



BVCA Private Equity and Venture Capital

Performance Measurement Survey 2018

A survey of independent UK-based funds that raise
capital from third-party investors



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Foreword

It is no exaggeration to state this is a time of significant political and economic uncertainty. Both at home and abroad, it has become clear we are operating in a rapidly changing environment, one which is presenting businesses, investors and governments across the world with profound challenges. Economic growth, productivity and innovation are more critical than ever.

And it is in such an environment that private equity and venture capital proves its value. There are currently more than 3,400 businesses in the UK that are currently backed by our industry. Collectively, they employ well in excess of 800,000 people, and in 2018 alone BVCA members invested more than £9.7 billion into UK companies.

Private equity and venture capital are equally important to investors. It has consistently and continuously delivered robust returns for its investors, as this report details. The BVCA Private Equity & Venture Capital Performance Measurement Survey, produced in association with PwC and Capital Dynamics, draws on a direct survey of the BVCA's eligible members. The survey contains information on 726 UK-managed funds. The results are provided net of fees and costs, including a provision for performance fees (carried interest) where appropriate.

Between 2008 and 2018, our industry has generated returns of 15.7%, significantly higher than the 9.1% the FTSE All-Share returned to investors. Although a long-term asset class, it has performed exceptionally well over the short-term.

Its five-year return of 18.5% and three-year figure of 26.4% are both four times greater than the FTSE All-Share over the same time periods.

On a since-inception basis, the most appropriate measure of venture capital and private equity fund performance, the results are equally impressive, with the 14.6% IRR (as of December 2018). Over the last decade, since-inception returns have tended to hover in the 14% to 15% band, underscoring how consistent this is as an asset class.

Turning to specifics, every investment stage continues to perform well, but particularly noteworthy are large buyout funds, which generated a since-inception IRR of 16%, and venture capital which delivered a 9% IRR for funds with a post-2002 vintage year – the highest number for UK venture capital on record.

Given investors in private equity and venture capital include pension funds, insurance companies and endowments, these results are very positive news indeed.



Cheryl Potter
BVCA Chair 2019-20, December 2019



Richard McGuire
Partner, Private Equity Funds Leader,
PwC, December 2019

The British Private Equity & Venture Capital Association (BVCA) is the industry body and public policy advocate for the private equity and venture capital industry in the UK.

We exist to connect all of the internal components of the private equity and venture capital community – investors, fund managers, entrepreneurs and companies, advisers and service providers – to each other, and to represent their interests to government, parliamentarians, officials and regulators, the media, other sections of the business community and society at large.

Since 1983 we have delivered authoritative research and analysis, proprietary publications, specialist training, topical conferences and best practice standards. Our membership comprises more than 770 influential firms, including over 350 private equity and venture capital houses, as well as institutional investors, professional advisers, service providers and international associations.

Highlights

Against a backdrop of political uncertainty in the UK and abroad, the industry continues to grow with all of the funds covered in the survey generating one-year IRRs of 15.6%. This compares favourably with the FTSE All-Share of -9.5% for the same period.

Caution should always be adopted when interpreting one-year annual returns. While they provide a succinct snapshot of whether or not that particular year was good or bad, the corresponding returns often swing significantly +/- from year to year, and the number does not reflect the actual return that investors receive. Over the five and especially the ten year time horizon, UK private equity and venture capital sustained its performance. Over both the last five and ten years, private equity returns are on average well ahead of the similar numbers that can be seen for the FTSE All-Share index.



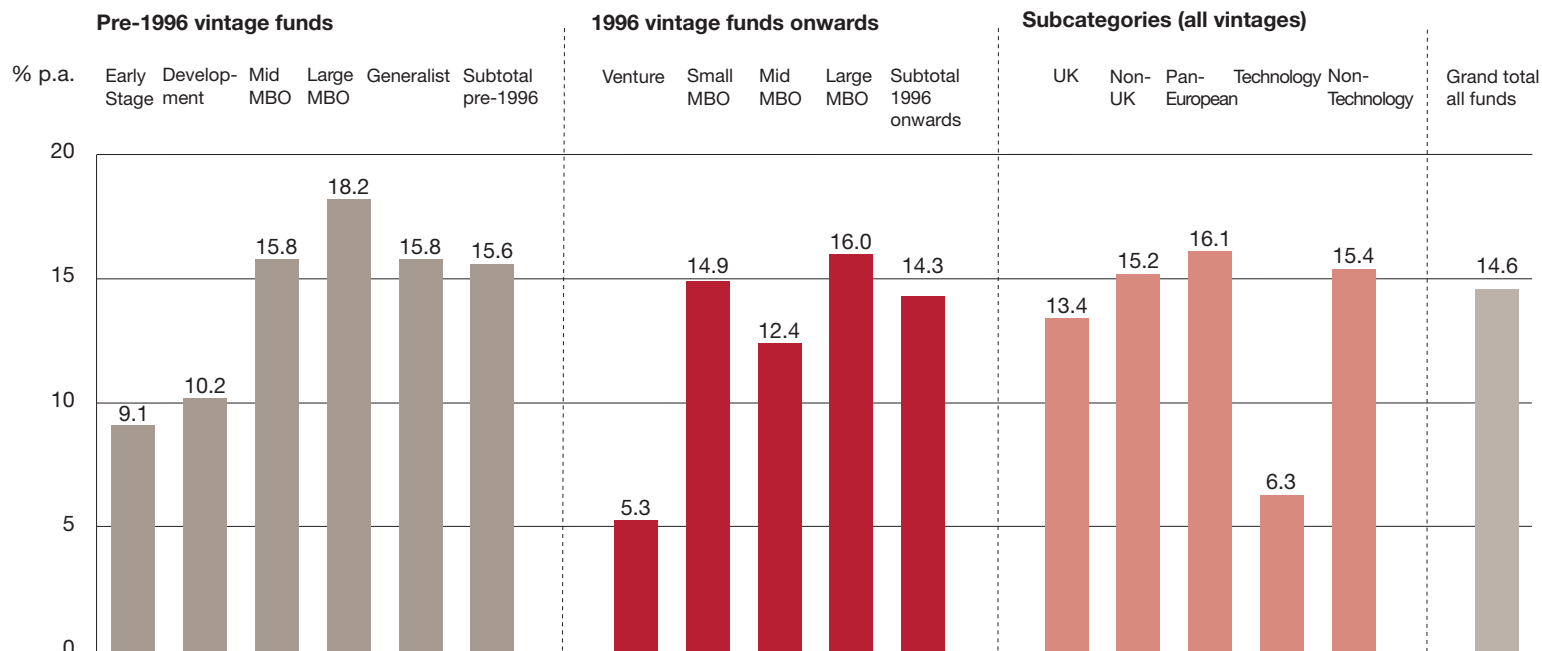
Highlights

Continued

The since-inception metric measures the performance of private equity over the full lifecycle of the fund. When surveying the totality of all funds raised before 2013, they generate a net IRR of 14.6%, which is an increase on last year's corresponding value of 14.5%. (N.B. Funds raised from 2014 onwards are not included in the computation of since-inception returns as these funds are still at the early stage of their life cycle, and their investment return during this period does not provide a significant indication of their performance at liquidation).

The most recent funds continue to generate consistent and attractive returns. The since-inception IRR generated by this 608-strong group of funds was 14.6% p.a. as at December 2018. In recognition of the widespread changes within the UK industry, funds raised after 1996 were classified into four investment stages: Venture, Small MBO, Mid MBO, and Large MBO. Consistent with a recent trend, the polar ends of the MBO investment space continue to outperform in an impressive fashion on a since-inception basis. Large MBO focused funds (16% IRR) marginally outperformed Small MBO funds (14.9% IRR). Mid MBO focused funds returned a very healthy 12.4% to December 2018.

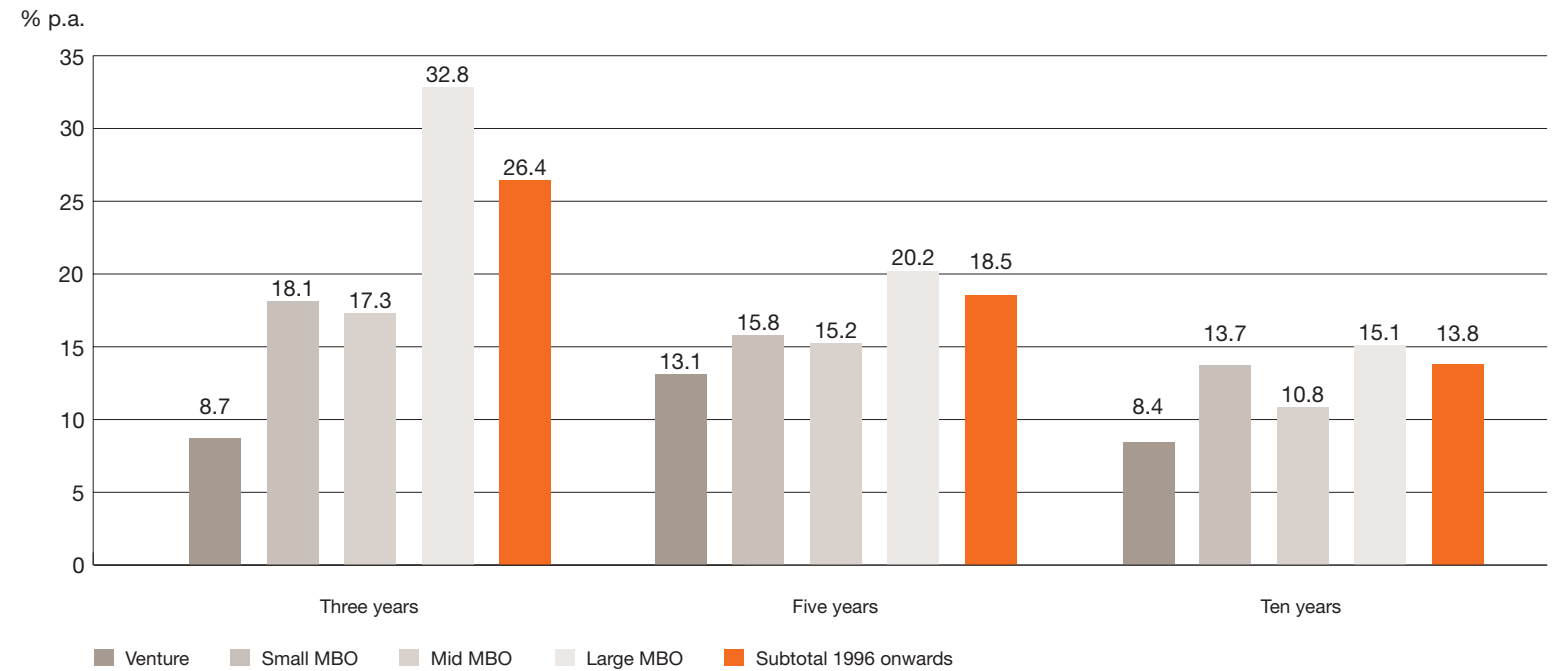
Since Inception Performance by Investment Stage and Subcategories to December 2018 – IRR (% p.a.)



Recent funds with a post 2002 vintage continue to mature and show improved performance, with IRRs to December 2018 on a since-inception basis standing at 9% per annum.

Summary of Performance by Investment Stage and Subcategories

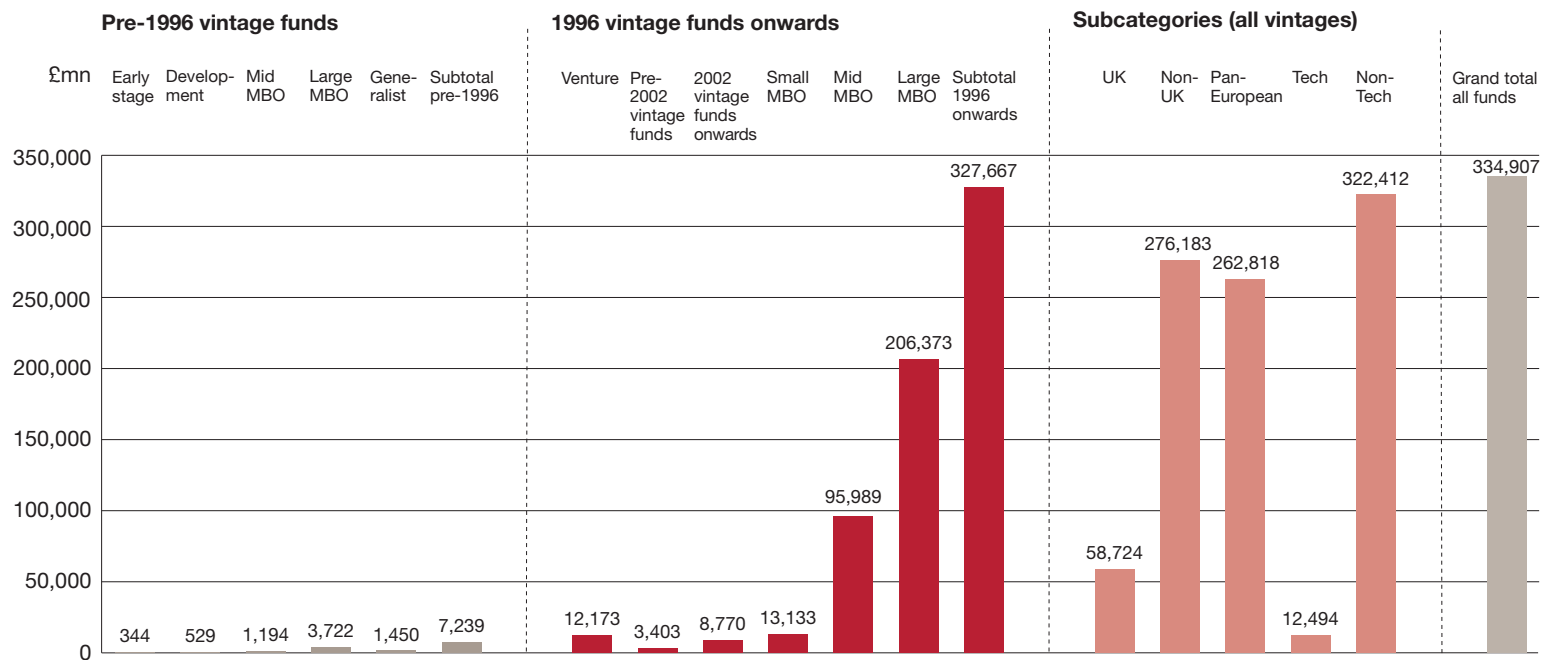
1996 vintage funds onwards – IRR (% pa)



Highlights

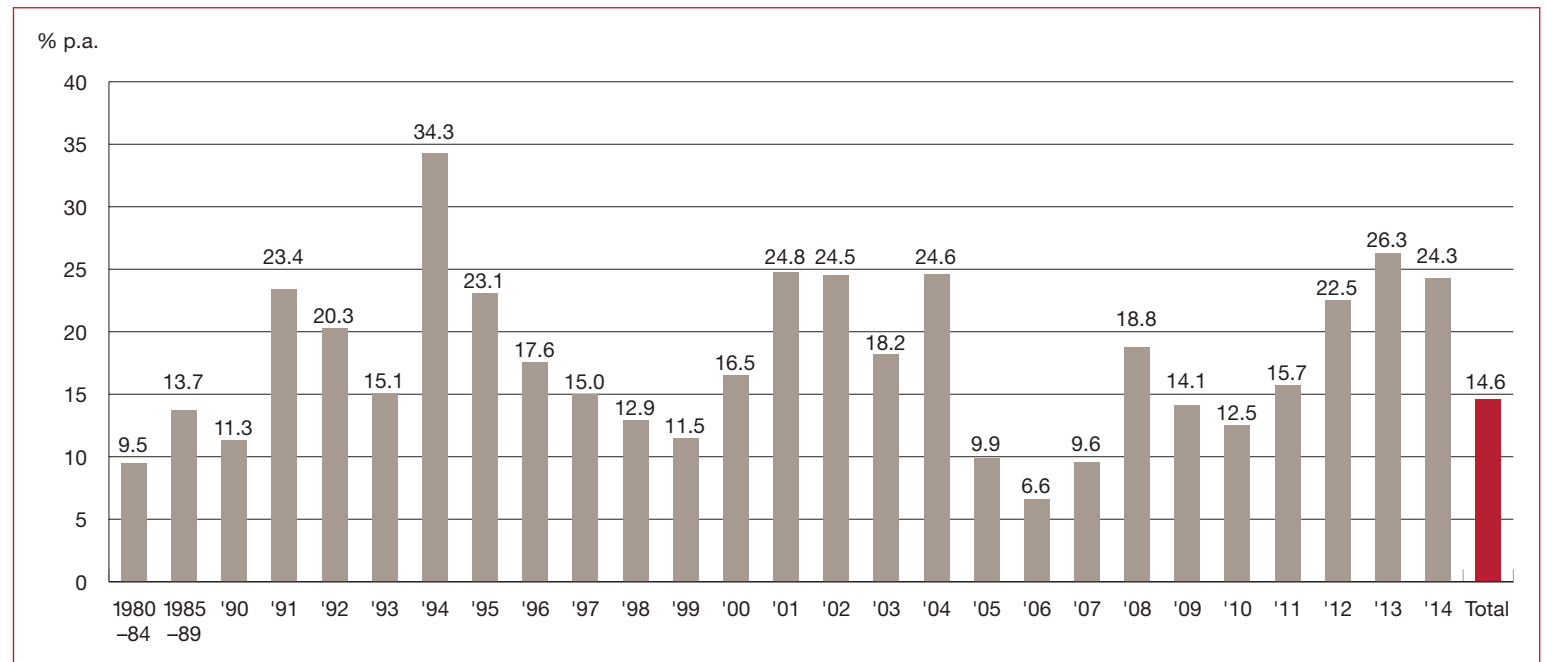
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Capital Raised by Investment Stage and Subcategory – December 2018



As of December 2018, the best performing fund vintage was 2015 which generated a pooled average of 26.3%. This is the strongest return since the 1994 height of 34.3%.

Since Inception Return by Vintage Year to December 2018



Highlights

Continued



Though always directly compared to the US venture scene, which is unique in its sophistication and maturity, the UK venture industry is the most well-developed ecosystem in Europe. The myths and anecdotal stories of the European and indeed UK venture scene do not necessarily correspond to the facts and body of analysis as academic evidence suggests.

The analysis of purely commercial venture funds shows that the sector has come out of the Dot-Com bubble in a relatively mixed fashion and in some areas still suffers from the second round effects of the bubble. To provide a more holistic and balanced assessment, we segment our funds into three categories according to their respective vintage year bands: Pre-Bubble (1980 to 1997), Bubble (1998 to 2001) and Post-Bubble (2002 to 2012). Funds raised prior to the Dot-Com boom have delivered a pooled average IRR of 11.8% per annum.

Funds with a vintage at the height of the bubble, between 1998 and 2001, have clearly endured a painful time, not least because of the inflated valuations that were prevalent in both the technology sector and venture capital industry at the time. Very few venture houses on this side of the Atlantic came out of the period unharmed, as large and unsustainable amounts of capital flooded into the industry and depressed the real returns to investors. Within this context, it is not surprising that Dot-Com bubble vintage funds have returned a collective loss of, on average, -1% per annum.

The 2002 to 2014 (post-bubble) fund vintages generated healthy returns, with these funds having a 7.0% pooled since inception IRR this year and 10.4% last year. However, whilst the sector is now generating strong returns on average, the range of returns is larger in venture than in private equity and this range is increasing.

Since Inception IRR (%) – Venture funds (purely commercial)

	Subtotal	Pre-bubble 1980–1997	Bubble 1998–2001	Post-bubble 2002–2014
No. of funds	87	32	25	30
Pooled average	4.7	11.8	-1.0	7.0
10th percentile	17.6	24.0	4.9	23.4
25th percentile	10.3	15.3	4.2	13.3
Median	4.4	9.0	-3.3	6.4
75th percentile	-6.3	-2.1	-12.1	-1.5
90th percentile	-19.1	-10.2	-20.9	-36.5
Inter-decile range	36.7	34.2	25.8	59.9
<i>Range of returns</i>	<i>132.2</i>	<i>71.5</i>	<i>60.8</i>	<i>132.2</i>
DPI	95.0	163.4	64.4	89.7
TVPI	126.4	165.4	91.5	139.9

The table reports the returns of the venture funds with no restrictions in their investment strategy imposed by their investors for purposes other than return maximisation or risk management. These funds are at least four years old. The returns are on the since-inception basis and are annualised.

Highlights

Continued

Private equity characteristics

The characteristics of private equity performance differ from other asset classes. Typically, private equity fund investments show less correlation to quoted public equity markets and are relatively illiquid, particularly in the early years. Private equity is a long-term investment, which, in the first few years, will normally show a drop in the net asset value before showing any significant uplift. This is often the effect of management fees being paid out, as well as the costs of initial capital being deployed into companies. Private equity offers institutional investors the opportunity to further diversify their asset allocation with the prospect of stable yet attractive investment returns. It does however, have different characteristics from quoted equity and it is crucial that an institutional investor considers the appropriateness of private equity in relation to their own particular risk profile and objectives. The life cycle of a private equity fund commitment is typically ten years or more. An investor will receive pro-rata distributions of capital during the life of the fund. There has been a substantial secondary marketplace for private equity fund holdings for some time now and this is likely to rise in prominence in the medium term given the impending regulatory reforms such as Basel III and Solvency II in Europe, and the Dodd-Frank legislation in the US. The ‘secondaries market’,

as it is colloquially known, provides an opportunity for Limited Partners to liquidate or increase their exposure to private equity by buying or selling fund stakes to other investors in the asset class.

