



In association with



Performance Measurement Survey 2021

A survey of the returns generated by independent UK-based funds that raise capital from third-party investors

A photograph of a woman in a grey and white patterned blazer pointing at a large digital screen displaying various financial charts and graphs. A man in a white shirt is partially visible on the right, looking at the screen. The background shows a city skyline at night with blurred lights.

November 2022

About this report

This report has been produced by the British Private Equity and Venture Capital Association (BVCA) to demonstrate the returns generated for investors by our members to 31 December 2021. The statistics in this report are the results of the BVCA's Performance Measurement Survey, an annual survey of fund level cash flows and valuations collected from our members.

With a significant presence in the UK, developed over the past 40 years, private equity and venture capital funds provide companies with the finance and know-how to deliver sustainable business growth. Active ownership, over the medium to long term, delivers economic and social value to those involved in the businesses (from employees, management and owners on the one hand, to customers and suppliers on the other) and a wide group of stakeholders (from local communities and local and regional economies, to national policy makers focused on issues such as climate change, diversity and inclusion and social issues).

Both private equity and venture capital firms are focused on delivering sustainable growth for the companies in which they invest: venture capital funds typically support early stage and younger companies, holding minority stakes in the businesses, while private equity funds typically acquire controlling stakes in more established businesses.

The Performance Measurement Survey looks at funds which invest in businesses at all stages of the growth lifecycle – from venture capital funds specialising in start-ups to large buyout funds investing in global corporations. We at the BVCA firmly believe that private equity and venture capital funds are an exciting and attractive investment opportunity for pension schemes and other investors and the results of this survey show us why.

In 2021 we received responses from 114 members out of a total eligible pool of 164 members, a response rate of 70%. For comparison, in 2020 we received response from 119 members out of a total of 158 who were eligible.

A summary version of this document can be found in the [Performance Measurement Survey Highlights brochure](#).

For those who wish to explore the data further, we have made the data tables in this report available for download on the BVCA website [here](#), in excel format. We hope this will prove a valuable resource for industry participants, researchers and others wishing to find out more about the performance of private equity and venture capital funds.

Further analysis comparing private equity and venture capital fund performance to public markets can be found in our Performance and Public Market Equivalent analysis report. The 2020 edition of this report can be found [here](#), and the 2021 report will be available before the end of the calendar year.

“

Robust, accurate and transparent data is of the utmost importance and underpins our ability to articulate our economic contribution to society. Gathered from over 110 BVCA members, this represents the largest primary research survey of its kind in the UK. I want to thank all firms who provided us with data and enabled us to demonstrate the continued strong returns generated for investors in 2021.



Michael Moore
Director General, BVCA



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UK Private Capital at a glance

Industry return since 1980

14.9% p.a.

Overall industry since inception internal rate of return since 1980

Industry return since 2012

22.6% p.a.

Overall industry since inception internal rate of return since 2012

10 year horizon return

17.5% p.a.

vs 7.7% p.a. achieved by the FTSE All Share index

Realised returns

1.37x

Across the industry as a whole since 1980, investors have received back distributions equal to 1.37x their original invested capital. This excludes the additional value in their, as yet, unrealised portfolios

Total return since 2012

2.01x

Across the industry as a whole since 2012, investors own assets which, if realised at their 31 December 2021 values, would mean investors receive more than double their original investment

Total returns

1.85x

Across the industry as a whole since 1980, investors own assets which, if realised at their 31 December 2021 values, would mean investors receive 1.85x their original investment

Capital raised in 2021

£29.1bn

of capital raised in 2021 by members responding to this survey

Wide range of returns

0.59x–2.69x

Illustrative Industry-wide range of total return multiples to 31 December 2021 (10th-90th percentile funds from 1980 onwards)



Foreword

2021 was a remarkable year; as Covid restrictions eased and economies around the world opened up, we saw a significant step up in deal activity, with UK fund managers actively deploying capital and investing in businesses around the world. Our Growing Great British Businesses [report](#) shows how our members invested £17.2 billion across the length and breadth of the UK last year.

We also saw record levels of distributions, as fund managers exited investments made in previous years and returned proceeds to investors. These high levels of distributions, along with continuing strong valuations at the end of 2021 have produced some of the best industry returns on record, with the aggregate since inception industry return now standing at 14.9% p.a.

The aggregate since inception return for all suitably mature funds launched in the past decade (i.e. starting between 2012 and 2017) is 22.6%, with venture capital and large private equity funds collectively performing even better than this. The money multiple figures show that these funds doubled their invested capital (including the value of unrealised assets) had all assets been realised as at 31 December 2021 net of all costs and fees.

However, these returns are not guaranteed. Our range of returns analysis shows that, whilst the industry's performance as a whole is very strong, returns vary between individual private equity and venture capital

funds. Some funds ultimately may not generate a positive return (in which case the firm will not receive carried interest if returns are below the hurdle agreed with investors) whilst others greatly outperform the pooled industry returns presented in this report. Investors in private equity and venture capital funds are typically institutional, well-advised investors, who will be aware of the spectrum of returns.

