					
0-250m	209	11.5	16.6	7.8	-1.0	0.89	0.54	1.42	6.2	-0.4	7.9	11.0	
250m-500m	34	17.1	21.2	2.9	-7.7	1.09	0.53	1.62	5.7	2.7	22.0	22.8	
500m-1bn	25	21.8	22.4	9.6	0.0	1.12	0.56	1.68	-4.5	-3.2	25.5	25.0	
1bn +	24	3.8	7.3	-1.1	-9.1	0.27	0.82	1.09	2.1	2.5	4.0	3.8	
All Buyouts	292	12.2	17.0	6.9	-2.0	0.65	0.68	1.33	1.6	1.0	9.6	12.7	

Source: EVCA/Thomson Venture Economics

J-Curve Effect

The normal life cycle of private equity funds requires at least six years to deliver significant returns. The returns in the early years of a typical fund are largely negative as companies are being funded and exits are only expected somewhere in a forthcoming number of years.

When analysing the data, we can observe the impact of the external environment on the fund performance, with the lower performance registered in the vintage period 1996–2003 due also to the difficult macroeconomic environment and the difficult exit conditions.

Figure 7: IRRs by Vintage (Funds formed 1980–1989, 1990–1995, 1996–2003)

Stage	1980-1989				1990-1995				1996-2003			
	IRR	DPI	RVPI	TVPI	IRR	DPI	RVPI	TVPI	IRR	DPI	RVPI	TVPI
All Venture	8.0	1.45	0.22	1.67	14.3	1.20	0.71	1.92	-2.1	0.25	0.70	0.95
All Buyouts	12.8	1.44	0.19	1.63	20.2	1.74	0.37	2.10	6.0	0.36	0.78	1.14
All Private Equity	9.8	1.18	0.29	1.47	17.6	1.53	0.47	2.01	3.6	0.33	0.76	1.09

Source: EVCA/Thomson Venture Economics

Short-term turbulence

While private equity performance should always be measured by looking at the long-term, both the one-, three- and five-year Horizon IRR illustrate the continued influence of poor economic conditions on private equity performance. The highest impact is felt by the venture funds (one-year Horizon IRR of -7.5%), more specifically the early stage funds (one-year Horizon IRR of -13.1% compared to a five-year Horizon IRR of -1.8%). The least affected are the buyout funds that maintain a positive Horizon IRR throughout all the horizons presented (one-year Horizon IRR of 1.6% compared to a five-year Horizon IRR of 9.6%).

Figure 8: Horizon IRR to 31 December 2003 (Funds formed 1980-2003)

Stage	No. of Funds	1-Year IRR	3-Year IRR	5-Year IRR	10-Year IRR
Early Stage	229	-13.1	-11.1	-1.8	1.3
Development	161	-7.2	-4.8	4.6	10.7
Balanced	125	-5.4	-10.2	4.2	12.3
All Venture	515	-7.5	-9.0	2.3	8.3
Buyouts	292	1.6	1.0	9.6	12.7
Generalist	74	2.4	-10.7	7.8	14.6
All Private Equity	881	-0.6	-3.8	7.3	11.9