Methods of measurement

The primary method for calculating the return of a private equity fund is based on the annualised internal rate of return (IRR) achieved over a period of time. This report measures performance in predominantly two ways: ‘since-inception’ and ‘medium to long-term’ (over three, five, and ten years). One of the unique and defining characteristics of private equity and venture capital is the very irregular timing of cashflows to and from the fund. As such, the IRR is not strictly and directly comparable with more standard measures of returns, namely buy-and-hold estimates of performance. In response to some of these concerns about IRRs, alternative measures have been proposed and developed, some of which have already been applied to our Survey dataset.

Since inception

This is the most meaningful way in which to measure private equity performance. It measures from the start of a fund’s investment (i.e. from the fund’s first drawdown) up to a particular point in time. This therefore most closely reflects the return an investor would achieve if they invested at the start of the fund.

Medium to long-term

Medium to long-term figures are included in this report so that investors can compare private equity returns with those of other asset classes, which is not possible with the ‘since-inception’ numbers. It is not, however, the most appropriate way to measure private equity performance. The returns quoted in the medium to long-term figures cover all activity of funds in the survey over the measured period to 31 December 2018 – it is not limited to those funds that were in existence at the start of the measured period (e.g. the ten-year return covers all activity of all funds over the period 1 January 2006 to 31 December 2018, regardless of whether the funds had been in existence for the whole of the measured period).

Current year returns

One-year figures are extremely volatile and inappropriate as a realistic measure of private equity performance, since it is largely not possible to invest in a private equity fund for just one year. They can, however, be used as an indication of how well the UK private equity industry performed in that one year.

Reclassification of investment stages for 1996 vintage funds onwards

To reflect changes in the market, which from the mid-1990s have seen the predominance of larger funds, a ‘restart’ in the venture marketplace, and the growing recognition of private equity as an asset class, 1996 vintage funds onwards were (as of the 2005 report) reclassified into four new investment stage categories: Venture, Small MBO (including development capital), Mid MBO and Large MBO. Pre-1996 vintage funds remain in the previous stage categories (i.e. Early Stage, Development, Mid MBO, Large MBO and Generalist). This is reflected in the tables accordingly. Please see Glossary of Terms for definitions. Comparative figures are not available, other than for the subcategories of UK and Non-UK, Pan-European and Technology and Non-Technology, which apply to all vintages.

Pan-European funds

From 2004 onwards, an extra subcategory was included, which is dedicated to pan-European UK-based funds. These funds invest, or intend to invest, in more than two European countries.

Fund multiples

We began reporting fund multiples alongside IRRs in the 2004 report. The multiples shown are: the total amount distributed to investors as a percentage of paid-in capital (DPI), and the total amount distributed plus the residual value attributable to investors as a percentage of paid-in capital (TVPI).



Returns by investment stage – IRR and multiple

Private equity is in and of itself a long-term asset class, and over the long-term, both industry-related and independent academic research indicates that private equity performance is superior to other comparable asset classes. The performance of a private equity fund is influenced by a number of factors not least the investment stage and the vintage year. The measure of fund performance used throughout this report is the internal rate of return (IRR), which is based on managers' discretionary portfolio cash flows and year-end valuations.

Since-inception IRR by investment stage

The performance of all funds, less those that are not at least four years old (and therefore not yet sufficiently mature), from their inception to December 2018, stood at 14.6% IRR per annum. This year's since-inception performance is consistent with last year's value, and broadly comparable with the average return achieved by the industry as whole over the last decade or so. Not only does the since-inception metric display persistence and consistency over time around, on average, the fifteen per cent mark, but the dataset from which this has been achieved for this year is believed to be the most comprehensive in terms of its coverage of UK-managed funds.

Pre-1996 vintage funds

As the majority of these funds have been fully wound up or retain only inconsequential residual values, their since-inception return is largely based upon realised cash flows and value. Performance, as at December 2018, has been robust across all investment stages with Large MBO funds delivering 18.2% IRR p.a., followed by Generalist and Mid MBO funds which have both returned 15.8%.

1996 vintage onwards

Small and Large MBO funds raised subsequent to 1996 continue to outperform other investment stages, at 14.9% (Small MBO) and 16% (Large MBO) p.a. respectively. They are closely followed by Mid MBO funds, which returned 12.4% p.a. as at December 2018. Venture funds, as a whole, have performed well on a relative basis. Post-2002 vintages improved their performance relative to previous years, generating 9% p.a., as at December 2018. This is promising, as the vast majority of these funds are still in their formative years and are yet to fully reach the harvesting phase.

Subcategories (all vintages)

Pan-European focused funds, once again, delivered superior performance as compared to the other subcategories, generating an IRR of 16.1% p.a. on a since-inception basis to December 2018. Technology investment focused funds continued to perform well generating an IRR of 6.3% as at December 2018. This is broadly consistent with venture funds that, as we have seen, are displaying growth in their underlying portfolios.

Since Inception Return – IRR (% pa) Investment Stage and Subcategories

	No. of funds	To Dec '18	To Dec '17	To Dec '16	To Dec '15	To Dec '14	To Dec '13	To Dec '12	To Dec '11	To Dec '10	To Dec '09	To Dec '08	To Dec '07	To Dec '06	To Dec '05
Pre-1996 vintage funds															
Early Stage	24	9.1	9.1	9.1	9.1	9.1	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.3	8.8
Development	35	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.0
Mid MBO	33	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.7	15.8	15.8	15.8	15.8
Large MBO	26	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
Generalist	35	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.8	15.6	15.6
<i>Subtotal pre-1996</i>	<i>153</i>	<i>15.6</i>	<i>15.6</i>	<i>15.6</i>	<i>15.6</i>	<i>15.6</i>	<i>15.6</i>	<i>15.6</i>	<i>15.6</i>	<i>15.6</i>	<i>15.6</i>	<i>15.6</i>	<i>15.6</i>	<i>15.5</i>	<i>15.5</i>
1996 vintage funds onwards															
Venture	140	5.3	4.4	4.5	3.7	3.4	2.4	0.4	0.9	-0.3	-2.2	-1.8	-1.6	-0.6	-1.9
pre-2002 vintage funds	43	-0.5	0.3	0.2	-0.2	0.1	-1.3	-2.6	-1.3	-1.6	-3.1	-2.6	n/a	n/a	n/a
2002 vintage funds onwards	97	9.0	7.6	7.8	7.0	6.4	5.9	3.6	4.0	2.2	0.2	1.7	n/a	n/a	n/a
Small MBO	80	14.9	16.7	15.7	15.6	14.9	16.2	16.0	15.3	17.9	17.3	6.5	7.3	3.2	1.9
Mid MBO	178	12.4	12.7	12.4	12.6	12.6	12.6	12.3	12.5	13.2	14.0	14.9	14.9	13.2	9.3
Large MBO	57	16.0	15.6	14.9	14.4	14.3	14.9	14.7	15.4	17.8	19.2	21.5	23.7	21.0	18.0
<i>Subtotal 1996 onwards</i>	<i>455</i>	<i>14.3</i>	<i>14.1</i>	<i>13.5</i>	<i>13.2</i>	<i>13.1</i>	<i>13.4</i>	<i>13.1</i>	<i>13.6</i>	<i>15.2</i>	<i>16.1</i>	<i>17.2</i>	<i>18.9</i>	<i>16.4</i>	<i>13.2</i>
Grand total all funds	608	14.6	14.5	14.1	13.8	13.8	14.1	13.9	14.3	15.3	15.9	16.4	17.3	16.0	14.4
Subcategories (all vintages)															
UK	415	13.4	13.4	13.3	13.5	13.6	13.6	13.5	13.6	13.9	14.1	14.6	14.6	14.4	14.0
Non-UK	193	15.2	15.0	14.4	14.0	13.9	14.4	14.2	14.7	16.6	17.7	18.5	20.2	17.9	14.9
Pan-European	182	16.1	16.0	15.5	15.1	15.2	15.7	15.6	16.3	18.0	19.3	20.3	21.6	19.7	17.4
Technology	153	6.3	5.9	5.4	4.4	3.8	3.4	1.1	1.5	0.6	-0.9	-0.6	-0.1	1.0	0.1
Non-Technology	455	15.4	15.3	14.8	14.6	14.6	15.0	14.9	15.3	16.4	17.0	17.8	18.7	17.3	15.7

Returns by investment stage – IRR and multiple

Continued

Fund multiples since inception

The multiples show the total amount distributed to investors as a percentage of paid-in capital (DPI), and the total amount distributed plus the residual value attributable to investors as a percentage of paid-in capital (TVPI). A DPI of 140.6% as at December 2018 indicates that BVCA member funds (which are at least four years old) have in aggregate returned all of the initial capital committed for investments and fees back to their fund investors, and a little more in addition. There is however, a considerable amount of residual value present within these portfolios, which will be liquidated and realised in due course. Taking account of this residual value, the total value (or TVPI multiple) yielded by these funds is 179.1% of the capital committed by fund investors as at December 2018.

Pre-1996 vintage funds

Given that the majority of these funds are now fully liquidated and have been for some time, the difference between the DPI and TVPI is infinitesimal. The return of 197.5% indicates that for every one GBP invested in private equity and venture capital, investors received nearly twice as much in return. Generalist funds delivered the greatest DPI and TVPI followed by Large MBOs, then Mid MBO, Development capital and Early Stage funds.

1996 vintage funds onwards

This subset of funds contains both relatively mature funds with minimal residual values, and younger funds for which significant unrealised value is contained in their portfolios. As such, there is a large difference between the reported DPI and TVPI. On the narrower measure of DPI, we observe that Large and Mid MBOs are the dominant outperformers, with both generating DPI multiples over 100%. The much wider TVPI measure indicates all three buyout stages, small, mid and large, generated multiples of the order of around 160-190%. In aggregate, post-1996 vintage funds delivered, on a since-inception basis to December 2018, a TVPI multiple of 178.5%.

Since Inception Return to Dec 2018 – Multiple to Paid-in Capital (%) – Investment Stage and Subcategory

	No. of funds	Distributions Multiple (DPI)	Total Value Multiple (TVPI)
Pre-1996 vintage funds			
Early Stage	24	165.7	170.1
Development	35	170.9	171.4
Mid MBO	33	177.4	177.4
Large MBO	26	192.4	192.4
Generalist	35	242.1	243.0
<i>Subtotal pre-1996</i>	<i>153</i>	<i>197.1</i>	<i>197.5</i>
1996 vintage funds onwards			
Venture	140	89.9	139.5
pre-2002 vintage funds	43	80.9	96.9
2002 vintage funds onwards	97	94.7	162.7
Small MBO	80	112.8	171.1
Mid MBO	178	129.8	161.8
Large MBO	57	146.7	188.0
<i>Subtotal 1996 onwards</i>	<i>455</i>	<i>138.7</i>	<i>178.5</i>
Grand total all funds	608	140.6	179.1
Subcategories (all vintages)			
UK	415	132.1	161.6
Non-UK	193	142.5	183.1
Pan-European	182	144.7	183.4
Technology	153	97.0	150.3
Non-Technology	455	142.5	180.4

Medium to long-term IRR by investment stage

Over both the five and ten-year time horizons, UK private equity and venture capital once again yielded solid returns, of 18.5% and 13.7%, respectively. Over both timeframes, private equity's performance was far superior to the returns delivered to investors in the FTSE All-Share. All of the underlying investment stages have made strong improvements throughout the last three years most notably in the Small/Large MBO spaces which delivered 18.1%, 32.8% respectively.

Current year IRR

Annual performance figures are highly volatile and unsuitable as a realistic measure of private equity returns. Having said that, they do present a snapshot of activity in a given 12-month window. This year, the annual IRR for the 726 funds covered in the survey was 15.6%.

Pre-1996 vintage funds

The point-to-point returns for the pre-1996 vintage funds are shown only in their summary form and should be interpreted with special care. As the majority of these funds have either been wound up or retain only minimal residual values, even a small number of positive exit events or write-offs can cause large swings in their short-term returns. The weight of money in this group now has little impact on the returns of the total sample.

1996 vintage funds onwards

Across the ten-year time horizon, double digit performance was noted over all three of the buyout stages with Large MBO being the outperformer – generating IRRs of 15.1% p.a. – and Mid and Small MBOs 10.8% and 13.7% respectively.

Subcategories (all vintages)

Over the ten-year time frame, the noteworthy outperformers are Pan-European and non-tech focused funds. Over the current year, three-year and five-year time horizons, UK private equity outperforms its principal comparators. Indeed, the returns gap is significant over the vast majority of the private equity subcategories, which consistently outperforms the FTSE All-Share.

Current year and longer term returns – IRR (% pa) by Investment Stage and Subcategory

	No. of funds	2018	Three years	Five years	Ten years
1996 vintage funds onwards					
Venture	167	10.1	8.7	13.1	8.4
pre-2002 vintage funds	43	-5.7	-4.1	4.1	1.1
2002 vintage funds onwards	124	12.3	10.8	14.5	10.3
Small MBO	114	20.1	18.1	15.8	13.7
Mid MBO	224	26.1	17.3	15.2	10.8
Large MBO	68	12.2	32.8	20.2	15.1
<i>Subtotal 1996 onwards</i>	<i>573</i>	<i>15.6</i>	<i>26.4</i>	<i>18.5</i>	<i>13.8</i>
Grand total all funds	726	15.6	26.4	18.5	13.7
Subcategories (all vintages)					
UK	490	15.6	16.4	14.0	10.4
Non-UK	236	15.6	28.4	19.3	14.3
Pan-European	216	11.9	28.3	18.9	13.8
Technology	180	15.6	13.4	15.8	10.2
Non-Technology	546	15.6	27.2	18.7	13.9
Listed Private Equity*	18	15.4	21.2	17.4	5.6

* Annualised weighted average total net asset value return, calculated by Morningstar, www.morningstar.com

Returns by investment stage – IRR and multiple

Continued

Since-inception return – IRR (% p.a.) by vintage year

	No. of funds	To Dec '18	To Dec '17	To Dec '16	To Dec '15	To Dec '14	To Dec '13	To Dec '12	To Dec '11	To Dec '10	To Dec '09	To Dec '08	To Dec '07	To Dec '06	To Dec '05
1980-84	13	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5
1985-89	68	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.8	13.8	13.8	13.8
1990	13	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.4	11.3	11.3	11.1
1991	14	23.4	23.4	23.4	23.4	23.4	23.4	23.4	23.4	23.4	23.4	23.4	23.4	23.4	23.4
1992	7	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3	20.3
1993	10	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.1	15.2	15.0	15.2	15.3	15.3	14.8
1994	19	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.4
1995	9	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	22.2	21.9
1996	13	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.8	17.8	19.1	18.7	18.7	18.6
1997	24	15.0	15.0	15.0	15.0	15.1	15.0	15.0	15.0	15.0	15.1	15.3	15.6	14.7	14.9
1998	16	12.9	12.9	12.9	12.9	12.9	12.9	12.8	12.9	12.8	12.9	12.9	12.5	12.2	10.8
1999	25	11.5	11.5	11.5	11.5	9.9	9.5	9.4	9.7	8.6	8.0	8.0	15.8	8.8	6.2
2000	26	16.5	16.6	16.6	16.6	16.7	16.6	16.6	16.6	16.6	16.2	14.1	16.7	14.9	8.7
2001	30	24.8	24.9	24.9	25.0	25.0	25.1	24.8	25.2	26.1	26.6	27.4	29.1	28.3	23.4
2002	19	24.5	24.4	24.4	24.4	24.9	24.7	25.5	26.1	26.1	25.5	27.0	30.8	26.6	27.7
2003	17	18.2	19.8	19.8	19.8	20.0	20.4	20.7	22.0	23.7	17.5	25.4	32.1	23.4	22.2
2004	11	24.6	24.3	24.4	17.9	24.7	24.2	25.0	26.4	32.0	34.1	41.3	41.1	25.8	-5.8
2005	27	9.9	10.7	10.9	10.5	11.1	11.1	9.6	7.4	9.4	8.4	4.2	19.4	24.0	-8.0
2006	41	6.6	5.9	5.3	4.6	5.2	6.2	4.2	2.4	5.2	-11.8	-12.7	7.2	100.6	n/a
2007	41	9.6	10.3	9.9	9.4	9.2	9.7	7.9	8.9	12.6	5.1	4.1	24.7	n/a	n/a
2008	26	18.8	17.1	13.5	10.0	7.8	8.1	7.6	7.8	5.8	-5.7	-2.5	n/a	n/a	n/a
2009	26	14.1	12.4	11.8	11.1	-2.1	9.2	4.0	-10.4	8.7	15.5	n/a	n/a	n/a	n/a
2010	19	12.5	16.8	18.2	23.5	25.6	23.3	18.7	37.9	140.8	n/a	n/a	n/a	n/a	n/a
2011	18	15.7	20.7	16.2	30.4	38.8	44.4	70.7	-36.9	n/a	n/a	n/a	n/a	n/a	n/a
2012	20	22.5	27.9	21.9	22.6	1.9	-9.7	-32.6	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2013	24	26.3	19.8	19.8	21.9	-3.6	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2014	32	24.3	19.3	9.8	2.5	7.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total*	608	14.6	14.5	14.1	13.8	13.8	14.1	13.9	14.3	15.3	15.9	16.4	17.3	16.0	14.4

*The 'total' figures for each year end are based on funds that were at least four years old at the relevant year end.

Please note that the remainder of the data continues on the following page.

Since-inception return – IRR (% p.a.) by vintage year (continued)

	No. of funds	To Dec '18	To Dec '17	To Dec '16	To Dec '15	To Dec '14	To Dec '13	To Dec '12	To Dec '11	To Dec '10	To Dec '09	To Dec '08	To Dec '07	To Dec '06	To Dec '05
2015	30	20.9	9.7	-61.4	-59.4	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2016	37	15.9	-4.8	41.7	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2017	27	27.0	-4.4	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2018	24	-57.2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<i>Subtotal 2015-2018</i>	<i>118</i>	<i>20.7</i>	<i>13.6</i>	<i>4.2</i>	<i>19.8</i>	<i>26.0</i>	<i>29.2</i>	<i>12.4</i>	<i>6.0</i>	<i>11.5</i>	<i>-6.3</i>	<i>-2.1</i>	<i>18.2</i>	<i>27.9</i>	<i>n/a</i>

* The 'total' figures for each year end are based on funds that were at least four years old at the relevant year end.

Please note that the remainder of the data is found on the previous page.

Returns by investment stage – IRR and multiple

Continued

Since-inception return to Dec 2018 – multiple to paid-in capital (%) by vintage year

	No. of funds	Distributions Multiple (DPI)	Total Value Multiple (TVPI)
1980-84	13	205.6	205.6
1985-89	68	183.9	185.1
1990	13	156.8	156.8
1991	14	186.0	186.0
1992	7	192.5	192.5
1993	10	194.5	194.7
1994	19	265.0	265.1
1995	9	192.1	192.1
1996	13	190.6	190.6
1997	24	168.1	168.1
1998	16	174.7	174.9
1999	25	171.7	172.2
2000	26	189.7	193.1
2001	30	193.6	197.6
2002	19	178.3	181.2
2003	17	168.6	172.8
2004	11	214.9	220.3
2005	27	155.0	165.5
2006	41	123.6	146.6
2007	41	136.1	158.5
2008	26	168.9	235.6
2009	26	133.4	169.5
2010	19	103.7	155.6
2011	18	87.4	170.4
2012	20	95.4	186.6
2013	24	46.9	186.4
2014	32	50.4	180.4
Total	608	140.6	179.1

Medium to long-term return – IRR (% p.a.) by vintage year

	No. of funds	2018	Three years	Five years	Ten years
1980-84	13	n/a	n/a	n/a	n/a
1985-89	68	n/a	n/a	n/a	n/a
1990	13	n/a	n/a	n/a	n/a
1991	14	n/a	n/a	n/a	n/a
1992	7	n/a	n/a	n/a	n/a
1993	10	n/a	n/a	n/a	n/a
1994	19	n/a	n/a	n/a	n/a
1995	9	n/a	n/a	n/a	n/a
1996	13	n/a	117.0	26.7	-7.4
1997	24	3.4	1.4	2.5	-8.5
1998	16	0.0	-77.6	-76.7	11.4
1999	25	-1.6	13.4	8.2	97.6
2000	26	-15.4	-3.6	11.0	20.6
2001	30	12.9	-3.9	2.7	2.8
2002	19	8.8	47.9	14.0	5.9
2003	17	-1.8	14.1	4.4	7.4
2004	11	2.0	10.9	18.4	15.2
2005	27	-4.6	14.1	9.7	11.5
2006	41	69.4	17.5	7.8	8.8
2007	41	-8.0	15.6	10.9	10.8
2008	26	7.8	57.9	31.7	19.0
2009	26	23.8	19.0	19.8	n/a
2010	19	1.9	9.8	12.0	n/a
2011	18	0.5	21.7	17.4	n/a
2012	20	21.5	25.0	23.9	n/a
2013	24	12.7	31.1	27.1	n/a

	No. of funds	2018	Three years	Five years	Ten years
2014	32	35.0	29.8	n/a	n/a
2015	30	15.0	21.6	n/a	n/a
2016	37	18.1	n/a	n/a	n/a
2017	27	31.7	n/a	n/a	n/a
2018	24	n/a	n/a	n/a	n/a
Total	726	15.6	26.4	18.5	13.7

Returns by vintage year (1996 onwards) and investment stage – IRR and multiple

Since-inception return to Dec 2018 – IRR (% p.a.) by vintage year and investment stage

	Small/Mid MBO – to Dec '18		Mid/Large MBO – to Dec '18		Venture – to Dec '18	
	No. of funds	IRR (% p.a.)	No. of funds	IRR (% p.a.)	No. of funds	IRR (% p.a.)
1996	11	12.4	10	18.1	0	n/a
1997	12	6.9	12	14.7	10	21.0
1998	11	6.7	12	13.2	1	n/a
1999	12	10.0	15	12.1	9	-0.8
2000	13	17.9	12	20.8	11	-3.6
2001	13	26.0	16	26.4	12	-0.2
2002	6	29.5	7	31.7	12	1.3
2003	9	18.6	9	20.0	6	4.6
2004	6	24.9	8	25.3	2	n/a
2005	14	7.5	18	10.0	7	9.7
2006	23	7.6	20	6.4	12	8.4
2007	23	11.1	25	9.6	13	10.4
2008	16	11.1	14	18.9	5	-0.5
2009	17	13.3	8	13.1	8	20.1
2010	13	13.3	6	13.3	6	0.6
2011	12	16.5	8	16.0	5	13.9
2012	12	11.8	8	22.5	5	20.2
2013	12	14.2	12	27.2	9	2.3
2014	23	19.4	15	24.6	7	18.5
Total	258	12.6	235	14.9	140	5.3

Since-inception return to Dec 2018 – multiple to paid-in capital (%) by vintage year and investment stage

	Small/Mid MBO – to Dec '18			Mid/Large MBO – to Dec '18			Venture – to Dec '18		
	No. of funds	Distributions (DPI)	Total Value (TVPI)	No. of funds	Distributions (DPI)	Total Value (TVPI)	No. of funds	Distributions (DPI)	Total Value (TVPI)
1996	11	162.1	162.1	10	193.0	193.0	0	n/a	n/a
1997	12	137.1	137.1	12	171.8	171.8	10	160.0	160.6
1998	11	139.0	139.7	12	176.9	177.1	1	n/a	n/a
1999	12	158.8	159.9	15	175.8	176.3	9	93.1	94.8
2000	13	176.7	177.0	12	218.2	217.8	11	46.4	69.3
2001	13	206.4	207.0	16	199.5	202.3	12	75.1	98.6
2002	6	226.1	226.1	7	198.8	199.3	12	95.7	108.3
2003	9	176.9	180.8	9	171.9	176.0	6	125.1	129.3
2004	6	200.2	201.2	8	218.1	223.0	2	n/a	n/a
2005	14	135.1	142.1	18	156.7	166.2	7	110.3	190.9
2006	23	122.6	157.5	20	123.4	144.7	12	111.4	176.6
2007	23	135.5	166.8	25	137.7	158.1	13	107.4	171.1
2008	16	125.3	150.6	14	170.1	237.5	5	11.8	96.7
2009	17	152.0	173.1	8	136.0	161.0	8	114.1	220.9
2010	13	109.2	158.8	6	102.1	151.7	6	14.6	103.2
2011	12	107.3	179.5	8	88.6	169.2	5	81.8	172.0
2012	12	82.5	135.8	8	94.5	187.3	5	95.5	183.5
2013	12	35.3	147.8	12	48.2	189.8	9	14.8	104.5
2014	23	39.0	146.7	15	53.1	184.6	7	30.6	148.1
Total	258	127.9	162.8	235	142.0	180.7	140	89.9	139.5

Returns by vintage year (1996 onwards) and investment stage – IRR and multiple

Continued

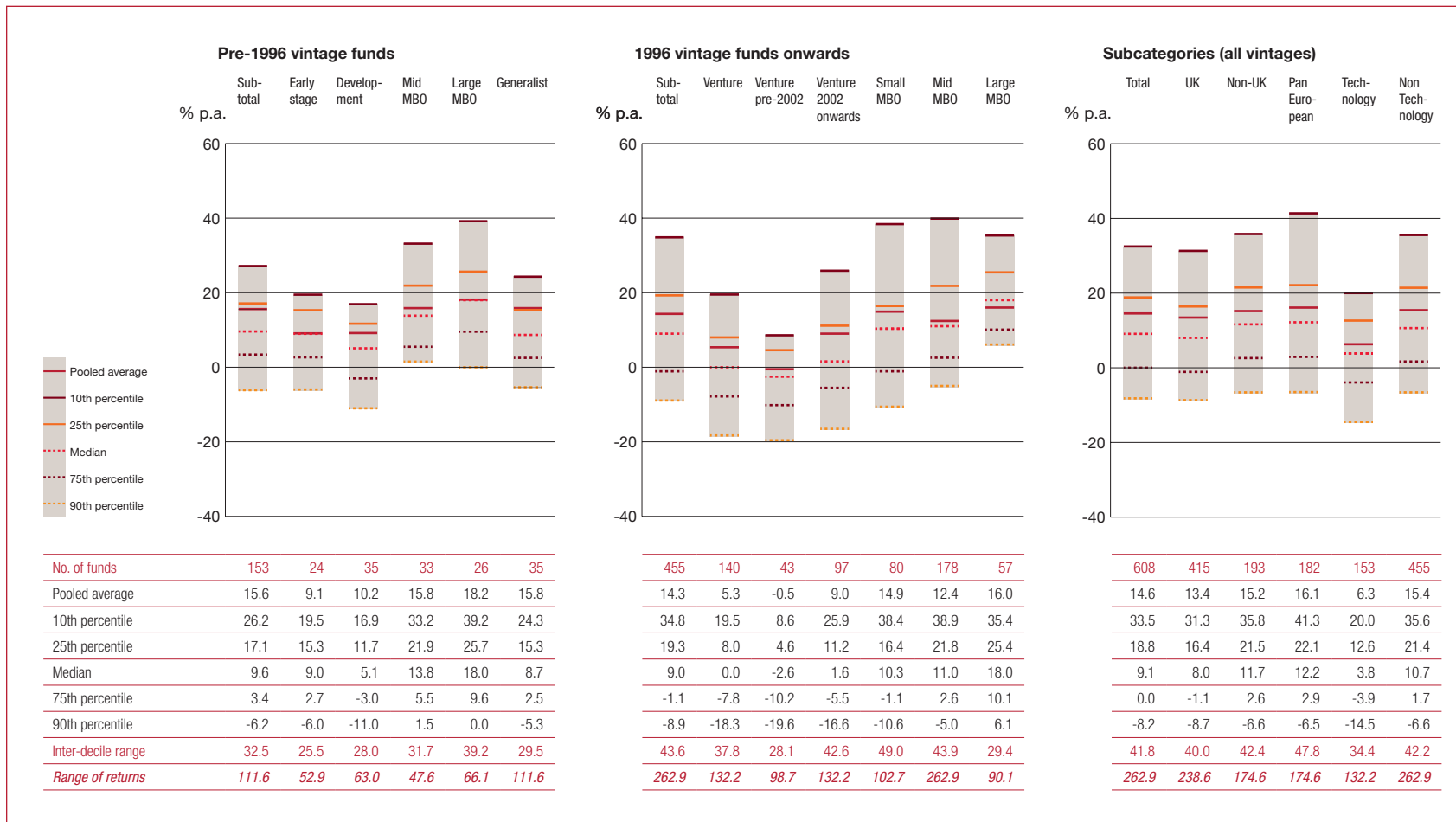
Medium to long-term return – IRR (% p.a.) by vintage year and investment stage

	Small/Mid MBO			Mid/Large MBO			Venture		
	No. of funds	Three years	Five years	No. of funds	Three years	Five years	No. of funds	Three years	Five years
1996	11	117.0	135.4	10	115.1	32.6	0	n/a	n/a
1997	12	n/a	n/a	12	0.7	-2.5	10	2.6	19.4
1998	11	-3.1	-7.0	12	-78.1	-77.4	1	n/a	n/a
1999	12	13.5	2.1	15	13.9	8.4	9	11.3	6.7
2000	13	14.4	1.7	12	n/a	6.3	11	1.1	12.6
2001	13	-22.6	-9.8	16	1.6	6.4	12	-10.8	-4.3
2002	6	n/a	-9.1	7	247.3	9.7	12	36.8	18.7
2003	9	12.1	5.5	9	15.8	2.2	6	4.6	26.9
2004	6	3.2	33.8	8	11.3	18.5	2	n/a	n/a
2005	14	0.7	4.5	18	14.1	9.1	7	17.5	32.1
2006	23	28.3	21.2	20	18.1	7.6	12	12.5	9.6
2007	23	27.2	15.4	25	17.0	11.0	13	7.8	13.5
2008	16	6.7	9.9	14	59.6	32.1	5	-9.6	-3.9
2009	17	26.5	20.5	8	20.9	19.3	8	7.4	20.3
2010	13	10.7	12.9	6	5.6	11.0	6	-0.4	0.4
2011	12	20.3	18.4	8	23.6	17.9	5	12.5	19.6
2012	12	7.4	13.5	8	24.3	23.6	5	25.8	24.2
2013	12	17.5	14.7	12	31.9	27.9	9	-2.5	2.6
2014	23	22.5	n/a	15	30.3	n/a	7	20.8	n/a
2015	24	10.2	n/a	18	22.9	n/a	4	5.5	n/a
2016	27	n/a	n/a	14	n/a	n/a	8	n/a	n/a
2017	16	n/a	n/a	16	n/a	n/a	5	n/a	n/a
2018	13	n/a	n/a	9	n/a	n/a	10	n/a	n/a
Total	338	17.4	15.3	292	28.0	18.9	167	8.7	13.1

Range of returns (IRR and multiple) since inception – investment stage and subcategory

Range of returns IRR (%) by investment stage and subcategory

Since inception to December 2018

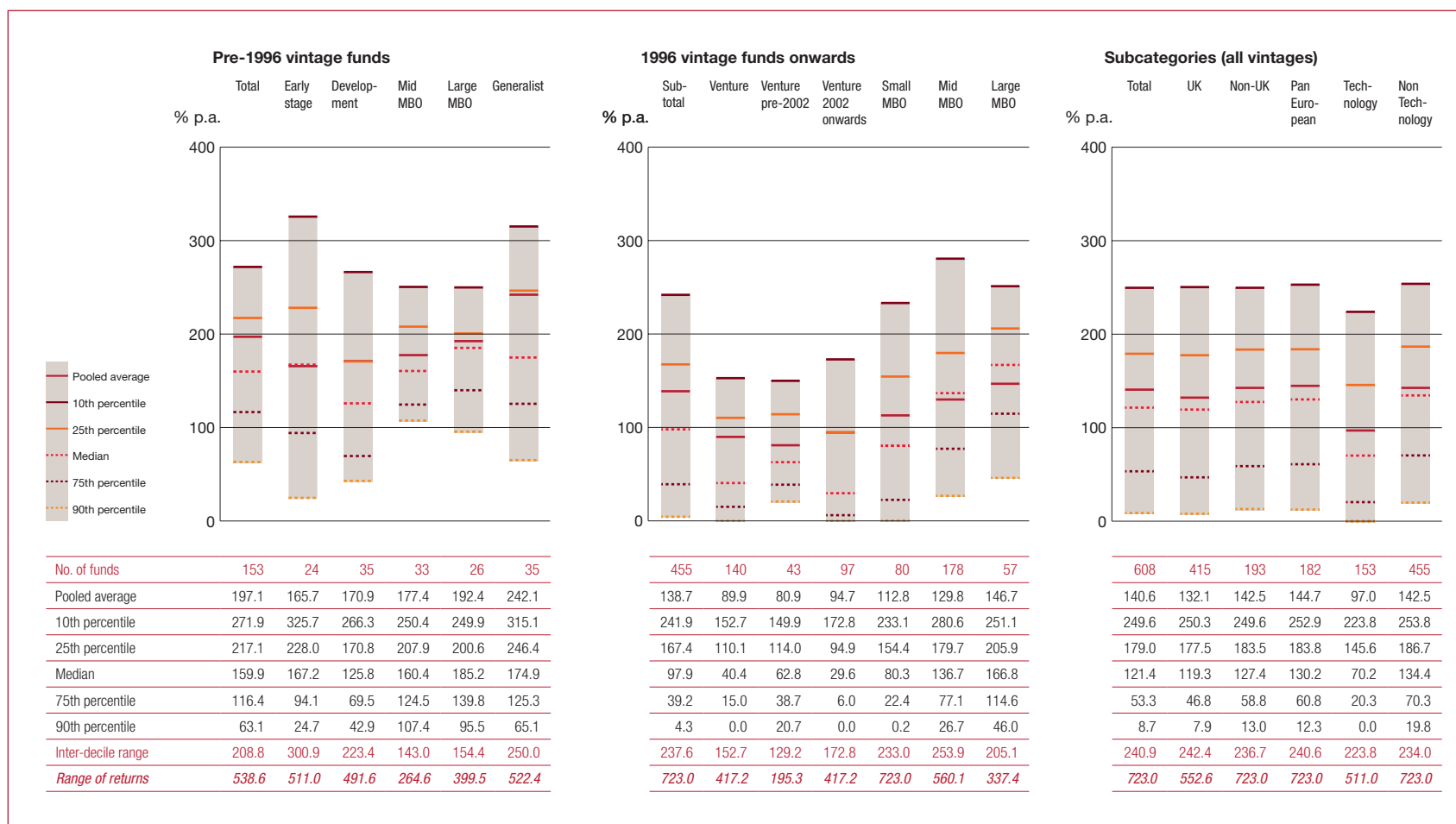


Range of returns (IRR and multiple) since inception – investment stage and subcategory

Continued

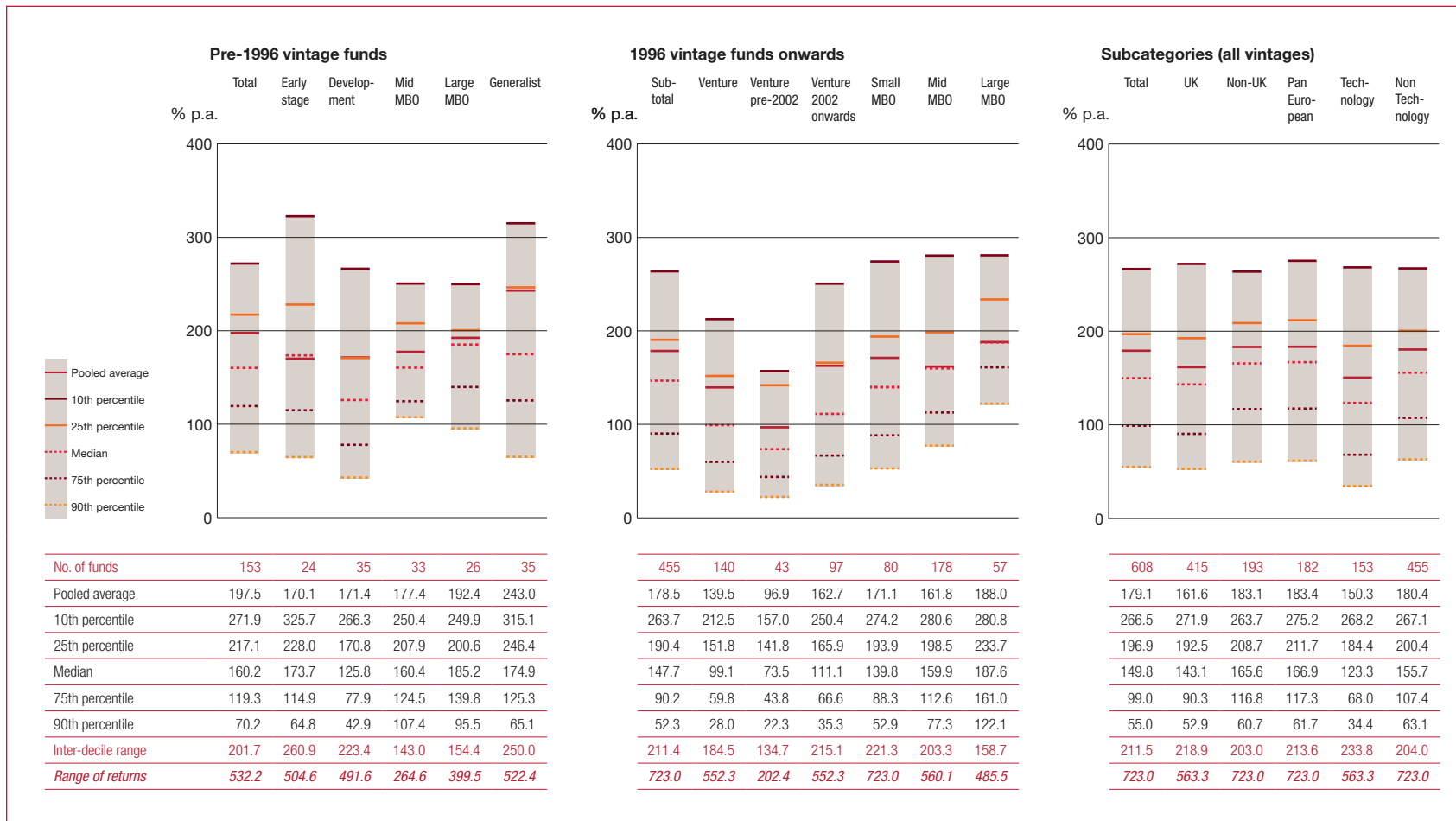
Range of returns (multiple) by investment stage and subcategory (%)
Distributions (DPI)

Since inception to December 2018



Range of returns (multiple) by investment stage and subcategory (%)
Total Value (TVPI)

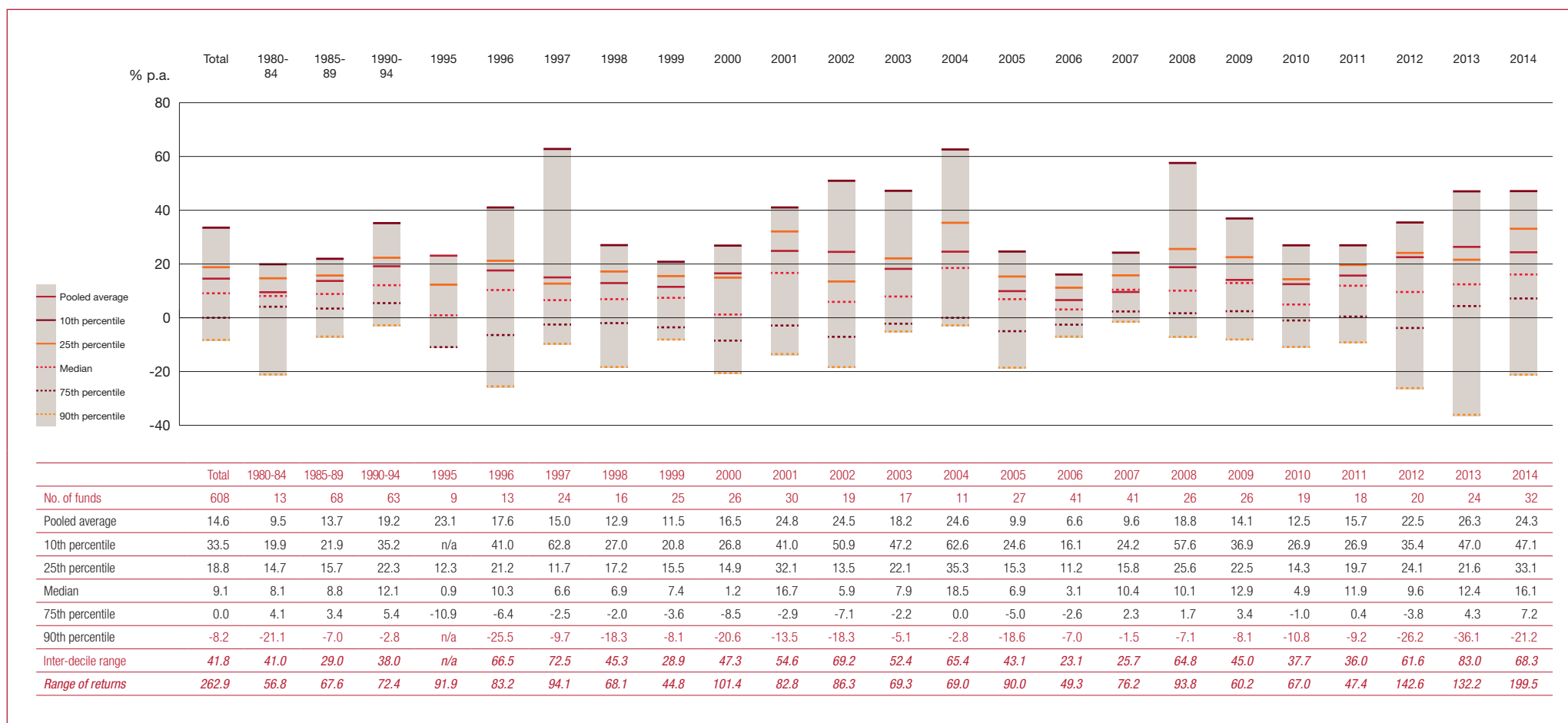
Since inception to December 2018



Range of returns (IRR and multiple) since inception – vintage year

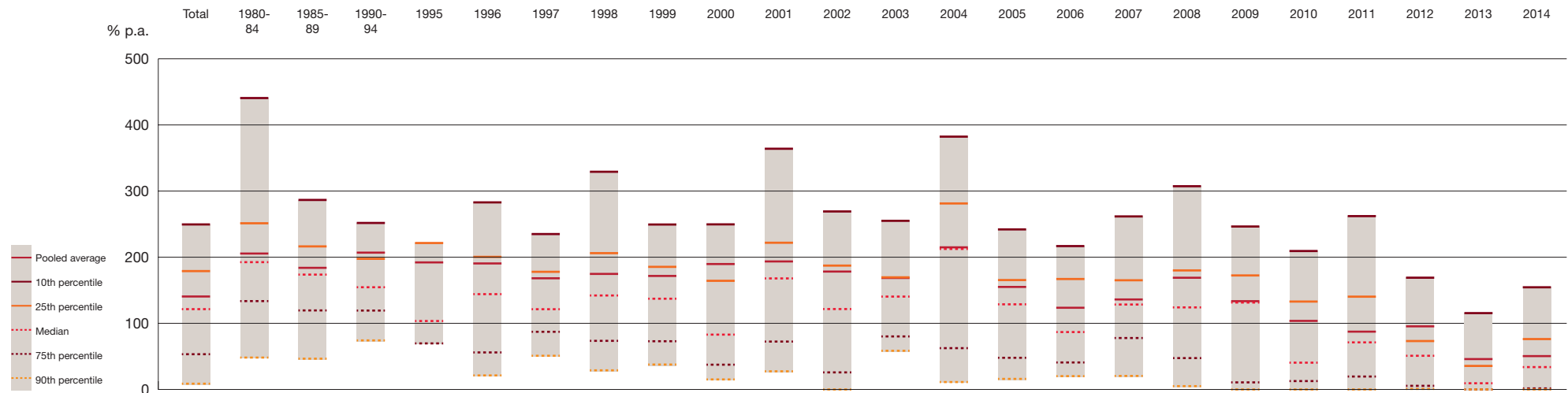
Range of returns – IRR (%) by vintage year