Source: EVCA/Thomson Venture Economics

Appendix

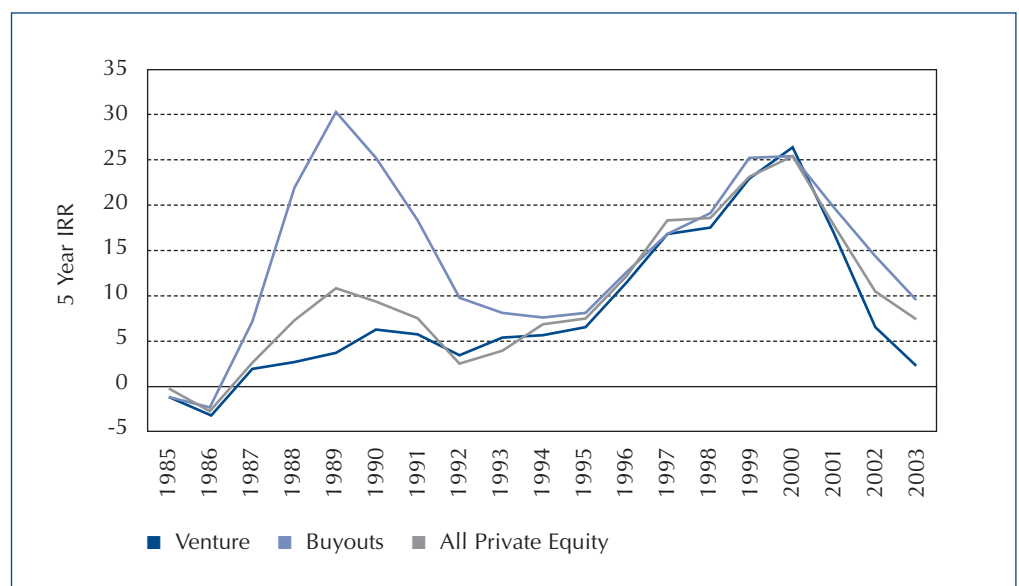
Five-Year Rolling IRR

Due to the difficult macroeconomic environment and the decrease in exit opportunities, the Five-Year Rolling IRR for both venture and buyouts are showing a decline.

The Five-Year Rolling IRR illustrates the development of European private equity performance over time until end 2003. When looking at the performance of all funds in the most recent years, the convergence of the performance of all investment stages registered in 2000 starts weakening with a larger gap between buyout funds and venture funds in the detriment of the venture funds.

The Five-Year Rolling IRR for venture was 2.3%, for buyouts it was 9.6%, leading to a Five-Year Rolling IRR of 7.3% for all surveyed private equity funds. The chart illustrates how performance has decreased since 2000 for all stages of investment. The convexity of the trend curve in Figure 9 shows there are signs the decline may be close to reach the bottom and turn into a positive trend.

Figure 9: Five-Year Rolling IRR



Source: EVCA/Thomson Venture Economics

Comparators (€-based)

Long-term private equity returns continue to exceed the performance of the public markets as proven by both Pooled IRRs and ten-year Horizon IRRs.

The comparison of returns from European private equity with those of other asset classes is made by calculating equivalent IRR returns. We assume that the same pattern of cash flows over time in other asset classes as in the private equity data set (e.g. invested in and divested from), which leads to a representative total return index for private equity in comparison to return indices used in other asset classes. The analysis has been applied both to investment horizon returns (Horizon IRR) and to cumulative returns (Pooled IRR) since inception.

The comparison of an investment horizon of ten years reveals that private equity sustains higher returns than public market equivalents, e.g. >1400 basis points more than the Morgan Stanley Euro, and >90 basis points more than the JP Morgan Euro Bond, as shown in Figure 11 for all private equity. Care should be taken when comparing the performance of private equity funds and the JP Morgan Euro Bonds index, since the bond performance is related to historical decrease in interest rates.

While for early stage private equity funds their performance seems to be exceeded by HSBC Small Company Equity index and by JP Morgan Euro Bonds in terms of ten-year Horizon IRR, and for development private equity funds by JP Morgan Euro Bonds, for all other type of funds the private equity performance is systematically higher than the return of any of the three comparator indexes: Morgan Stanley Euro Equity, HSBC Small Company Equity and JP Morgan Euro Bond.

Overall, the private equity one-year Horizon IRR is the only negative return, with all the three comparators presenting strong positive returns and dynamics. The cumulative comparison for all private equity funds versus comparators indicates that the private equity funds delivered superior returns compared to the public market (Pooled IRR of 9.9% for private equity, closely followed by JP Morgan Euro Bonds return of 9.7% and at far distance by the returns of the other two indexes). However, compared over the different investment horizons the private equity funds have a longer life cycle (recover slower from recession).