Since inception to December 2018



Range of returns – multiple (%) by vintage year
Distributions (DPI)

Since inception to December 2018



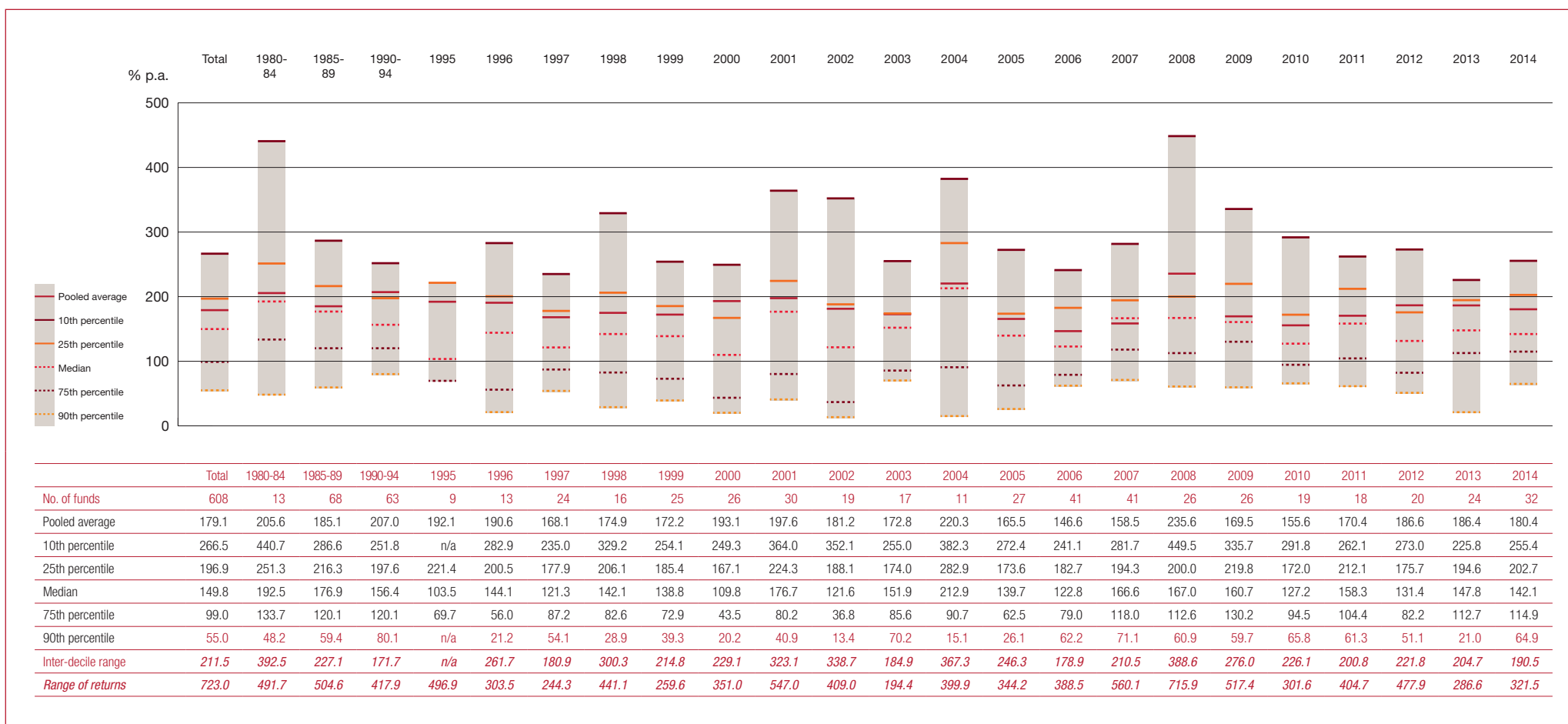
	Total	1980-84	1985-89	1990-94	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
No. of funds	608	13	68	63	9	13	24	16	25	26	30	19	17	11	27	41	41	26	26	19	18	20	24	32
Pooled average	140.6	205.6	183.9	206.9	192.1	190.6	168.1	174.7	171.7	189.7	193.6	178.3	168.6	214.9	155.0	123.6	136.1	168.9	133.4	103.7	87.4	95.4	46.9	50.4
10th percentile	249.6	440.7	286.6	251.8	n/a	282.9	235.0	329.2	249.4	249.7	364.0	269.2	255.0	382.3	242.0	216.8	261.7	307.3	246.4	209.3	262.1	169.0	115.4	154.5
25th percentile	179.0	251.3	216.3	197.6	221.4	200.5	177.9	206.1	185.4	164.3	221.8	187.3	169.6	281.3	165.4	167.0	164.8	180.0	172.4	132.9	140.3	83.2	45.6	76.2
Median	121.4	192.5	173.7	154.6	103.5	144.1	121.3	142.1	137.2	82.9	167.9	121.6	140.4	212.6	128.7	86.8	128.4	123.1	131.4	40.5	71.2	60.9	9.4	33.8
75th percentile	53.3	133.7	119.5	119.3	69.7	56.0	87.2	73.5	72.9	37.4	72.4	25.8	80.2	62.4	47.9	40.8	77.8	47.4	10.7	12.7	19.6	5.5	0.0	1.6
90th percentile	8.7	48.2	46.5	74.2	n/a	21.2	50.9	28.9	37.7	15.2	27.4	0.0	58.5	11.2	16.0	20.1	20.4	5.0	0.0	0.0	0.0	0.0	0.0	0.0
Inter-decile range	240.9	392.5	240.1	177.6	n/a	261.7	184.0	300.3	211.8	234.5	336.5	269.2	196.5	371.1	225.9	196.7	241.3	302.4	246.4	209.3	262.1	169.0	115.4	154.5
Range of returns	723.0	491.7	511.0	426.4	496.9	303.5	244.3	441.1	259.6	351.0	547.0	352.1	252.7	399.9	381.2	417.2	560.1	723.0	360.6	291.8	441.0	187.8	241.5	320.5

Range of returns (IRR and multiple) since inception – vintage year

Continued

Range of returns – multiple (%) by vintage year
Total Value (TVPI)

Since inception to December 2018



Range of returns (IRR and multiple) since inception – investment stage (1996 onwards) and vintage year

Range of returns – IRR (%) by investment stage and vintage year

Since inception to December 2018



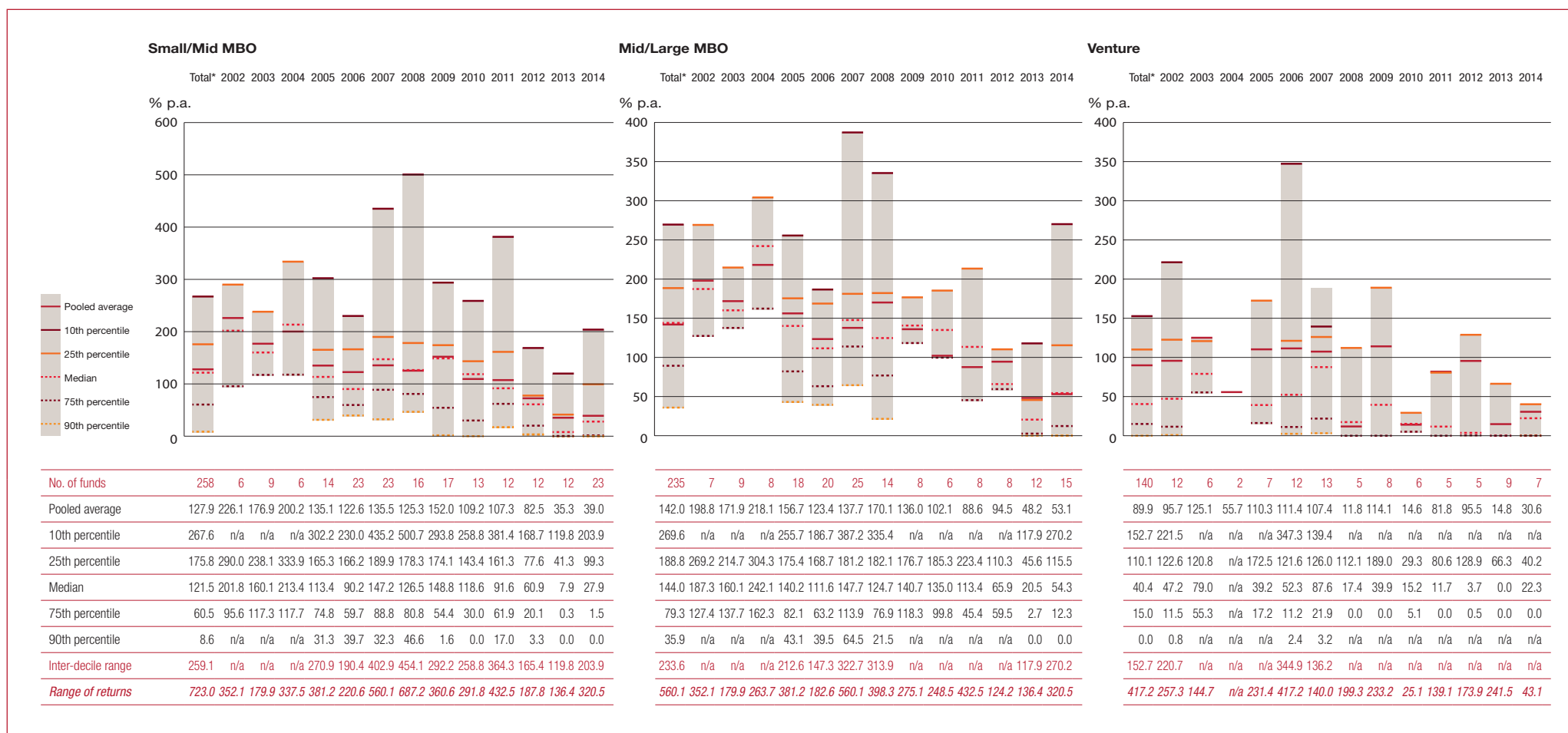
* Total figures are inclusive of the period from 1996 to 2014

Range of returns (IRR and multiple) since inception – investment stage (1996 onwards) and vintage year

Continued

Range of returns – multiple (%) by investment stage and vintage year
Distributions (DPI)

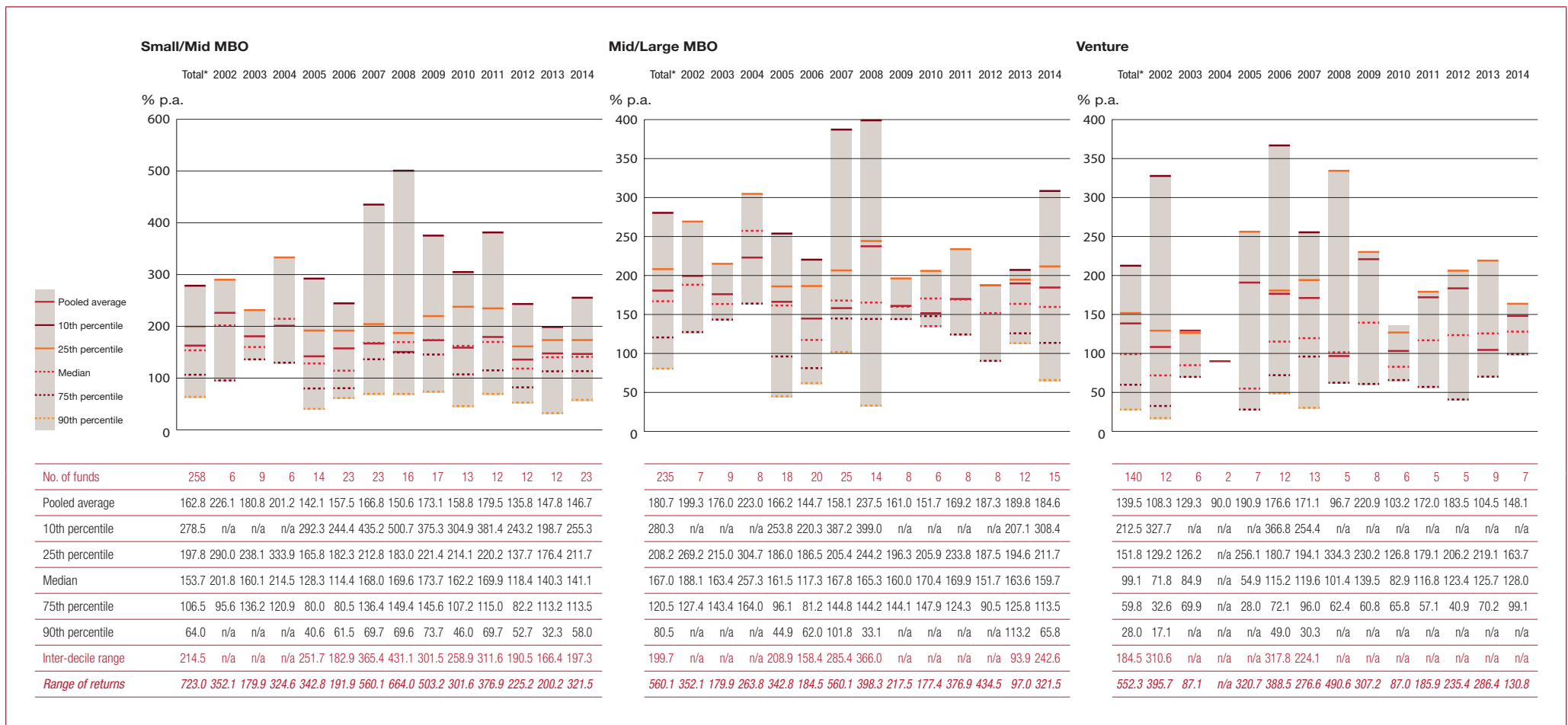
Since inception to December 2018



* Total figures are inclusive of the period from 1996 to 2014

Range of returns – multiple (%) by investment stage and vintage year
Total Value (TVPI)

Since inception to December 2018



* Total figures are inclusive of the period from 1996 to 2014

Capital raised and realised

Capital raised and realised by investment stage and subcategories to year end December 2018

	No. of funds	Capital raised (£mn)	Paid-in capital (£mn)	Distributions		Residual value		Total value	
				(£mn)	%	(£mn)	%	(£mn)	%
Pre-1996 vintage funds									
Early stage	24	344	343	569	165.7	15	4.4	584	170.1
Development	35	529	528	903	170.9	2	0.4	906	171.4
Mid MBO	33	1,194	1,174	2,083	177.4	0	0.0	2,083	177.4
Large MBO	26	3,722	3,605	6,934	192.4	0	0.0	6,934	192.4
Generalist	35	1,450	1,439	3,484	242.1	13	0.9	3,497	243.0
<i>Subtotal pre-1996</i>	<i>153</i>	<i>7,239</i>	<i>7,090</i>	<i>13,974</i>	<i>197.1</i>	<i>31</i>	<i>0.4</i>	<i>14,005</i>	<i>197.5</i>
1996 vintage funds onwards									
Venture	167	12,173	9,963	8,481	85.1	5,180	52.0	13,662	137.1
pre-2002 vintage funds	43	3,403	3,323	2,689	80.9	530	15.9	3,219	96.9
2002 vintage funds onwards	124	8,770	6,640	5,792	87.2	4,650	70.0	10,442	157.3
Small MBO	114	13,133	8,705	7,557	86.8	6,048	69.5	13,605	156.3
Mid MBO	224	95,989	64,792	70,759	109.2	29,459	45.5	100,218	154.7
Large MBO	68	206,373	158,062	203,668	128.9	81,456	51.5	285,123	180.4
<i>Subtotal 1996 onwards</i>	<i>573</i>	<i>327,667</i>	<i>241,522</i>	<i>290,466</i>	<i>120.3</i>	<i>122,142</i>	<i>50.6</i>	<i>412,608</i>	<i>170.8</i>
Grand total all funds	726	334,907	248,612	304,439	122.5	122,173	49.1	426,613	171.6
Subcategories (all vintages)									
UK	490	58,724	46,284	53,155	114.8	18,814	40.6	71,969	155.5
Non-UK	236	276,183	202,329	251,284	124.2	103,359	51.1	354,643	175.3
Pan-European	216	262,818	194,032	247,820	127.7	92,686	47.8	340,506	175.5
Technology	180	12,494	9,647	8,725	90.4	5,571	57.8	14,296	148.2
Non-Technology	546	322,412	238,966	295,714	123.7	116,602	48.8	412,316	172.5

Please note that total figures do not necessarily equal the sum of the components due to rounding.

Capital raised and realised by vintage year to year end December 2018

	No. of funds	Capital raised (£mn)	Paid-in capital (£mn)	Distributions		Residual value		Total value	
				(£mn)	%	(£mn)	%	(£mn)	%
1980-84	13	165	165	338	205.6	0	0.0	338	205.6
1985-89	68	2,475	2,473	4,549	183.9	28	1.1	4,577	185.1
1990	13	1,301	1,301	2,040	156.8	0	0.0	2,040	156.8
1991	14	342	342	636	186.0	0	0.0	636	186.0
1992	7	211	211	407	192.5	0	0.0	407	192.5
1993	10	369	365	710	194.5	1	0.2	711	194.7
1994	19	1,508	1,376	3,647	265.0	2	0.1	3,649	265.1
1995	9	868	858	1,648	192.1	0	0.0	1,648	192.1
1996	13	1,476	1,413	2,694	190.6	0	0.0	2,694	190.6
1997	24	4,350	4,085	6,866	168.1	3	0.1	6,869	168.1
1998	16	5,661	5,260	9,187	174.7	11	0.2	9,197	174.9
1999	25	7,711	7,409	12,720	171.7	38	0.5	12,758	172.2
2000	26	8,120	8,005	15,185	189.7	271	3.4	15,455	193.1
2001	30	15,719	15,232	29,485	193.6	619	4.1	30,104	197.6
2002	19	3,397	2,952	5,262	178.3	86	2.9	5,348	181.2
2003	17	6,958	6,642	11,194	168.6	284	4.3	11,479	172.8
2004	11	3,706	2,904	6,242	214.9	156	5.4	6,398	220.3
2005	27	26,571	24,742	38,343	155.0	2,615	10.6	40,958	165.5
2006	41	30,761	23,633	29,203	123.6	5,445	23.0	34,648	146.6
2007	41	29,669	28,791	39,175	136.1	6,453	22.4	45,628	158.5
2008	26	25,611	22,553	38,085	168.9	15,040	66.7	53,125	235.6
2009	26	8,572	7,872	10,503	133.4	2,837	36.0	13,340	169.5
2010	19	4,907	3,754	3,894	103.7	1,949	51.9	5,843	155.6
2011	18	10,615	10,276	8,982	87.4	8,528	83.0	17,510	170.4
2012	20	10,257	10,057	9,593	95.4	9,174	91.2	18,767	186.6
2013	24	20,439	11,856	5,565	46.9	16,530	139.4	22,095	186.4
2014	32	11,987	9,486	4,775	50.3	12,330	130.0	17,106	180.3

Please note that the remainder of the data continues on the following page.

Capital raised and realised

Capital raised and realised by vintage year to year end December 2018 (continued)

	No. of funds	Capital raised (£mn)	Paid-in capital (£mn)	Distributions		Residual value		Total value	
				(£mn)	%	(£mn)	%	(£mn)	%
2015	30	16,324	10,781	1,911	17.7	13,069	121.2	14,980	138.9
2016	37	15,530	9,223	1,559	16.9	9,338	101.2	10,896	118.1
2017	27	41,405	13,848	43	0.3	16,774	121.1	16,817	121.4
2018	24	17,921	751	0	0	593	79.0	593	79.0
Total	726	334,907	248,616	304,439	122.5	122,173	49.1	426,613	171.6

Please note that the remainder of the data is found on the previous page.

Capital raised and realised

Continued

Across all vintage years and investment stages from when BVCA records commenced in 1980 to the present day (of December 2018), BVCA member funds have raised £335bn for investment¹.

The tables overleaf on capital raised and realised show the ratio of distributions made to paid-in capital, the residual value of the funds to paid-in capital and the total value created to paid-in capital. In most cases, capital is paid into funds over a number of years as suitable investment opportunities arise.

Across all vintage years, BVCA funds have raised £335 billion for investment. Of the capital raised, £249 billion has been drawn down to date. This indicates an amount of around £86 billion that is available for the industry to invest. Of the capital paid in, £304 billion has been returned to investors and £122 billion is retained in the portfolio. The total value (distribution plus residual value) as a percentage of paid-in capital is 172%.



1. Please note that the capital raised figures reported in this report are not comparable with the capital raised figures in the BVCA Investment Activity Report for the same period. Firstly, this report examines only the UK-based unlisted funds that raise capital from the third party investors, whereas the Investment Activity Report covers not only these funds but also VCTs and listed private equity vehicles. Secondly, this report only includes the funds, which have made their first capital call from their investors. Furthermore, it is the total amount raised by these funds that is reported, not just the amount raised in a particular year (2018 in this case). The Investment Activity Report, on the other hand, considers only the amount raised in the relevant year irrespective of the timing of the first capital call. For example, consider Fund A, which started fundraising in 2017, raised £200 million in 2017, and £100 million in 2018, and made a capital call in July 2018. The Investment Activity Report 2018 would have included only the £100 million raised in 2018 (the £200 million raised in 2017 should have been covered by the 2017 report). The Performance Measurement Report 2018 would have included this fund for the first time in its 2018 vintage sub category and reported the total amount raised, i.e. the £300 million (the fund would not have been reported in Performance Measurement Report 2017).

Appendix I – Methodology

The Survey – Introduction

The BVCA, in conjunction with Capital Dynamics and PwC, carried out the BVCA Performance Measurement Survey for the year ended 31 December 2018. The survey highlights the performance of ‘independent’ UK private equity funds – funds raised from external investors for investment into businesses at the venture capital (early stage and development) and private equity (MBO) stages (and managed from the manager’s UK office), but excluding investments made from the fund manager’s own balance sheet. It also excludes listed private equity investment companies (formerly known as private equity investment trusts (PEITs)) and venture capital trusts (VCTs), although listed private equity is shown as a separate category.

This is the twenty-fifth annual set of performance results that the BVCA has published.

Methodology

The Survey collects data on the performance of BVCA member, UK-managed funds that raise capital from institutional investors (the ‘independents’).

This year’s survey incorporates the results of 726 private equity and venture capital funds – the most comprehensive dataset to date. We therefore believe that it is the most complete country-specific survey on the performance of private equity funds in the world.

Capital Dynamics were responsible for verifying the data with the private equity funds and, where appropriate, correcting the data upon verification.

The BVCA managed and assisted with the project, from the gathering of data through to writing and editing the summary pamphlet and this final report.

The results of the survey have been analysed, by both investment stage and vintage year. Further analysis has been included to consider the performance of UK and non-UK funds, and also to review the overall performance of technology funds. As previously stated, we also show the performance of listed private equity investment companies as an entirely separate category.

To reflect changes in the marketplace, funds set up from 1996 onwards have been reclassified into four investment stage categories: Venture, Small MBO (including development capital), Mid MBO and Large MBO. Pre-1996 vintage funds remain in the previous stage categories, that is, Early Stage, Development, Mid MBO, Large MBO and Generalist. This is reflected in the tables accordingly. Please note that when comparing the totals and subtotals with underlying category inputs, in some instances there may be minor discrepancies due to rounding.

UK private equity returns are compared in the report with the FTSE 100 and FTSE All-Share indices. The return quoted for private equity funds is the internal rate of return (IRR) to investors, net of costs and fees.

Eligibility criteria

The survey shows the aggregate returns produced between 1980 and 2018 by independent, UK-based private equity funds managed by UK private equity firms that are members of the BVCA. Non-UK and technology-focused funds are included. Venture capital trusts and funds not open to external investors have been excluded from the survey. While listed private equity is excluded from the main analysis, they are shown as an entirely separate category for comparison purposes.

The BVCA represents the vast majority of private equity and venture capital in the UK. Full members, such as those included in this survey, are UK-based firms, which manage private equity and venture capital funds from the UK. Funds managed by former members of the BVCA have been included where information has been available, but these are few and most are no longer active in the private equity industry. Firms that have never been members of the BVCA are not included.

Appendix I – Methodology

Continued

Calculation of return

The returns are derived from cash flows and valuations of funds at the relevant period year-ends and the calculation of the change between them on a per annum (p.a.) basis.

The measurement of performance in this survey is the internal rate of return (IRR), a widely used measure of performance and comparable with similar studies of private equity fund returns in the US and Europe, which are both time- and money- weighted. The return represents the ‘net’ return to investors after costs and fees. Provision is made for performance fees that would have been payable if the valuation had been realised at the balance-sheet date.

The IRR is used as the appropriate performance measure for venture capital and private equity, due to the high level of discretion of the manager in determining cash flows, to and from the fund-investor, and the difficulty in determining portfolio valuations at the date of these cash flows. Time-weighted return calculations require frequent and easily obtainable re-valuations and assume a low level of manager discretion in the timing of cash flows. The academic community and the CFA (Chartered Financial Analyst) Institute (formerly known as AIMR – Association for Investment Management and Research)

supports the use of the IRR as the most appropriate measure of private equity and venture capital fund performance.

The IRR is regarded to be the most comprehensive absolute measure of private equity’s performance. Making direct comparisons with other asset classes, however, is a key concern for institutional investors. Given the inherent nature of IRRs, one of the limitations or difficulties of its use arises when comparing IRRs to the time-based measures of total return generated from investing in traditional publicly quoted financial instruments like individual equities or fixed income or indeed the indices of such instruments.

One of the key ways to overcome this difficulty has been through the advent of performance metrics comparing public markets with IRRs in a meaningful manner. The Public Market Equivalent (PME) method – first devised by Long and Nickels (1996)² – enables investors to directly compare IRRs with the performance that would be generated from publicly quoted securities over the same time period of the cash flows. Moreover, in order to overcome some of the limitations of the PME method, particularly around the possibility that the hypothetical PME vehicle could end up in a ‘short position’ or hold a negative NAV, a modified metric of PME+ has been proposed by Rouvinez (2003)³.

The performance numbers and percentiles analyses published throughout this report have been computed using SPSS Statistics, a specialist statistical software package. The use of SPSS ensures a greater level of robustness and richness in the final analysis not found in common spreadsheet software applications.

Listed Private Equity

Morningstar (www.morningstar.com) has calculated the performance of listed private equity (formerly known in the survey as quoted private equity investment trusts or PEITs). More information on listed private equity can be found at: www.lpeq.com/

Valuations

The survey is based on cash flows and valuations supplied by each participating fund. PwC has stipulated that these be based on the International Private Equity and Venture Capital Valuation (IPEV) Guidelines, developed by the BVCA, European Private Equity and Venture Capital Association (EVCA) and Association Française des Investisseurs en Capital (AFIC), the French national association, and which were first introduced in March 2005.

However, as noted in the ‘Disclaimer’ at the end of this report, PwC has not independently

checked the valuation data, nor confirmed that the International Private Equity and Venture Capital Valuation Guidelines have been strictly adhered to. Fifty-six percent of the funds surveyed contain unrealised investments, which are usually stated at fair value in accordance with these Guidelines, and which give a return in an interim measure of performance.

Confidentiality

The data for this survey was provided by BVCA members on the basis that no data relating to any individual member or fund would be seen by any other member, including those on the BVCA Investor Relations Committee, or by another person or organisation other than PwC or Capital Dynamics (unless members specified otherwise) other than in the anonymous and aggregate form in which it is published.

2. Long, A, and Nickels, C (1996), ‘A private investment benchmark’, mimeo; paper presented to AIMR Conference on Venture Capital Investing, February.

3. Rouvinez, C (2003), ‘Private equity benchmarking with PME+’, Venture Capital Journal, August, pages 34-38.

Appendix II – Glossary of terms

Capital raised (or ‘funds raised’)

Capital committed by investors (capital they have agreed to subscribe). This will not usually all be paid in at one time.

Inception/since inception

The period from a fund’s first drawdown up to a particular point in time, that is, 31 December 2018 in this report. Funds measured thus are at least four years old.

Investment stage and general fund investment profile

Pre-1996 vintage funds

‘Early Stage’

Invests in companies in the seed (concept), start-up (within three years of a company’s establishment) and early stages of development.

‘Development’

Invests in expansion stage companies, that is, established companies that raise private equity to make acquisitions, fund working capital, buy new plant, etc. and small management buyouts and buy-ins (MBOs) with less than £10 million of equity invested.

‘Mid MBO’

Invests in management buyouts and buy-ins with £10 million to £100 million of equity invested.

‘Large MBO’

Invests in management buyouts and buy-ins with more than £100 million of equity invested.

1996 vintage funds onwards

‘Venture’

Invests in companies in the seed (concept), start-up (within three years of a company’s establishment) and early stages of development.

‘Small MBO’

Invests in small management buyouts and buy-ins (MBOs) with less than £10 million of equity invested. This category also includes development capital for expansion stage companies, that is, established companies that raise private equity to make acquisitions, fund working capital, buy new plant machinery and the like.

Subcategories – all vintages

‘Technology’

Invests primarily (at least 60% of the fund) in technology companies.

‘Non-UK’

Invests primarily (at least 60% of the fund) in companies outside the UK.

‘Pan-European’

Invests in more than two European countries.

IRR

See Return

Multiple

The distributed (DPI) multiple is the total amount distributed to investors as a percentage of paid-in/committed capital.

The total value multiple (TVPI) is the total amount distributed plus the residual value attributable to investors as a percentage of paid-in capital.

Net and gross returns

All private equity returns quoted are the net returns of investors, after all costs and fees.

Not applicable

Due to the small number of private equity funds in some periods and the need for confidentiality, some ranges are marked not applicable – that is, n/a.

Paid-in capital

Capital that has actually been paid into the fund by investors.

Percentile ranking

Percentile rankings indicate the position occupied by a portfolio return in a particular universe. A ranking of the nth percentile means that n% of funds achieved a return greater than or equal to that fund’s return. See also ‘range of returns’.

Appendix II – Glossary of terms

Continued

Range of returns: quartiles/deciles/percentiles

The ‘range of returns’ represents the results of a universe of portfolios constructed for the purposes of comparing performance. Within each range, a portfolio’s results are defined in terms of a percentile ranking. Ranges can be subdivided by quartiles, deciles and percentiles. The range between the tenth and ninetieth percentile is known as the ‘interdecile’ range.

Top decile

Tenth percentile – 10% of the funds have an equal or higher return than this value.

Upper quartile

Twenty-fifth percentile – 25% of the funds have an equal or higher return than this value.

Median

Fiftieth percentile – The return of funds in the middle of the ranking.

Lower quartile

Seventy-fifth percentile – 75% of the funds have an equal or higher return than this value.

Bottom decile

Ninetieth percentile – 90% of the funds have an equal or higher return than this value.

Pooled average

The IRR or return for the total sample of funds being analysed.

Return

The annualised internal rate of return (IRR) achieved over a period of time, based on the portfolio cash flows and valuations. The cash flows used in the calculations are the total actual fund cash flows and the returns are therefore time-weighted and money-weighted. This type of calculation is often referred to as ‘time line basis’ (see also Methodology, ‘Calculation of Return’).

Total return

The aggregate of all cash flows.

Universe

A group of similar portfolios assembled to provide a benchmark against which the performance of an individual portfolio may be compared. Any such universe should comprise portfolios with similar investments and objectives, and the same domicile and tax status.

Valuations

This refers to the assessed value of the unrealised part of the portfolio, which is assumed to be realised at 31 December 2018 in the final return calculation. This assessment is carried out in accordance with the International Private Equity and Venture Capital Valuation Guidelines.

Vintage year

Governed by the date of the fund’s first drawdown, that is, the earlier of either (I) the first payment by the investor to the fund; or (II) the first investment made by the fund.

Weighted average (Principal comparators)

The aggregate returns of a number of like portfolios, the results of which are used for comparing performance. The weighted average for a number of portfolios is calculated by weighting each individual portfolio’s return by the proportion (by the average value of investment over the period) of the combined total that it represents.

Appendix III – Range of returns (IRR) medium to long-term

This appendix shows the range of returns (under the IRR metric) over the longer term – three, five and ten-year periods. The range of returns ‘since inception’ is the most appropriate measurement for private equity and venture capital and these are shown on pages 23-31 of the main report.

It is important to note that the shorter the time period measured, the more volatile the returns are likely to be. The most probable cause of extreme numbers is the realisation of assets at prices that differ significantly from previous valuations. The more extreme numbers are likely to occur where the time period measured is short, or where funds in older vintages realise their last remaining assets from a small residual carrying value.

Put simply, an investment with an original cost of £1 might be valued at £0.50. If the investment subsequently failed, the loss of £0.50 of value would record as -100% over whatever time period was measured. If the investment had been sold at cost, say nine months later, the return in the period would be in excess of 150% on an annualised basis.

It should also be noted that the ‘Pooled average’ return in the ‘Total’ column in the following tables is the return for all funds that were in existence at the beginning of the measurement period (e.g. the ‘pooled average’ return for funds over five years is calculated by measuring the aggregate performance of all funds that were in existence on 1 January 2012 for the five-year period from 1 January 2012 to 31 December 2018). This differs from the medium to long-term return tables, which calculate the five-year returns on all funds in the survey at 31 December 2018, regardless of their vintage year. The same principle applies to the three and ten-year returns.

The top and bottom deciles are excluded to produce a range that disregards outliers. This is known as the ‘interdecile’ range.

Where there are fewer than ten funds in a sample, the 10th and 90th percentile are denoted n/a (not applicable) in the following tables.



Appendix III – Range of returns (IRR) medium to long-term – three years

Range of returns (IRR) by investment stage and subcategory (% p.a.) – three years

	Pre-1996 vintage funds						1996 vintage funds onwards					Subcategories (all vintages)					
	Total	Early Stage	Develop-ment	Mid MBO	Large MBO	Generalist	Total	Venture	Small MBO	Mid MBO	Large MBO	Total	UK	Non-UK	Pan-European	Technology	Non-Technology
No. of funds	153	24	35	33	26	35	485	144	88	194	59	638	437	201	190	156	482
Pooled average	-0.5	n/a	4.1	n/a	n/a	-1.4	26.9	9.1	18.7	17.1	33.4	26.9	16.5	28.8	29.3	13.3	27.7
10th percentile	0.0	0.0	0.0	0.0	0.0	0.0	38.0	28.4	38.8	37.2	75.4	30.1	27.1	38.0	37.3	24.6	31.3
25th percentile	0.0	0.0	0.0	0.0	0.0	0.0	16.6	10.8	16.7	17.5	28.5	11.5	4.4	19.5	17.1	8.7	12.5
Median	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	2.0	1.9	13.9	0.0	0.0	6.8	6.8	0.0	0.0
75th percentile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90th percentile	0.0	0.0	0.0	0.0	0.0	0.0	-8.6	-11.0	-9.8	-6.0	-0.7	-4.7	-3.5	-6.8	-10.8	-5.7	-3.5
Inter-decile range	0.0	0.0	0.0	0.0	0.0	0.0	46.6	39.4	48.6	43.2	76.0	34.7	30.6	44.8	48.1	30.3	34.8
<i>Range of returns</i>	<i>144.0</i>	<i>0.0</i>	<i>144.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>367.1</i>	<i>351.4</i>	<i>186.9</i>	<i>367.1</i>	<i>288.6</i>	<i>367.1</i>	<i>361.7</i>	<i>350.3</i>	<i>350.3</i>	<i>348.5</i>	<i>367.1</i>

Range of returns (IRR) by vintage year (% p.a.) – three years

	Total	1980-84	1985-89	1990-94	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
No. of funds	638	13	68	63	9	13	24	16	25	26	30	19	17	11	27	41	41	26	26	19	18	20	24	32	30
Pooled average	26.9	n/a	n/a	-3.3	n/a	117.0	1.4	-77.6	13.4	-3.6	-3.9	47.9	14.1	10.9	14.1	17.5	15.6	57.9	19.0	9.8	21.7	25.0	31.1	29.8	21.6
10th percentile	30.1	0.0	0.0	0.0	n/a	80.6	6.9	109.6	18.1	15.9	43.9	253.3	59.5	0.0	32.3	61.0	50.3	75.5	31.8	44.0	31.9	38.6	40.5	70.2	36.5
25th percentile	11.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.1	10.6	12.7	9.6	15.2	7.4	16.0	12.0	15.0	17.4	22.9	18.3	21.2	29.2	26.7	37.7	23.3
Median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.5	0.0	0.2	7.6	7.5	3.2	5.7	9.7	13.3	21.8	8.8
75th percentile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.9	-2.3	-5.3	0.0	0.0	0.0	0.0	-0.5	0.0	5.8	5.3	0.0
90th percentile	-4.7	0.0	0.0	0.0	n/a	0.0	0.0	-2.0	0.0	-7.4	-28.4	-18.5	-11.1	-7.0	-38.4	-14.3	-12.6	-18.3	-7.5	-10.8	-13.1	-26.4	-36.2	-27.4	-2.3
Inter-decile range	34.7	0.0	0.0	0.0	n/a	80.6	6.9	111.5	18.1	23.3	72.4	271.8	70.6	7.0	70.6	75.3	62.9	93.8	39.3	54.8	45.0	65.1	76.8	97.6	38.8
<i>Range of returns</i>	<i>367.1</i>	<i>0.0</i>	<i>0.0</i>	<i>144.0</i>	<i>0.0</i>	<i>115.1</i>	<i>7.8</i>	<i>159.3</i>	<i>35.3</i>	<i>256.2</i>	<i>233.0</i>	<i>351.4</i>	<i>137.0</i>	<i>32.4</i>	<i>200.8</i>	<i>318.4</i>	<i>258.7</i>	<i>192.3</i>	<i>60.3</i>	<i>138.4</i>	<i>56.7</i>	<i>141.2</i>	<i>179.5</i>	<i>214.0</i>	<i>48.3</i>

Appendix III – Range of returns (IRR) medium to long-term – five years

Range of returns (IRR) by investment stage and subcategory (% p.a.) – five years

	Pre-1996 vintage funds						1996 vintage funds onwards					Subcategories (all vintages)					
	Total	Early Stage	Development	Mid MBO	Large MBO	Generalist	Total	Venture	Small MBO	Mid MBO	Large MBO	Total	UK	Non-UK	Pan-European	Technology	Non-Technology
No. of funds	153	24	35	33	26	35	423	133	70	165	55	576	394	182	167	147	429
Pooled average	-1.8	-4.5	2.4	n/a	n/a	-0.5	18.0	13.3	16.0	15.2	19.3	18.0	14.2	18.6	18.4	15.6	18.1
10th percentile	0.0	0.0	0.0	0.0	0.0	0.0	35.5	33.0	29.3	34.7	43.0	28.1	27.8	36.8	36.6	30.9	27.7
25th percentile	0.0	0.0	0.0	0.0	0.0	0.0	17.7	11.0	14.4	18.3	22.8	10.3	6.0	18.3	17.9	8.5	10.9
Median	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0	1.6	0.9	10.7	0.0	0.0	4.3	1.6	0.0	0.0
75th percentile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90th percentile	0.0	0.0	0.0	0.0	0.0	0.0	-8.5	-16.3	-5.3	-9.3	-4.7	-5.1	-3.5	-7.9	-8.7	-5.7	-5.0
Inter-decile range	0.0	0.0	0.0	0.0	0.0	0.0	44.1	49.2	34.6	44.0	47.7	33.2	31.3	44.7	45.3	36.5	32.7
<i>Range of returns</i>	<i>89.1</i>	<i>0.0</i>	<i>34.2</i>	<i>0.0</i>	<i>0.0</i>	<i>54.9</i>	<i>276.3</i>	<i>169.0</i>	<i>191.8</i>	<i>273.0</i>	<i>92.0</i>	<i>276.3</i>	<i>232.0</i>	<i>273.0</i>	<i>273.0</i>	<i>169.0</i>	<i>276.3</i>