Figure 10: Comparators: Annualised Pooled IRR since inception to 31 December 2003

Stage	Morgan Stanley Euro Index	HSBC Small Company Index	JP Morgan Euro Bonds	Private Equity
Early Stage	1.8	5.7	9.8	1.9
Development	7.9	7.5	9.3	9.0
Balanced	2.7	6.2	9.1	9.0
All Venture	4.3	6.4	9.4	7.2
Buyouts	-2.9	3.8	9.9	12.2
Generalist	5.9	4.3	9.4	9.1
All Private Equity	0.5	4.8	9.7	9.9

Source: EVCA/Thomson Venture Economics

Figure 11: Horizon IRR to 31.12.2003 (Funds formed 1980 - 2003)

Stage / Index	1-Year	3-Year	5-Year	10-Year
Early Stage				
Morgan Stanley Euro	15.7	-15.6	-7.9	-1.2
HSBC Small Company Equity	60.2	4.9	3.3	5.1
JP Morgan Euro Bonds	26.5	10.8	13.2	12.3
Private Equity	-13.1	-11.1	-1.8	1.3
Development				
Morgan Stanley Euro	15.0	-15.7	-5.6	4.8
HSBC Small Company Equity	59.3	5.3	4.9	8.1
JP Morgan Euro Bonds	26.4	10.9	15.0	12.1
Private Equity	-7.2	-4.8	4.6	10.7
Balanced				
Morgan Stanley Euro	18.2	-14.9	-8.1	-0.9
HSBC Small Company Equity	63.6	6.6	4.1	6.1
JP Morgan Euro Bonds	27.2	11.1	12.3	11.3
Private Equity	-5.4	-10.2	4.2	12.3
All Venture				
Morgan Stanley Euro	16.5	-15.3	-7.3	0.7
HSBC Small Company Equity	61.4	5.7	4.0	6.3
JP Morgan Euro Bonds	26.8	10.9	13.3	11.9
Private Equity	-7.5	-9.0	2.3	8.3
All Buyouts				
Morgan Stanley Euro	10.4	-17	-10.2	-4.4
HSBC Small Company Equity	54.2	3.4	1.4	3.1
JP Morgan Euro Bonds	23.5	9.5	11.4	10.4
Private Equity	1.6	1.0	9.6	12.7
Generalist				
Morgan Stanley Euro	13.8	-17.5	-7	1.9
HSBC Small Company Equity	58.1	1.2	1.6	4.7
JP Morgan Euro Bonds	26.2	9.7	13.8	12.3
Private Equity	2.4	-10.7	7.8	14.6
All Private Equity				
Morgan Stanley Euro	12.7	-16.4	-8.9	-2.1
HSBC Small Company Equity	56.7	4.0	2.2	4.3
JP Morgan Euro Bonds	24.7	9.9	12.1	11.0
Private Equity	-0.6	-3.8	7.3	11.9

Source: EVCA/Thomson Venture Economics

Appendix

Terminology

IRR Internal Rate of Return

The IRR is the interim net return earned by investors (Limited Partners), from the fund from inception to a stated date. The IRR is calculated as an annualised effective compounded rate of return using monthly cash flows to and from investors, together with the Residual Value as a terminal cash flow to investors. The IRR is therefore net, i.e. after deduction of all fees and carried interest. In cases of captive or semi-captive investment vehicles without fees or carried interest, the IRR is adjusted to create a synthetic net return using assumed fees and carried interest.

Pooled IRR

The IRR obtained by taking cash flows from inception together with the Residual Value for each fund and aggregating them into a pool as if they were a single fund. This is superior to either the average, which can be skewed by large returns on relatively small investments, or the capital weighted IRR which weights each IRR by capital committed. This latter measure would be accurate only if all investments were made at once at the beginning of the funds life.

Horizon IRR

The Horizon IRR allows for an indication of performance trends in the industry. It uses the fund's net asset value at the beginning of the period as an initial cash outflow and the Residual Value at the end of the period as the terminal cash flow. The IRR is calculated using those values plus any cash actually received into or paid by the fund from or to investors in the defined time period (i.e. horizon).

One-year horizon looks back over one year from the end 2003 to the end of 2002 to give you the IRR, three-year horizon looks back from the end of 2003 over three years to the end of 2000 and so on.

Five-Year Rolling IRR

The five-year rolling IRR shows the development of the five-year Horizon IRR, measured at the end of each year.

Median IRR

The value appearing halfway in a table ranking funds by IRR in descending order.

Quartile IRR

Statistically the returns of each fund can be ranked and three quartiles obtained: the upper, the median and the lower that separate the four quarters of ranked IRRs. The IRR value which lies a quarter from the bottom (lower quartile point) or top (upper quartile point) of a table ranking individual funds in descending order.

Top Quarter

Comprises funds with an IRR equal to or above the upper quartile point. So while upper quartile IRR is a discrete return for a single fund, the top quarter IRR is a pooled return for all the funds ranking as individual performance in the top quarter.

Upper Half

Comprises funds with an IRR equal to or above the median point.

DPI - Distribution to Paid-In

The DPI measures the cumulative distributions returned to investors (Limited Partners) as a proportion of the cumulative paid-in capital. DPI is net of fees and carried interest. This is also often called the "cash-on-cash return". This is a relative measure of the fund's "realised" return on investment.

RVPI - Residual Value to Paid-In

The RVPI measures the value of the investors' (Limited Partner's) interest held within the fund, relative to the cumulative paid-in capital. RVPI is net of fees and carried interest. This is a measure of the fund's "unrealised" return on investment.

Residual Value

The estimated value of the assets of the fund, net of fees and carried interest.

TVPI - Total Value to Paid-In

TVPI is the sum of the DPI and the RVPI. TVPI is net of fees and carried interest.

Mature Funds

Funds that have been in existence for over two years.

Early Stage Fund

Venture capital funds focused on investing in companies in the early part of their lives.

Development Fund

Venture capital funds focused on investing in later stage companies in need of expansion capital.

Balanced Fund

Venture capital funds focused on both early stage and development with no particular concentration on either.

Buyout Fund

Funds whose strategy is to acquire other businesses; this may also include mezzanine debt funds which provide (generally subordinated) debt to facilitate financing buyouts, frequently alongside a right to some of the equity upside.

Generalist Fund

Funds with either a stated focus of investing in all stages of private equity investment, or funds with a broad area of investment activity. Venture capital refers to early-stage (=seed and start-up) and expansion finance. Private equity provides equity capital to enterprises not quoted on a stock market and refers to all stages of industry, i.e. venture capital and buyouts.

Morgan Stanley Euro Index

The equity index from Morgan Stanley Capital International, which tracks stocks from various European nations.

HSBC Small European Company Index

Covering 18 European nations, this index defines small cap companies by ranking all companies in Europe by market capitalisation, removing large cap companies and retaining the remaining companies. The market cap ranges from approximately €30m to €3,500m.

JP Morgan Euro Bond Index

European portion of the most widely used benchmark for performance measurement; measures total, principal and interest returns for those traded issues available to international investors.

Scope and Methodology

This data is taken from the 2004 Investments Benchmarks Report: European Private Equity undertaken by Thomson Venture Economics with the full cooperation of EVCA.

It contains detailed statistical measures including distribution and valuation ratios from data on a sample consisting of 881 funds formed between 1980 and 2003, representing a total amount committed of €158.7bn. Out of these 881 funds, 830 were mature funds formed between 1980 and 2001.



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This EVCA Paper is published by the European Private Equity & Venture Capital Association (EVCA).
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