Range of returns (IRR) by vintage year (% p.a.) – five years

	Total	1980-84	1985-89	1990-94	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
No. of funds	576	13	68	63	9	13	24	16	25	26	30	19	17	11	27	41	41	26	26	19	18	20	24
Pooled average	18.0	n/a	0.6	-15.2	n/a	26.7	2.5	-76.7	8.2	11.0	2.7	14.0	4.4	18.4	9.7	7.8	10.9	31.7	19.8	12.0	17.4	23.9	27.1
10th percentile	28.1	0.0	0.0	0.0	n/a	106.2	19.8	89.3	55.7	40.3	48.2	45.3	28.8	112.2	25.5	31.6	27.7	39.2	31.0	28.3	38.0	39.0	50.7
25th percentile	10.3	0.0	0.0	0.0	0.0	0.0	0.0	4.6	14.2	3.1	21.9	9.1	8.6	42.8	14.3	10.0	18.2	15.5	24.0	19.3	23.4	26.4	22.9
Median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.7	7.1	1.7	8.4	8.5	11.8	5.5	14.3	11.4	15.7
75th percentile	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.9	-3.0	-3.7	4.6	-2.3	-4.5	0.0	0.0	0.0	-1.0	0.7	-3.8	3.2
90th percentile	-5.1	0.0	0.0	0.0	n/a	-17.7	0.0	-4.9	0.0	-17.4	-23.3	-24.5	-72.1	0.0	-19.4	-19.8	-6.9	-9.8	-10.4	-8.5	-6.1	-30.1	-43.3
Inter-decile range	33.2	0.0	0.0	0.0	n/a	123.9	19.8	94.2	55.7	57.7	71.5	69.8	100.9	112.2	44.9	51.4	34.6	49.0	41.3	36.8	44.1	69.1	94.0
<i>Range of returns</i>	<i>276.3</i>	<i>0.0</i>	<i>0.0</i>	<i>89.1</i>	<i>0.0</i>	<i>154.8</i>	<i>92.6</i>	<i>99.5</i>	<i>76.0</i>	<i>86.5</i>	<i>94.1</i>	<i>133.6</i>	<i>135.8</i>	<i>125.8</i>	<i>200.6</i>	<i>128.0</i>	<i>88.4</i>	<i>133.1</i>	<i>59.7</i>	<i>50.1</i>	<i>51.7</i>	<i>142.6</i>	<i>145.6</i>

Appendix III – Range of returns (IRR) medium to long-term – ten years

Range of returns – IRR (% p.a.) by investment stage and subcategory – ten years

	Pre-1996 vintage funds						1996 vintage funds onwards					Subcategories (all vintages)					
	Total	Early Stage	Develop-ment	Mid MBO	Large MBO	Generalist	Total	Venture	Small MBO	Mid MBO	Large MBO	Total	UK	Non-UK	Pan-European	Technology	Non-Technology
No. of funds	153	24	35	33	26	35	316	100	38	131	47	469	326	143	136	117	352
Pooled average	-1.4	-1.8	-5.8	3.6	-31.7	-1.5	12.4	6.5	12.0	9.0	13.7	12.4	7.5	13.0	12.8	7.0	12.7
10th percentile	0.0	0.0	0.0	0.0	0.0	0.0	29.3	21.2	38.0	36.4	30.9	21.5	22.7	20.7	20.6	15.9	23.8
25th percentile	0.0	0.0	0.0	0.0	0.0	0.0	14.3	9.6	12.9	16.2	17.7	9.8	7.2	13.1	11.9	4.4	10.7
Median	0.0	0.0	0.0	0.0	0.0	0.0	4.2	0.0	6.3	7.3	8.6	0.0	0.0	3.3	2.8	0.0	0.0
75th percentile	0.0	0.0	0.0	0.0	0.0	0.0	-1.0	-3.3	0.0	0.0	-0.2	0.0	0.0	0.0	0.0	-0.3	0.0
90th percentile	0.0	-22.1	0.0	0.0	0.0	0.0	-11.4	-17.1	-10.5	-11.9	-6.5	-8.0	-5.6	-10.1	-9.1	-11.1	-7.0
Inter-decile range	0.0	22.1	0.0	0.0	0.0	0.0	40.7	38.3	48.6	48.3	37.4	29.5	28.2	30.8	29.7	27.0	30.7
<i>Range of returns</i>	<i>89.4</i>	<i>71.6</i>	<i>29.8</i>	<i>22.9</i>	<i>23.2</i>	<i>10.4</i>	<i>230.4</i>	<i>230.4</i>	<i>96.8</i>	<i>187.9</i>	<i>147.2</i>	<i>234.6</i>	<i>230.4</i>	<i>171.3</i>	<i>153.4</i>	<i>234.6</i>	<i>187.9</i>

Range of returns (IRR) by vintage year (% p.a.) – ten years

	Total	1980-84	1985-89	1990-94	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
No. of funds	469	13	68	63	9	13	24	16	25	26	30	19	17	11	27	41	41	26
Pooled average	12.4	n/a	0.5	-5.8	-44.0	-7.4	-8.5	11.4	97.6	20.6	2.8	5.9	7.4	15.2	11.5	8.8	10.8	19.0
10th percentile	21.5	0.0	0.0	0.0	n/a	42.1	43.4	46.8	45.1	86.6	20.2	28.3	41.8	98.7	21.2	20.6	30.2	61.7
25th percentile	9.8	0.0	0.0	0.0	0.0	8.6	1.9	10.7	8.5	21.3	10.5	6.5	19.6	13.7	13.7	16.2	19.9	25.6
Median	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.4	0.0	-2.3	6.6	4.1	4.4	4.7	13.0	10.3
75th percentile	0.0	0.0	0.0	0.0	0.0	0.0	-4.8	0.0	-2.8	-9.0	-8.9	-8.8	-0.9	0.0	0.0	-1.7	5.3	2.7
90th percentile	-8.0	0.0	0.0	-2.5	n/a	-27.3	-36.2	-26.7	-17.0	-26.0	-18.5	-44.2	-6.7	-4.1	-8.3	-9.9	-1.3	-7.4
Inter-decile range	29.5	0.0	0.0	2.5	n/a	69.4	79.6	73.5	62.1	112.6	38.7	72.4	48.5	102.7	29.4	30.5	31.5	69.1
<i>Range of returns</i>	<i>234.6</i>	<i>0.0</i>	<i>0.0</i>	<i>89.4</i>	<i>23.2</i>	<i>85.3</i>	<i>109.1</i>	<i>92.7</i>	<i>107.5</i>	<i>221.4</i>	<i>63.0</i>	<i>84.5</i>	<i>88.6</i>	<i>114.0</i>	<i>65.7</i>	<i>57.5</i>	<i>75.4</i>	<i>84.8</i>

Appendix IV – Since-inception range of returns by vintage year band and investment stage

1991 to 1995 vintage funds

	IRR (% p.a.)						DPI						TVPI					
	Subtotal	Early Stage	Develop-ment	Mid MBO	Large MBO	Generalist	Subtotal	Early Stage	Develop-ment	Mid MBO	Large MBO	Generalist	Subtotal	Early Stage	Develop-ment	Mid MBO	Large MBO	Generalist
No. of funds	31	5	9	7	6	4	31	5	9	7	6	4	31	5	9	7	6	4
Pooled average	19.5	15.3	1.7	21.5	21.7	n/a	190.9	176.2	106.5	186.1	181.0	n/a	191.0	176.2	107.0	186.1	181.0	n/a
10th percentile	31.5	n/a	n/a	n/a	n/a	n/a	242.5	n/a	n/a	n/a	n/a	n/a	242.5	n/a	n/a	n/a	n/a	n/a
25th percentile	21.9	16.9	10.0	35.9	24.7	n/a	198.2	193.1	145.1	226.8	202.3	n/a	198.2	193.1	145.1	226.8	202.3	n/a
Median	13.0	12.5	-3.0	26.3	21.5	n/a	151.6	159.9	69.5	198.2	180.9	n/a	151.6	159.9	77.9	198.2	180.9	n/a
75th percentile	2.5	0.2	-8.6	11.0	17.0	n/a	108.4	97.8	59.7	151.6	144.7	n/a	108.4	97.8	59.7	151.6	144.7	n/a
90th percentile	-8.6	n/a	n/a	n/a	n/a	n/a	58.4	n/a	n/a	n/a	n/a	n/a	58.4	n/a	n/a	n/a	n/a	n/a
Inter-decile range	40.0	n/a	n/a	n/a	n/a	n/a	184.1	n/a	n/a	n/a	n/a	n/a	184.1	n/a	n/a	n/a	n/a	n/a
<i>Range of returns</i>	61.3	22.3	33.7	31.8	11.5	n/a	292.5	136.6	102.8	185.8	78.2	n/a	284.0	136.6	102.8	185.8	78.2	n/a

1992 to 1994 vintage funds

	IRR (% p.a.)						DPI						TVPI					
	Subtotal	Early Stage	Develop-ment	Mid MBO	Large MBO	Generalist	Subtotal	Early Stage	Develop-ment	Mid MBO	Large MBO	Generalist	Subtotal	Early Stage	Develop-ment	Mid MBO	Large MBO	Generalist
No. of funds	36	5	8	10	7	6	36	5	8	10	7	6	36	5	8	10	7	6
Pooled average	27.9	15.6	17.5	15.1	39.2	18.4	244.0	172.8	166.9	175.0	295.5	221.0	244.1	172.8	169.9	175.0	295.5	221.2
10th percentile	36.8	n/a	n/a	32.5	n/a	n/a	250.7	n/a	n/a	308.7	n/a	n/a	250.7	n/a	n/a	308.7	n/a	n/a
25th percentile	21.1	17.8	11.7	17.8	43.9	21.8	197.0	195.8	151.0	191.2	301.7	248.0	197.0	195.8	155.3	191.2	301.7	248.0
Median	11.7	13.5	6.9	12.4	24.6	11.6	151.6	159.9	127.7	154.8	205.7	151.2	151.6	159.9	130.3	154.8	205.7	151.2
75th percentile	4.4	0.2	-1.8	8.0	9.3	2.5	119.4	97.8	78.6	130.9	131.1	105.0	120.3	97.8	87.5	130.9	131.1	107.1
90th percentile	-2.5	n/a	n/a	4.2	n/a	n/a	80.2	n/a	n/a	119.5	n/a	n/a	83.5	n/a	n/a	119.5	n/a	n/a
Inter-decile range	39.3	n/a	n/a	28.4	n/a	n/a	170.5	n/a	n/a	189.2	n/a	n/a	167.2	n/a	n/a	189.2	n/a	n/a
<i>Range of returns</i>	60.1	22.3	49.6	29.8	49.6	32.4	426.4	136.6	158.6	201.7	353.7	220.0	417.9	136.6	158.6	201.7	353.7	211.5

Appendix IV – Since-inception range of returns by vintage year band and investment stage

Continued

1995 to 1995 vintage funds

	IRR (% p.a.)						DPI						TVPI					
	Subtotal	Early Stage	Development	Mid MBO	Large MBO	Generalist	Subtotal	Early Stage	Development	Mid MBO	Large MBO	Generalist	Subtotal	Early Stage	Development	Mid MBO	Large MBO	Generalist
No. of funds	38	4	7	10	9	8	38	4	7	10	9	8	38	4	7	10	9	8
Pooled average	27.9	n/a	20.7	13.7	30.7	36.5	231.0	n/a	172.7	166.9	226.7	331.0	231.1	n/a	176.1	166.9	226.7	331.1
10th percentile	41.6	n/a	n/a	32.0	n/a	n/a	276.7	n/a	n/a	308.7	n/a	n/a	276.7	n/a	n/a	308.7	n/a	n/a
25th percentile	15.4	n/a	11.7	14.8	41.4	19.7	189.7	n/a	153.8	169.5	249.2	256.4	189.7	n/a	159.5	169.5	249.2	256.4
Median	9.1	n/a	4.4	9.6	11.7	11.5	139.3	n/a	116.4	143.0	139.6	151.2	139.3	n/a	121.7	143.0	139.6	151.2
75th percentile	1.9	n/a	1.9	3.0	1.9	-4.8	106.3	n/a	106.0	114.5	105.6	63.5	107.5	n/a	112.9	114.5	105.6	63.5
90th percentile	-4.6	n/a	n/a	-0.2	n/a	n/a	66.6	n/a	n/a	99.5	n/a	n/a	72.5	n/a	n/a	99.5	n/a	n/a
Inter-decile range	46.3	n/a	n/a	32.2	n/a	n/a	210.1	n/a	n/a	209.2	n/a	n/a	204.2	n/a	n/a	209.2	n/a	n/a
<i>Range of returns</i>	91.9	n/a	45.2	33.9	66.1	91.9	505.6	n/a	157.4	221.7	399.5	505.6	497.1	n/a	149.0	221.7	399.5	497.1

1994 to 1996 vintage funds

	IRR (% p.a.)						DPI						TVPI					
	Subtotal	Early Stage	Development	Mid MBO	Large MBO	Generalist	Subtotal	Early Stage	Development	Mid MBO	Large MBO	Generalist	Subtotal	Early Stage	Development	Mid MBO	Large MBO	Generalist
<i>Pre-1996 vintage funds</i>																		
No. of funds	28	1	5	9	8	5	28	1	5	9	8	5	28	1	5	9	8	5
Pooled average	31.1	n/a	23.1	16.4	30.7	55.0	237.0	n/a	180.2	174.0	226.7	389.1	237.1	n/a	183.5	174.0	226.7	389.1
10th percentile	45.1	n/a	n/a	n/a	n/a	n/a	362.6	n/a	n/a	n/a	n/a	n/a	362.6	n/a	n/a	n/a	n/a	n/a
25th percentile	15.6	n/a	27.0	15.3	43.9	46.0	204.4	n/a	190.3	178.7	301.7	398.1	204.4	n/a	193.2	178.7	301.7	398.1
Median	11.0	n/a	9.5	10.4	6.8	15.2	142.3	n/a	138.9	134.5	123.4	157.3	142.3	n/a	138.9	134.5	123.4	157.3
75th percentile	2.0	n/a	2.8	1.9	-2.2	-3.7	106.9	n/a	109.4	109.6	94.2	93.3	111.5	n/a	117.3	109.6	94.2	93.3
90th percentile	-4.5	n/a	n/a	n/a	n/a	n/a	87.6	n/a	n/a	n/a	n/a	n/a	87.6	n/a	n/a	n/a	n/a	n/a
Inter-decile range	49.5	n/a	n/a	n/a	n/a	n/a	275.0	n/a	n/a	n/a	n/a	n/a	275.0	n/a	n/a	n/a	n/a	n/a
<i>Range of returns</i>	91.9	n/a	40.4	33.9	66.1	91.9	496.9	n/a	120.9	221.7	399.5	496.9	496.9	n/a	113.9	221.7	399.5	496.9

1994 to 1996 vintage funds continued

	IRR (% p.a.)					DPI					TVPI				
	Subtotal	Venture	Small MBO	Mid MBO	Large MBO	Subtotal	Venture	Small MBO	Mid MBO	Large MBO	Subtotal	Venture	Small MBO	Mid MBO	Large MBO
<i>1996 vintage funds onwards</i>															
No. of funds	13	0	3	8	2	13	0	3	8	2	13	0	3	8	2
Pooled average	17.6	n/a	n/a	13.2	n/a	190.6	n/a	n/a	165.9	n/a	190.6	n/a	n/a	165.9	n/a
10th percentile	41.0	n/a	n/a	n/a	n/a	282.9	n/a	n/a	n/a	n/a	282.9	n/a	n/a	n/a	n/a
25th percentile	21.2	n/a	n/a	18.0	n/a	200.5	n/a	n/a	205.5	n/a	200.5	n/a	n/a	205.5	n/a
Median	10.3	n/a	n/a	10.3	n/a	144.1	n/a	n/a	147.2	n/a	144.1	n/a	n/a	147.2	n/a
75th percentile	-6.4	n/a	n/a	5.2	n/a	56.0	n/a	n/a	122.7	n/a	56.0	n/a	n/a	122.7	n/a
90th percentile	-25.5	n/a	n/a	n/a	n/a	21.2	n/a	n/a	n/a	n/a	21.2	n/a	n/a	n/a	n/a
Inter-decile range	66.5	n/a	n/a	n/a	n/a	261.7	n/a	n/a	n/a	n/a	261.7	n/a	n/a	n/a	n/a
<i>Range of returns</i>	83.2	n/a	n/a	60.0	n/a	303.5	n/a	n/a	249.9	n/a	303.5	n/a	n/a	249.9	n/a

1995 to 1997 vintage funds

	IRR (% p.a.)						DPI						TVPI					
	Subtotal	Early Stage	Develop-ment	Mid MBO	Large MBO	Generalist	Subtotal	Early Stage	Develop-ment	Mid MBO	Large MBO	Generalist	Subtotal	Early Stage	Develop-ment	Mid MBO	Large MBO	Generalist
<i>Pre-1996 vintage funds</i>																		
No. of funds	9	0	1	2	3	3	9	0	1	2	3	3	9	0	1	2	3	3
Pooled average	23.1	n/a	n/a	n/a	n/a	n/a	192.1	n/a	n/a	n/a	n/a	n/a	192.1	n/a	n/a	n/a	n/a	n/a
10th percentile	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
25th percentile	12.3	n/a	n/a	n/a	n/a	n/a	221.4	n/a	n/a	n/a	n/a	n/a	221.4	n/a	n/a	n/a	n/a	n/a
Median	0.9	n/a	n/a	n/a	n/a	n/a	103.5	n/a	n/a	n/a	n/a	n/a	103.5	n/a	n/a	n/a	n/a	n/a
75th percentile	-10.9	n/a	n/a	n/a	n/a	n/a	69.7	n/a	n/a	n/a	n/a	n/a	69.7	n/a	n/a	n/a	n/a	n/a
90th percentile	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Inter-decile range	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<i>Range of returns</i>	91.9	n/a	n/a	n/a	n/a	n/a	496.9	n/a	n/a	n/a	n/a	n/a	496.9	n/a	n/a	n/a	n/a	n/a

Appendix IV – Since-inception range of returns by vintage year band and investment stage

Continued

1995 to 1997 vintage funds continued

	IRR (% p.a.)					DPI					TVPI				
	Subtotal	Venture	Small MBO	Mid MBO	Large MBO	Subtotal	Venture	Small MBO	Mid MBO	Large MBO	Subtotal	Venture	Small MBO	Mid MBO	Large MBO
<i>1996 vintage funds onwards</i>															
No. of funds	37	10	5	18	4	37	10	5	18	4	37	10	5	18	4
Pooled average	15.9	21.0	1.3	8.7	n/a	173.9	160.0	106.3	145.8	n/a	173.9	160.6	106.3	145.8	n/a
10th percentile	47.7	43.9	n/a	26.9	n/a	248.1	198.9	n/a	229.8	n/a	248.1	198.9	n/a	229.8	n/a
25th percentile	13.5	18.9	34.2	10.8	n/a	181.8	159.6	189.6	177.9	n/a	181.8	161.6	189.6	177.9	n/a
Median	8.0	6.6	-5.9	8.8	n/a	142.8	121.3	55.0	143.9	n/a	142.8	121.3	55.0	143.9	n/a
75th percentile	-2.7	-8.6	-24.3	1.1	n/a	84.4	55.9	25.7	105.8	n/a	84.4	63.8	25.7	105.8	n/a
90th percentile	-12.5	-15.0	n/a	-4.2	n/a	47.9	46.9	n/a	78.9	n/a	47.9	46.9	n/a	78.9	n/a
Inter-decile range	60.2	59.0	n/a	31.0	n/a	200.2	152.0	n/a	150.9	n/a	200.2	152.0	n/a	150.9	n/a
Range of returns	108.8	59.6	101.1	60.0	n/a	303.5	154.0	287.7	249.9	n/a	303.5	154.0	287.7	249.9	n/a

1996 to 1998 vintage funds

	IRR (% p.a.)					DPI					TVPI				
	Subtotal	Venture	Small MBO	Mid MBO	Large MBO	Subtotal	Venture	Small MBO	Mid MBO	Large MBO	Subtotal	Venture	Small MBO	Mid MBO	Large MBO
No. of funds	53	11	8	26	8	53	11	8	26	8	53	11	8	26	8
Pooled average	14.3	16.1	2.1	8.0	19.6	174.3	145.3	109.7	143.4	201.8	174.4	145.8	109.8	143.6	201.8
10th percentile	41.7	43.8	n/a	20.8	n/a	247.0	197.0	n/a	221.8	n/a	247.0	197.0	n/a	221.8	n/a
25th percentile	16.1	11.1	25.8	10.4	22.8	184.0	152.2	240.3	177.4	247.1	184.0	154.9	240.5	177.4	247.1
Median	7.6	6.1	-1.9	8.4	22.1	142.5	119.3	64.3	143.4	206.1	142.5	119.3	71.6	143.4	206.1
75th percentile	-2.5	-7.9	-15.3	-0.2	15.8	80.3	55.6	41.5	99.5	169.5	83.9	55.6	41.5	99.5	169.5
90th percentile	-10.2	-14.5	n/a	-6.9	n/a	47.6	47.0	n/a	69.8	n/a	47.6	47.0	n/a	69.8	n/a
Inter-decile range	51.9	58.3	n/a	27.8	n/a	199.3	150.1	n/a	152.0	n/a	199.3	150.1	n/a	152.0	n/a
Range of returns	112.4	59.6	101.1	86.8	71.7	451.1	154.0	451.1	293.6	107.5	451.1	154.0	451.1	293.6	107.5

1997 to 1999 vintage funds

	IRR (% p.a.)					DPI					TVPI				
	Subtotal	Venture	Small MBO	Mid MBO	Large MBO	Subtotal	Venture	Small MBO	Mid MBO	Large MBO	Subtotal	Venture	Small MBO	Mid MBO	Large MBO
No. of funds	65	20	6	29	10	65	20	6	29	10	65	20	6	29	10
Pooled average	12.8	8.1	6.2	8.0	16.4	171.7	127.5	129.9	146.6	191.9	172.0	128.4	130.0	147.3	192.0
10th percentile	31.3	42.5	n/a	20.1	73.9	245.7	181.8	n/a	211.6	278.9	245.7	181.8	n/a	211.6	278.9
25th percentile	15.3	7.2	43.5	12.2	24.4	177.9	145.7	331.9	177.9	246.7	177.9	145.7	331.9	177.9	246.7
Median	6.9	2.9	7.4	8.5	16.5	135.0	112.4	131.7	135.0	190.0	135.0	119.3	132.0	135.0	190.2
75th percentile	-2.5	-7.9	-1.6	-1.3	6.2	82.6	47.6	65.0	96.2	136.5	84.4	47.6	75.9	96.2	136.5
90th percentile	-8.0	-10.5	n/a	-9.5	0.4	44.6	37.0	n/a	64.2	12.0	45.0	37.0	n/a	64.2	12.0
Inter-decile range	39.3	52.9	n/a	29.7	73.4	201.2	144.8	n/a	147.3	267.0	200.7	144.8	n/a	147.3	267.0
<i>Range of returns</i>	<i>112.4</i>	<i>59.6</i>	<i>73.3</i>	<i>55.2</i>	<i>78.6</i>	<i>441.1</i>	<i>178.2</i>	<i>415.1</i>	<i>250.5</i>	<i>282.2</i>	<i>441.1</i>	<i>178.2</i>	<i>415.1</i>	<i>257.2</i>	<i>282.2</i>

1998 to 2000 vintage funds

	IRR (% p.a.)					DPI					TVPI				
	Subtotal	Venture	Small MBO	Mid MBO	Large MBO	Subtotal	Venture	Small MBO	Mid MBO	Large MBO	Subtotal	Venture	Small MBO	Mid MBO	Large MBO
No. of funds	67	21	7	29	10	67	21	7	29	10	67	21	7	29	10
Pooled average	13.5	-3.3	4.3	10.9	16.6	179.4	56.7	120.5	160.2	203.6	181.0	73.9	120.9	161.0	203.4
10th percentile	22.7	4.8	n/a	26.8	30.5	242.4	138.1	n/a	246.2	281.2	242.4	151.4	n/a	248.9	281.1
25th percentile	15.9	4.2	14.8	20.0	22.3	177.1	113.2	175.2	194.2	252.4	177.1	138.0	175.2	194.2	252.1
Median	4.4	-5.4	0.0	9.4	17.4	117.7	54.5	75.8	152.3	192.8	131.2	57.7	88.8	152.3	192.8
75th percentile	-4.0	-9.7	-1.3	-1.8	9.7	58.7	31.3	39.3	87.0	162.7	62.4	31.5	39.3	91.2	162.7
90th percentile	-12.5	-21.2	n/a	-10.7	4.3	25.1	17.6	n/a	55.8	121.9	27.1	22.2	n/a	55.8	121.9
Inter-decile range	35.1	26.0	n/a	37.4	26.1	217.3	120.4	n/a	190.4	159.3	215.2	129.2	n/a	193.1	159.2
<i>Range of returns</i>	<i>101.4</i>	<i>60.8</i>	<i>38.8</i>	<i>80.6</i>	<i>27.3</i>	<i>454.4</i>	<i>139.5</i>	<i>454.4</i>	<i>337.8</i>	<i>162.5</i>	<i>454.4</i>	<i>140.8</i>	<i>454.4</i>	<i>337.8</i>	<i>162.5</i>

Appendix IV – Since-inception range of returns by vintage year band and investment stage

Continued

1999 to 2001 vintage funds

	IRR (% p.a.)					DPI					TVPI				
	Subtotal	Venture	Small MBO	Mid MBO	Large MBO	Subtotal	Venture	Small MBO	Mid MBO	Large MBO	Subtotal	Venture	Small MBO	Mid MBO	Large MBO
No. of funds	81	32	6	32	11	81	32	6	32	11	81	32	6	32	11
Pooled average	17.7	-2.1	32.5	17.1	20.6	187.3	63.5	245.2	183.2	203.9	190.3	83.6	245.2	183.9	205.6
10th percentile	34.8	5.0	n/a	41.3	35.6	274.4	123.8	n/a	351.0	326.4	273.5	151.3	n/a	351.0	326.4
25th percentile	22.2	3.9	43.0	27.4	31.3	189.0	83.4	334.9	211.4	272.4	194.2	127.4	334.9	211.5	271.4
Median	5.0	-3.9	10.9	18.5	22.9	125.8	53.5	161.1	178.1	189.6	147.1	70.9	161.1	178.1	189.6
75th percentile	-3.9	-12.7	-1.1	5.2	14.9	61.5	30.8	56.9	118.3	173.9	72.5	33.5	57.0	118.3	174.3
90th percentile	-13.5	-20.3	n/a	-6.5	5.4	25.3	17.7	n/a	74.0	127.8	29.8	20.5	n/a	74.0	127.8
Inter-decile range	48.3	25.2	n/a	47.8	30.3	249.1	106.1	n/a	277.1	198.6	243.7	130.8	n/a	277.1	198.6
<i>Range of returns</i>	117.0	60.8	61.1	75.9	31.8	552.6	146.2	552.6	343.8	217.8	552.6	202.4	552.6	343.8	217.8

2000 to 2002 vintage funds

	IRR (% p.a.)					DPI					TVPI				
	Subtotal	Venture	Small MBO	Mid MBO	Large MBO	Subtotal	Venture	Small MBO	Mid MBO	Large MBO	Subtotal	Venture	Small MBO	Mid MBO	Large MBO
No. of funds	75	35	5	27	8	75	35	5	27	8	75	35	5	27	8
Pooled average	21.3	-1.6	34.3	22.7	25.0	190.7	66.3	250.0	197.0	207.8	194.4	87.3	250.0	197.5	209.9
10th percentile	37.2	6.1	n/a	54.1	n/a	280.1	122.1	n/a	356.6	n/a	312.6	152.8	n/a	356.6	n/a
25th percentile	25.4	3.9	47.5	33.0	34.5	188.6	82.9	407.5	255.1	266.8	200.7	121.6	407.5	255.1	268.2
Median	4.9	-3.5	7.1	23.3	27.2	111.6	52.5	147.1	180.9	188.5	134.7	70.9	147.1	181.7	188.8
75th percentile	-5.0	-16.5	-2.2	8.2	20.0	41.8	25.8	37.9	123.0	180.0	66.2	31.3	38.0	123.0	181.5
90th percentile	-18.4	-20.8	n/a	-3.1	n/a	14.7	6.3	n/a	70.8	n/a	23.9	18.9	n/a	70.8	n/a
Inter-decile range	55.6	26.9	n/a	57.2	n/a	265.4	115.9	n/a	285.8	n/a	288.7	133.9	n/a	285.8	n/a
<i>Range of returns</i>	117.0	67.2	61.1	71.2	20.9	552.6	257.3	552.6	388.3	177.0	552.6	403.5	552.6	388.3	177.0

2001 to 2003 vintage funds

	IRR (% p.a.)					DPI					TVPI				
	Subtotal	Venture	Small MBO	Mid MBO	Large MBO	Subtotal	Venture	Small MBO	Mid MBO	Large MBO	Subtotal	Venture	Small MBO	Mid MBO	Large MBO
No. of funds	66	30	4	24	8	66	30	4	24	8	66	30	4	24	8
Pooled average	23.6	1.3	n/a	23.9	26.6	185.1	93.8	n/a	197.3	190.2	189.0	109.3	n/a	198.4	193.7
10th percentile	41.9	8.2	n/a	61.9	n/a	274.8	136.3	n/a	359.5	n/a	302.7	153.1	n/a	359.5	n/a
25th percentile	27.3	3.0	n/a	39.7	34.5	194.8	88.8	n/a	258.9	234.8	208.5	118.4	n/a	258.9	241.4
Median	8.2	-2.8	n/a	24.5	27.2	136.4	67.4	n/a	180.9	184.4	150.6	76.4	n/a	181.7	187.7
75th percentile	-3.0	-12.9	n/a	10.5	17.5	67.5	26.0	n/a	143.2	164.3	75.8	44.6	n/a	151.8	172.8
90th percentile	-14.0	-18.5	n/a	-3.2	n/a	16.5	5.7	n/a	77.4	n/a	35.1	20.7	n/a	77.4	n/a
Inter-decile range	55.9	26.8	n/a	65.1	n/a	258.3	130.6	n/a	282.1	n/a	267.5	132.4	n/a	282.1	n/a
<i>Range of returns</i>	87.9	37.5	n/a	69.5	24.6	552.6	257.3	n/a	388.3	182.5	552.6	403.5	n/a	388.3	177.0

2002 to 2004 vintage funds

	IRR (% p.a.)					DPI					TVPI				
	Subtotal	Venture	Small MBO	Mid MBO	Large MBO	Subtotal	Venture	Small MBO	Mid MBO	Large MBO	Subtotal	Venture	Small MBO	Mid MBO	Large MBO
No. of funds	47	20	3	18	6	47	20	3	18	6	47	20	3	18	6
Pooled average	21.3	2.7	n/a	24.3	24.3	181.6	108.1	n/a	196.6	186.5	185.8	117.5	n/a	198.1	190.9
10th percentile	50.3	10.0	n/a	63.3	n/a	271.7	151.2	n/a	356.9	n/a	288.7	151.9	n/a	356.9	n/a
25th percentile	25.4	5.0	n/a	50.4	34.0	222.7	118.7	n/a	272.3	236.0	222.7	120.5	n/a	272.3	245.7
Median	7.9	-2.1	n/a	18.3	26.4	136.2	62.4	n/a	161.8	200.0	137.5	76.4	n/a	161.8	200.5
75th percentile	-2.3	-6.5	n/a	7.5	16.7	62.4	12.5	n/a	135.9	170.5	76.4	42.0	n/a	135.9	175.2
90th percentile	-8.6	-18.1	n/a	-0.6	n/a	5.9	0.3	n/a	72.7	n/a	30.2	14.6	n/a	72.7	n/a
Inter-decile range	58.9	28.2	n/a	63.9	n/a	265.7	150.9	n/a	284.2	n/a	258.5	137.3	n/a	284.2	n/a
<i>Range of returns</i>	90.6	37.5	n/a	72.0	24.1	399.9	257.3	n/a	399.9	99.3	409.0	409.0	n/a	399.9	111.3

Appendix IV – Since-inception range of returns by vintage year band and investment stage

Continued

2003 to 2005 vintage funds

	IRR (% p.a.)					DPI					TVPI				
	Subtotal	Venture	Small MBO	Mid MBO	Large MBO	Subtotal	Venture	Small MBO	Mid MBO	Large MBO	Subtotal	Venture	Small MBO	Mid MBO	Large MBO
No. of funds	55	15	5	24	11	55	15	5	24	11	55	15	5	24	11
Pooled average	12.3	6.8	3.5	12.3	12.8	162.7	116.5	114.7	154.3	168.2	171.6	154.0	120.0	159.9	177.2
10th percentile	38.7	18.7	n/a	56.6	33.7	256.8	200.6	n/a	346.6	251.8	281.9	288.8	n/a	336.7	274.7
25th percentile	19.5	2.3	14.0	35.3	25.4	205.2	110.1	161.2	246.0	230.0	222.7	117.1	180.1	246.0	233.2
Median	7.9	-1.4	-1.1	11.6	15.3	136.2	56.1	92.5	153.2	175.7	147.7	79.5	95.3	158.9	176.4
75th percentile	-2.9	-5.9	-3.8	2.4	7.2	71.1	17.2	65.4	104.3	134.0	80.8	43.4	71.9	116.4	167.1
90th percentile	-6.5	-41.2	n/a	-5.7	-7.8	23.7	4.8	n/a	69.7	64.0	46.1	10.3	n/a	71.7	66.2
Inter-decile range	45.3	59.9	n/a	62.2	41.5	233.1	195.8	n/a	276.9	187.7	235.8	278.5	n/a	265.0	208.5
<i>Range of returns</i>	112.6	66.3	25.5	79.6	46.8	399.9	242.8	160.3	399.9	206.4	399.9	337.9	154.2	381.3	235.0

2004 to 2006 vintage funds

	IRR (% p.a.)					DPI					TVPI				
	Subtotal	Venture	Small MBO	Mid MBO	Large MBO	Subtotal	Venture	Small MBO	Mid MBO	Large MBO	Subtotal	Venture	Small MBO	Mid MBO	Large MBO
No. of funds	79	21	12	31	15	79	21	12	31	15	79	21	12	31	15
Pooled average	9.1	8.6	4.5	9.2	9.2	143.9	109.8	122.4	136.6	148.2	159.9	178.7	132.2	156.3	161.0
10th percentile	27.9	19.2	30.3	42.4	30.5	242.8	231.0	240.5	308.9	246.8	258.6	321.5	244.9	308.9	258.3
25th percentile	14.0	8.2	10.5	16.8	18.5	172.4	108.2	154.8	169.7	212.6	188.1	178.1	177.7	195.0	224.3
Median	6.2	0.0	0.0	8.6	10.0	103.4	39.2	90.2	140.8	168.7	137.9	90.7	101.5	147.0	173.6
75th percentile	-2.8	-5.5	-4.0	-0.6	6.9	54.0	14.3	47.7	73.6	117.0	77.5	49.2	71.7	96.1	139.7
90th percentile	-7.3	-32.4	-9.9	-7.0	-8.1	19.7	1.6	27.8	59.3	43.7	53.2	19.4	58.2	62.7	56.3
Inter-decile range	35.3	51.6	40.2	49.4	38.6	223.1	229.5	212.6	249.6	203.0	205.4	302.1	186.7	246.2	202.0
<i>Range of returns</i>	112.6	72.7	49.3	79.6	46.8	417.2	417.2	220.6	399.9	216.7	428.5	428.5	191.9	381.3	235.0

2005 to 2007 vintage funds

	IRR (% p.a.)					DPI					TVPI				
	Subtotal	Venture	Small MBO	Mid MBO	Large MBO	Subtotal	Venture	Small MBO	Mid MBO	Large MBO	Subtotal	Venture	Small MBO	Mid MBO	Large MBO
No. of funds	109	32	14	46	17	109	32	14	46	17	109	32	14	46	17
Pooled average	8.7	9.4	5.8	9.0	8.7	138.3	109.5	118.4	132.2	142.0	157.1	176.5	139.9	157.3	156.6
10th percentile	20.5	17.5	25.9	30.0	16.6	224.2	180.7	238.7	283.8	212.5	245.1	274.5	244.4	283.8	227.9
25th percentile	13.9	12.5	11.5	18.5	11.5	165.7	129.0	137.8	171.6	172.2	186.3	185.1	182.7	194.3	180.7
Median	7.4	1.6	2.3	10.1	7.9	116.2	51.8	90.6	146.1	134.0	147.5	114.0	118.0	158.6	157.6
75th percentile	-0.9	-4.2	-4.3	1.1	7.0	59.3	19.7	42.1	77.2	114.3	92.9	70.3	70.0	106.1	131.4
90th percentile	-6.8	-21.7	-9.5	-5.7	-7.0	19.9	7.9	23.0	53.8	45.8	54.8	31.6	53.7	63.4	59.2
Inter-decile range	27.3	39.2	35.4	35.8	23.6	204.3	172.8	215.7	230.1	166.7	190.2	242.9	190.7	220.4	168.7
<i>Range of returns</i>	97.2	72.7	49.3	64.2	33.2	560.1	417.2	220.6	560.1	204.2	560.1	422.7	192.1	560.1	194.0

2006 to 2008 vintage funds

	IRR (% p.a.)					DPI					TVPI				
	Subtotal	Venture	Small MBO	Mid MBO	Large MBO	Subtotal	Venture	Small MBO	Mid MBO	Large MBO	Subtotal	Venture	Small MBO	Mid MBO	Large MBO
No. of funds	108	30	19	43	16	108	30	19	43	16	108	30	19	43	16
Pooled average	11.1	8.7	11.3	9.4	11.6	142.0	101.9	142.2	127.4	147.5	177.9	167.9	165.2	159.4	183.5
10th percentile	25.9	15.9	51.3	31.8	25.8	223.0	179.8	243.1	287.5	211.9	276.0	276.4	245.7	287.5	310.5
25th percentile	13.7	11.3	12.2	18.7	13.4	168.7	123.1	173.8	173.5	172.3	187.8	183.9	188.1	192.6	188.6
Median	8.2	1.9	8.2	10.3	10.2	117.0	46.8	121.7	133.9	143.2	158.6	116.5	171.4	163.6	161.9
75th percentile	1.0	-2.7	-1.1	1.8	7.1	59.2	15.1	74.1	77.3	111.8	104.4	74.1	92.5	110.9	128.4
90th percentile	-6.1	-6.1	-12.2	-5.6	-1.8	19.2	0.0	23.4	47.3	28.4	62.9	61.8	53.8	68.3	45.5
Inter-decile range	32.0	22.1	63.5	37.4	27.6	203.7	179.8	219.7	240.2	183.4	213.1	214.6	191.9	219.2	265.0
<i>Range of returns</i>	102.4	52.0	89.7	87.3	32.8	723.0	417.2	700.5	560.1	258.2	723.0	546.5	669.4	560.1	385.6

Appendix IV – Since-inception range of returns by vintage year band and investment stage

Continued

2007 to 2009 vintage funds

	IRR (% p.a.)					DPI					TVPI				
	Subtotal	Venture	Small MBO	Mid MBO	Large MBO	Subtotal	Venture	Small MBO	Mid MBO	Large MBO	Subtotal	Venture	Small MBO	Mid MBO	Large MBO
No. of funds	93	26	20	36	11	93	26	20	36	11	93	26	20	36	11
Pooled average	13.6	12.4	13.3	11.4	14.2	148.2	101.9	133.8	138.0	154.0	189.3	183.8	174.4	163.4	197.9
10th percentile	33.5	27.4	51.2	36.9	26.6	252.4	197.6	342.6	325.5	250.0	313.4	303.6	539.8	325.5	369.2
25th percentile	18.7	14.6	21.9	20.7	18.9	170.8	133.6	173.0	179.7	171.9	200.2	189.9	212.5	202.3	233.8
Median	11.2	2.6	12.0	12.0	11.2	128.1	45.5	126.7	147.4	130.2	166.2	118.2	178.7	167.8	157.6
75th percentile	3.0	-4.3	6.9	7.9	7.7	55.7	5.9	75.4	95.8	112.3	119.4	67.0	140.6	144.7	150.3
90th percentile	-5.4	-8.3	-6.4	-0.4	1.4	3.9	0.0	7.2	42.7	21.4	62.2	54.9	74.4	83.8	30.3
Inter-decile range	38.9	35.7	57.6	37.3	25.2	248.5	197.6	335.4	282.8	228.7	251.2	248.6	465.3	241.6	338.9
<i>Range of returns</i>	102.4	66.0	89.7	86.1	26.9	723.0	233.2	723.0	560.1	258.2	723.0	546.5	669.4	560.1	385.6

2008 to 2010 vintage funds

	IRR (% p.a.)					DPI					TVPI				
	Subtotal	Venture	Small MBO	Mid MBO	Large MBO	Subtotal	Venture	Small MBO	Mid MBO	Large MBO	Subtotal	Venture	Small MBO	Mid MBO	Large MBO
No. of funds	71	19	24	22	6	71	19	24	22	6	71	19	24	22	6
Pooled average	17.5	13.4	15.8	12.0	19.4	153.5	80.8	145.2	127.2	169.5	211.6	181.1	189.3	156.6	238.6
10th percentile	39.2	30.1	50.9	43.2	n/a	228.4	199.3	285.0	287.4	n/a	325.3	353.0	445.8	287.6	n/a
25th percentile	21.2	11.7	21.9	24.6	25.8	168.7	64.7	173.0	171.3	208.0	195.6	152.8	223.0	177.9	304.6
Median	10.9	0.2	12.3	12.3	16.1	114.4	17.4	115.7	132.8	139.7	162.2	101.4	177.5	166.2	200.0
75th percentile	0.2	-6.4	3.5	8.1	8.5	17.6	0.0	24.8	89.6	86.0	101.4	65.8	127.8	147.0	115.4
90th percentile	-8.0	-9.6	-10.3	-5.1	n/a	0.0	0.0	0.0	38.1	n/a	61.9	58.8	75.6	76.4	n/a
Inter-decile range	47.2	39.7	61.2	48.4	n/a	228.4	199.3	285.0	249.3	n/a	263.4	294.2	370.1	211.2	n/a
<i>Range of returns</i>	99.0	51.0	94.9	86.1	26.9	723.0	233.2	723.0	403.3	258.2	715.9	506.4	711.0	346.3	385.6

2009 to 2011 vintage funds

	IRR (% p.a.)					DPI					TVPI				
	Subtotal	Venture	Small MBO	Mid MBO	Large MBO	Subtotal	Venture	Small MBO	Mid MBO	Large MBO	Subtotal	Venture	Small MBO	Mid MBO	Large MBO
No. of funds	63	19	22	20	2	63	19	22	20	2	63	19	22	20	2
Pooled average	14.5	16.4	13.9	14.5	n/a	106.7	91.9	111.3	124.9	n/a	167.5	193.8	187.3	167.9	n/a
10th percentile	32.0	30.1	31.1	35.4	n/a	223.6	196.8	199.8	290.4	n/a	286.2	251.7	323.9	290.4	n/a
25th percentile	19.1	11.7	18.3	25.5	n/a	153.4	64.7	155.6	176.7	n/a	203.8	152.8	224.2	207.5	n/a
Median	12.1	3.0	12.3	15.0	n/a	87.9	15.0	92.3	140.5	n/a	153.9	116.8	159.0	170.4	n/a
75th percentile	0.0	-7.8	2.3	8.3	n/a	12.7	0.0	17.7	91.8	n/a	100.0	65.8	118.8	144.1	n/a
90th percentile	-8.4	-10.8	-3.5	-7.7	n/a	0.0	0.0	0.0	11.3	n/a	64.8	45.9	78.9	68.9	n/a
Inter-decile range	40.5	40.9	34.5	43.0	n/a	223.6	196.8	199.8	279.0	n/a	221.4	205.9	245.0	221.6	n/a
<i>Range of returns</i>	73.0	53.5	73.0	53.3	n/a	441.0	233.2	360.6	438.9	n/a	551.3	316.7	551.3	380.9	n/a

2010 to 2012 vintage funds

	IRR (% p.a.)					DPI					TVPI				
	Subtotal	Venture	Small MBO	Mid MBO	Large MBO	Subtotal	Venture	Small MBO	Mid MBO	Large MBO	Subtotal	Venture	Small MBO	Mid MBO	Large MBO
No. of funds	57	16	19	18	4	57	16	19	18	4	57	16	19	18	4
Pooled average	17.4	13.4	15.4	14.4	n/a	93.3	74.2	103.6	102.9	n/a	174.9	162.5	184.7	157.8	n/a
10th percentile	28.7	27.8	25.7	35.2	n/a	176.7	149.5	187.8	306.8	n/a	255.8	230.6	275.5	306.8	n/a
25th percentile	17.5	7.1	14.8	26.3	n/a	122.3	29.5	100.4	154.1	n/a	177.8	148.5	182.6	185.1	n/a
Median	10.5	1.0	10.5	13.7	n/a	63.7	12.2	58.8	121.4	n/a	135.5	105.7	127.2	166.8	n/a
75th percentile	-1.0	-10.2	-0.7	2.9	n/a	12.2	1.7	19.5	62.3	n/a	95.7	66.2	97.0	113.7	n/a
90th percentile	-11.1	-17.7	-11.1	-17.4	n/a	0.0	0.0	0.0	34.1	n/a	62.9	29.8	50.3	63.5	n/a
Inter-decile range	39.8	45.4	36.7	52.6	n/a	176.7	149.5	187.8	272.6	n/a	192.8	200.8	225.2	243.2	n/a
<i>Range of returns</i>	142.6	63.8	69.0	140.6	n/a	441.0	173.9	209.3	432.5	n/a	480.6	235.4	301.6	382.9	n/a

Appendix IV – Since-inception range of returns by vintage year band and investment stage

Continued

2011 to 2015 vintage funds

	IRR (% p.a.)					DPI					TVPI				
	Subtotal	Venture	Small MBO	Mid MBO	Large MBO	Subtotal	Venture	Small MBO	Mid MBO	Large MBO	Subtotal	Venture	Small MBO	Mid MBO	Large MBO
No. of funds	62	19	15	21	7	62	19	15	21	7	62	19	15	21	7
Pooled average	20.7	16.8	15.6	15.2	23.6	75.0	73.1	80.2	79.7	72.9	181.3	161.8	171.3	157.9	191.6
10th percentile	35.4	37.0	27.9	27.8	n/a	160.2	173.9	136.4	227.2	n/a	242.0	250.1	244.6	235.5	n/a
25th percentile	21.6	24.3	12.1	21.2	36.7	83.1	83.8	81.5	130.3	74.8	191.1	196.8	153.9	188.3	210.0
Median	11.2	5.1	10.5	13.1	25.0	41.4	3.7	58.8	58.1	69.3	137.7	123.4	125.1	151.9	190.6
75th percentile	1.3	-11.5	0.0	4.3	21.2	3.1	0.0	10.9	8.6	36.0	105.2	67.1	96.9	113.3	166.0
90th percentile	-11.3	-71.8	-6.5	-7.9	n/a	0.0	0.0	0.0	0.2	n/a	52.7	14.7	30.2	66.7	n/a
Inter-decile range	46.8	108.7	34.4	35.7	n/a	160.2	173.9	136.4	226.9	n/a	189.3	235.4	214.4	168.8	n/a
<i>Range of returns</i>	153.7	132.2	57.6	130.2	42.1	441.0	241.5	187.8	441.0	124.0	492.6	286.4	275.5	382.9	330.0

2012 to 2014 vintage funds

	IRR (% p.a.)					DPI					TVPI				
	Subtotal	Venture	Small MBO	Mid MBO	Large MBO	Subtotal	Venture	Small MBO	Mid MBO	Large MBO	Subtotal	Venture	Small MBO	Mid MBO	Large MBO
No. of funds	76	21	20	27	8	76	21	20	27	8	76	21	20	27	8
Pooled average	24.3	17.6	20.2	14.5	27.6	63.5	61.7	58.6	44.3	71.1	184.6	157.5	156.2	141.9	204.3
10th percentile	45.9	44.1	45.6	38.2	n/a	141.6	158.0	150.1	170.5	n/a	251.5	248.4	255.6	216.7	n/a
25th percentile	25.9	28.2	21.5	23.1	43.6	73.4	41.7	78.1	78.8	105.3	193.7	182.4	152.1	181.4	262.6
Median	13.2	9.2	10.9	13.1	27.8	29.4	18.3	21.4	44.8	57.7	139.3	125.7	133.7	137.0	193.3
75th percentile	2.4	-5.9	0.1	4.5	21.6	1.1	0.0	1.6	7.1	38.4	106.6	82.8	98.2	113.5	181.3
90th percentile	-18.9	-63.0	-21.7	-10.6	n/a	0.0	0.0	0.0	0.0	n/a	56.5	20.2	50.6	73.4	n/a
Inter-decile range	64.8	107.1	67.3	48.8	n/a	141.6	158.0	150.1	170.5	n/a	195.0	228.2	205.0	143.2	n/a
<i>Range of returns</i>	262.9	132.2	71.0	262.9	35.7	320.5	241.5	187.8	320.5	124.0	492.6	286.4	275.5	321.5	326.6

Appendix V – Worked examples

Sample carried interest calculation to produce an interim IRR (as of 31 Dec 2018)

Fund size – £20 million

Draw down – £17 million (85%)

Distributed – £12.25 million

Residual net asset value (NAV) at 31 December 2018 (before carried interest) – £12 million.

Distribution Priority

- i) 100% to investors until commitments returned;
- ii) 100% to investors until a ‘preferred return’ of 10% pa compound is achieved;
- iii) 100% to manager until payments equal 25% of ii);
- iv) 80% to investors, 20% to manager thereafter.

An interim IRR is a ‘snapshot’ of performance to date. In calculating an interim IRR, the assumption used is that the fund is wound up at the NAV date (i.e. 31 December 2018) and that the residual value is distributed according to the above.

As the fund is not fully drawn down, one of two assumptions can be made, each of which has the same effect on the IRR calculation:

- i) The £3 million not yet drawn down is cancelled and commitments correspondingly drop to £17 million; or
- ii) The £3 million is drawn down on 31 December 2018 and distributed simultaneously.

The example given on the right produces an interim IRR before carried interest of 12.9% and 10.7% pa after carried interest. The latter figure is the one used in the BVCA Performance Measurement Survey.

Sample interim IRR calculation for a fund

Cash flow date	Amount (£)	Comment
1 Feb 14	-2,000,000	10% draw down from investors
10 Jun 14	-2,000,000	10% draw down from investors
25 Nov 14	-2,000,000	10% draw down from investors
3 Apr 15	-2,000,000	10% draw down from investors
9 Sep 15	-2,000,000	10% draw down from investors
12 Dec 15	-2,000,000	10% draw down from investors
5 May 16	-2,000,000	10% draw down from investors
15 Oct 16	1,500,000	Cash distribution to investors
11 Nov 16	-1,000,000	5% draw down from investors
29 Mar 17	2,500,000	Cash distribution to investors
27 Jun 17	1,000,000	Cash distribution to investors
18 Sep 17	-2,000,000	10% draw down from investors
29 Apr 18	3,000,000	Cash distribution to investors
12 Aug 18	1,500,000	Cash distribution to investors
15 Dec 18	2,750,000	Cash distribution to investors
31 Dec 18	12,000,000	Residual NAV

NB. All figures have been calculated using Microsoft Excel and the IRRs using the XIRR function in the same programme.

The NAV required to produce the preferred return to investors at 31 December 2018 is £10,077,618 in accordance with Distribution Priority ii) leaving an excess of £1,922,382 to be allocated between the investors and the manager.

At this point, the minimum gain attributable to investors would be £5,327,618 (£10,077,618 + £12,250,000 – £17,000,000).

As investors would have received the preferred return (the fund being ‘wound up’ at this date), the manager becomes entitled to an amount equivalent to 20% of this minimum gain from the excess of £1,922,382. The manager is thus entitled to 25% of the minimum gain achieved (i.e. £1,331,905) in accordance with iii) plus 20% of the remaining excess of £590,477 (£1,922,382 – £1,331,905). The manager would now have received 20% of the gain, that is, 20% of (£5,327,618 + £1,331,905 + £590,477).

Of the £12,000,000 residual NAV, £11,409,523 has been allocated as follows:

£4,750,000	To the investors to make draw downs equal to distributions (£17mn-£12.25mn) – i)
£5,327,618	To the investors to produce the preferred return – ii)
£1,331,905	To the manager to produce 20% of gains at the preferred return point – iii)
£11,409,523	

The residual £590,477 (£12,000,000-£11,409,523) is to be allocated in accordance with condition iv):

£472,382	To the investors
£118,095	To the manager
£590,477	

In this way, the £12,000,000 residual NAV has been allocated as follows:

£10,550,000	To the investors
£1,450,000	To the manager
£12,000,000	

It will be noted that the manager has received 20% of net gains (£1,450,000 being 25% of (£10,550,000 + £12,250,000-£17,000,000)). NB. If the residual NAV had been £10,077,618 condition iii) could not be fulfilled in its entirety and the interim IRR would be exactly 10% pa.

Appendix VI – List of responding managers

3i	Blue Frontier Group	Edition Capital	Inflexion Private Equity Partners
Abingworth	BlueGem Capital Partners	Elysian Capital	IP Group (Top Technology Ventures)
Accel Partners	Bowmark Capital	EMK Capital	IQ Capital Partners
Active Partners Investments	Bridgepoint	Endless	Keen Venture Partners
Alchemy Partners	Bridges Fund Management	EOS Investment Management	Kester Capital
Alcuin Capital Partners	Cambridge Innovation Capital	Episode 1 Ventures	Key Capital Partners
Aliter Capital	CBPE Capital	Equistone Partners Europe	Kindred Capital
Amadeus Capital Partners	Cinven Partners	ETF Manager	Kings Park Capital
AnaCap Financial Partners	Clarendon Fund Managers	Exponent Private Equity	Kohlberg Kravis Roberts & Co. (KKR)
Anthemis Group	Core Capital Partners	Finch Capital	Langholm Capital
Apax Partners UK	CVC Capital Partners	FPE Capital	Lion Capital
Apiary Capital	Development Bank of Wales	Frog Capital	Livingbridge EP
Apposite Capital	DN Capital	Graphite Capital Management	Lonsdale Capital Partners
August Equity	Draper Esprit	Growth Capital Partners	Magenta Partners
Bain Capital Europe	Duke Street	Helios Investment Partners	Mayfair Equity Partners
Baird Capital Partners Europe	Dunedin	Herald Investment Management	Midven
BC Partners	ECI Partners	Hg Capital	MMC Ventures

MML Capital Partners	Piper Private Equity	Tenzing Private Equity	Notes 1. 116 managers responded to the survey and these managers were full BVCA members as at 31 December 2018 (the vast majority of those firms that manage funds eligible for the report). 2. Many private equity firms manage more than one fund. 3. Those full BVCA members not listed above either do not raise third-party funds (i.e. invest their own or parent company money only), manage VCTs or government funds, or do not manage their funds from the UK, and therefore are not eligible to be included in this survey. 4. A number of past BVCA members' funds remain within the dataset (see Methodology as detailed in Appendix I) and are not listed here – most of these funds have come to the end of their lives.
Mobeus Equity Partners	Primary Capital Partners	Terra Firma Capital Partners	
MVM Partners	Risk Capital Partners	The Summit Group	
Nesta Investment Management	Roundshield Partners	Three Hills Capital Partners	
Next Wave Partners	Rutland Partners	TowerBrook Capital Partners UK	
Nexus Investments	Scottish Equity Partners	True	
NorthEdge Capital	Shackleton Ventures	Vespa Capital	
Oakley Capital	Silverfleet Capital	Vision Capital	
Oxford Sciences Innovation	Solingen Private Equity	Vitruvian Partners	
Oxx	Sovereign Capital	WestBridge Fund Managers	
Palamon Capital Partners	Spark Impact	Wyvern Seed Fund	
Palatine Private Equity	STAR Capital	YFM Equity Partners	
Panoramic Growth Equity	Sussex Place Ventures	YFM Venture Finance	
Par Equity	SV Health Investors	Zouk Capital	
Penta Capital	Synova Capital		
Permira Advisers (London)	TDR Capital		
Phoenix Equity Partners	Technology Venture Partners		

Appendix VII – Frequently asked questions

Who is included in the survey?

To be eligible for inclusion in the survey, the private equity firm must:

- Be a full BVCA member;⁴
- Raise money from third-party investors;
- Manage that money from the UK (although it may be invested elsewhere).

The following are excluded:

- BVCA members investing from their own balance sheet;
- Quoted vehicles managed by BVCA members such as VCTs and listed private equity (formerly known as private equity investment trusts), although the latter are shown as a separate category

These groups have been excluded because the purpose of the survey is to show institutional investors the kind of returns they might attain if they invested in UK-based private equity funds (which are often structured as limited partnerships)

The performance of these ‘independent’ funds is calculated in a different way from quoted vehicles and therefore cannot be combined in the same sample. Listed private equity is, however, shown as a separate category in the report for comparison purposes.

Firms that only invest directly from their own balance sheet are excluded because they do not manage a fund into which an institutional investor would be able to invest. Such firms will not be able to report performance data net of costs and fees, as with the ‘independent’ funds.

Is the BVCA membership representative of the UK private equity industry?

The BVCA represents the vast majority of private equity and venture capital in the UK, with just over 325 full members – firms that provide private equity or venture capital funding to unquoted companies.

What is the response rate for the survey?

In total, 116 BVCA members responded to the survey in 2018. Only firms that manage funds are eligible to be included. Many firms manage more than one fund. In total, 726 funds were analysed in this year’s survey.

The BVCA recognises the importance of producing the most comprehensive performance data possible and therefore it is a condition of BVCA membership that the data is provided.

Who produces the survey?

The survey is conducted by PwC Research in conjunction with Capital Dynamics and the BVCA.

How is the data collected?

BVCA members submit their cash flow and valuation data for qualifying funds via the BVCA’s online data collection portal. The data is then provided to PwC Research for analysis by investment stage and vintage year, with verification, where appropriate, undertaken by Capital Dynamics.

The BVCA then produces a summary flyer in the Summer, with the full report compiled by PwC and the BVCA, published in the Autumn.

Why have funds with vintages of 1996 onwards been reclassified?

This was done in order to reflect changes in the market. It was decided that 1996 was the most appropriate point at which to do this, as it was around this time that the market started to noticeably change, with a large rise in the number of venture capital funds and significantly larger buyout funds being raised. The new categories and their size-bandings (i.e. size of equity investments) are as follows:

- Venture;
- Small MBO (< £10mn);
- Mid MBO (£10mn–£100mn);
- Large MBO (> £100mn).

4. Funds managed by former members of the BVCA have been included where information has been available, but these are few and most are no longer active within the UK private equity industry. Only past members that still have active funds and continue to provide data are listed as having responded to the survey.

Appendix VII – Frequently asked questions

Continued

Does this allow for greater breakdown of the data?

Yes. Reducing the number of categories makes it easier to break out vintage year data by stage category. From 1996 vintages onwards, vintage years are analysed by Venture, Small/Mid-MBO and Mid/Large MBO stages. Due to some very small sample sizes, the MBO categories have had to be combined when comparing with Venture. This further breakdown of vintage year returns will be useful when benchmarking funds. It is hoped that this will increase the usefulness of the survey to investors and practitioners alike.

How are the returns calculated?

The primary method for calculating returns is based on the annualised internal rate of return (IRR) achieved over a period of time. This return is based upon the total actual fund cash flows and valuations of the funds at the relevant period ends and the calculation of the change between them on a per annum basis. The returns are therefore time- and money-weighted (often referred to as ‘time line basis’).

The returns are based on fund valuations provided by the fund manager. How robust are these numbers?

Fifty-six percent of the funds surveyed contain unrealised investments. As part of the data collection process, respondents are asked whether fund valuations have been based on the new International Private Equity and Venture Capital Valuation (IPEV) Guidelines and, if not, what valuation method has been used. However, PwC has not independently confirmed that the International Guidelines have been adhered to.

It should be remembered that, as with other asset classes, a valuation provides an interim ‘snapshot’ of performance. The distributing nature of the vast majority of private equity funds means that when a fund has made its final distribution, a pure cash-on-cash return can be calculated.

What are the International Private Equity and Venture Capital Valuation (IPEV) Guidelines?

The International Valuation Guidelines were initially launched in March 2005, having been developed by the Association Française des Investisseurs en Capital (AFIC), the British Private Equity and Venture Capital Association (BVCA) and Invest Europe, and endorsed by 39 regional and national associations, including the Institutional Limited Partners Association (ILPA) in the USA. These replaced the previously widely used BVCA Valuation Guidelines.

For more information, please visit: <http://www.privateequityvaluation.com/>

Why is the internal rate of return (IRR) used?

The IRR is the most appropriate measure of return due to the high level of discretion on the part of the fund manager in determining cash flows to and from the investors and the difficulty in determining portfolio valuations at the date of each cash flow that would be required in order to calculate a time-weighted return. The academic community and the CFA Institute (formerly AIMR – Association of Investment Management Research) supports the use of the IRR as the most appropriate measure of private equity and venture capital fund performance.

Can you compare IRRs to the returns generated by other asset classes?

Most other asset classes quoted in this report, are calculated as gross time-weighted returns (TWR) and so any comparison should be done with care. Such TWR calculations are not possible for private equity as they require frequent and easily obtainable revaluations and assume a low level of manager discretion in the timing of cash flows.

Is the IRR net or gross?

The private equity return represents the ‘net’ return to investors after costs and fees. Provision is made for performance fees, which would have been payable if the residual valuation had been realised at the valuation date. Returns from FTSE indices, however, are gross time-weighted returns. Thus, private equity returns are effectively understated in comparison.

Why is the net IRR used?

The net IRR is the most appropriate measure of performance as this is the return that is generated to the investor. While gross IRRs are important for measuring individual investments, the effects of costs and fees can significantly reduce the gross returns when the totality of the fund is examined.

Why are different types of net IRR reported?

‘Since inception’ returns are the most meaningful way to measure private equity performance. They measure from the actual start of the fund (i.e. from the first drawdown) up to a particular point in time. This, therefore, most closely reflects the return a primary investor would have achieved.

‘Medium to long-term returns’ (three, five and ten years) are reported so that investors can compare them with other asset classes, which is not possible with the since-inception numbers. These returns cover all activity in all funds in the survey over the measured period to 31 December; it is not limited to just those funds that were in existence at the start of the measured period. (N.B. These returns can be compared with the ‘horizon’ returns produced by Invest Europe.)

Current (or one-) year returns are very volatile and inappropriate as a sensible measure of private equity performance. It is not possible to invest in a private equity fund for just one year. Private equity is a long-term investment, spanning the life of a fund. They can, however, be used as an indication of how well the UK private equity industry performed in that one year.

Why is the complete dataset 726 funds in some cases and 608 in others?

The since-inception returns have a reduced dataset compared to the medium to longer-term returns, because only funds over four years old are included in the former. The reason for this is that short-term IRRs can be very volatile and are not a reliable indicator of progress. After four years, the IRR has begun to settle down and is thus a more meaningful indication of the direction of progress.

Why is the pooled average IRR so different from the median IRR in some populations?

The pooled average IRR is the return for the total sample of funds being analysed, whereas the median is the actual return of the middle ranking fund in the sample. The pooled average is influenced by larger funds in the sample, whereas the median is size-neutral.

Why are multiples also quoted?

The IRR is not the only important measure of performance for private equity and venture capital funds. Multiples are a useful additional measure that can be used in conjunction with IRRs when comparing the relative performance of funds. The multiple is shown in two ways:

- As a percentage of paid-in capital distributed to investors (DPI);
- As a percentage of total value, which includes capital distributed and residual value (TVPI).

What is the impact of currency on the returns?

All of the fund returns are calculated in pounds sterling. For those funds that are denominated in other currencies, each cash flow and valuation is converted to pounds sterling using the relevant exchange rate prevailing at the date of said cash flow or valuation. In this way, the return calculated will be closest to that of a sterling-based investor. Although exchange rate movements may have some significant impact on short to medium-term returns, their effect on since-inception and long-term returns is generally small.

How transparent is the UK private equity industry?

The private equity industry is mindful of the need for appropriate levels of transparency, given its high profile in the media and its importance to the wider success of the economy. It must be remembered, however, that private equity differs from public equity and that a degree of privacy is an important component of return generation. This survey was first commissioned by the BVCA in 1994 and demonstrated the desire and strategic vision of the BVCA to promote greater understanding of the industry and to encourage greater transparency regarding performance. The proactive and continuous efforts to improve the survey, such as the further breakdown of vintage year performance, are also made with the desire for greater transparency in mind.

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