Entering choppy waters

As we know, in 2022 the world looks very different to 2021: the ongoing Russian aggression in Ukraine, together with the lingering impact of COVID 19 and the end of central banks' quantitative easing programmes has created an economic and energy crisis in most major economies, resulting in increasing interest rates and higher inflation. Political instability in the UK has added to the uncertainty. It is natural to ask whether private equity and venture capital can continue to generate strong returns. The record levels of deal activity in 2021 are unlikely to be repeated. So far in 2022, we have seen deal flow softening and valuations tightening, so we expect both distributions and valuations to be lower come the end of the year.

Private equity and venture capital is, however, a long term asset class, in which fund managers can choose both when to invest and when to realise their investments, so although the shorter term returns may fall, the longer term performance, particularly relative to public markets, is expected to remain robust. By way of example, the 10 year horizon return for funds

managed by our members to 31 December 2021 is 17.5%, compared to an equivalent return of 7.7% from the FTSE All Share Total Return index.

It is also instructive to look back at the performance of funds in the global financial crisis. Our analysis shows that while funds which invested just prior to the financial crisis (2005-07) generated lower IRRs overall, the resulting money multiples earned were in line with historical averages. Why is that? As is fundamental to the private capital business model, managers continued to provide financial and business support to their portfolio companies, actively helping them to generate value until exit. Moreover, as long term investors, private capital managers are able to hold and invest in assets for longer if needed to ensure a good return for their investors.

We would like to thank all BVCA members who contributed data and give special thanks to the members of the Performance Measurement Survey Review Board, who provide technical advice to the BVCA and help ensure the robustness of the processes undertaken to produce this report.



Charlie Troup

Managing Partner, Duke Street Capital,
& BVCA Chair 2022/2023



Albertha Charles

UK Asset & Wealth Management Leader,
PwC



Report from the Performance Measurement Survey Review Board

About the board

Established in 2019, the Performance Measurement Survey Review Board is an advisory group comprised of experienced individuals working across all parts of the private equity and venture capital industry – from fund managers to investors to academics.

We are pleased to support the BVCA in the production of the report this year. The Board is a technical advisory group and has no access to individual firm submissions or any of the underlying disaggregated data. Our role is to advise on methodology and process and to ensure that the results are robust.

Board membership changes

One of the founding Board members, Kathleen Bacon, stepped down at the end of the 2020 survey cycle. Alongside the BVCA, we would like to thank Kathleen for her invaluable contribution to the survey and the report over the past two years since the Board's creation.

We were pleased to welcome Candy Ip from Advent International to the Board in May 2022. Candy is Investor Relations Director at Advent International, with a wealth of experience across performance reporting including Public Market Equivalent methodologies, as well as experience in implementing operational improvements.

Robustness of results

70% of firms who were members of the BVCA in March 2022, and who managed funds which met the criteria, responded to this year's survey, 114 in total. This is a strong response rate and in line with previous years.

The survey is based on cash flows and valuations provided by each participating fund; neither the BVCA nor PwC is able to independently check the data provided. However, the BVCA research team has sought to verify the accuracy of data submissions via seeking sign-off of fund level returns to investors from a senior individual at each member firm. 83% of firms who provided data subsequently signed-off their numbers.

In addition, we were pleased to see two further improvements to the survey this year:

1. This year's survey included an additional mandatory question around the methodologies followed for the valuations submitted. 100% of respondents confirmed that their asset valuations followed the International Private Equity and Venture Capital Valuation (IPEV) Guidelines or were in line with European accounting standards.
2. The BVCA has further developed its in-house capability and calculations for all tables are now performed by both PwC and the BVCA.

Current board members



Mark Dragan
Formerly of Capital Dynamics



Candy Ip
Advent International



Graeme Keenan
Pantheon



Fraser McLatchie
SEP



Professor David Robinson
Duke University



Jeremy Lytle
ECI



Report from the Performance Measurement Survey Review Board

The response rate, sign-off rate, the calculation verification procedures undertaken by PwC and the additional improvements give the Board confidence that the survey findings are robust. As the non-respondents among BVCA members generally tend to be smaller firms with fewer assets under management, we believe that the pooled returns calculated in this study are representative of the BVCA membership.

Commentary on findings

2021 saw high levels of deal activity. The increase in exits has pushed up the level of distributions to investors. This is particularly noticeable for funds which are 5-7 years old which are at the stage of realising investments made in previous years and

we can observe a significant increase in DPI multiples for these vintage years.

Valuations also remained strong throughout 2021, with the venture capital funds in particular, pushing up the Total Value to Paid-In (TVPI) multiple for active funds.

Given the change in the economic environment in 2022, caution must be taken when interpreting interim results as funds with significant unrealised assets may face a challenge in realising assets at a 2021 valuation price point.

We are pleased to be able to contribute to the available research into the returns from private equity and venture capital to investors, and we hope the

BVCA Performance Measurement Survey will continue to be an important resource for investors, industry participants and those who study or wish to learn more about the returns generated by the asset class.



Mark Drugan

Chair, Performance Measurement
Survey Review Board



Guide to this report

This report is structured as follows:

- **Section 1** explains, in simple language, how private equity and venture capital funds work and the different ways of measuring returns. It also introduces key concepts needed to understand this report for the reader unfamiliar with interpreting private equity and venture capital performance.
- **Section 2** presents information on our dataset – both the number of funds and the amount of capital raised – cut by investment stage and year of fund raising.

- **Sections 3 to 6** look at various measures of returns across different time periods. We present IRRs and multiples concurrently within each time period.
- **Section 7** summarises the key takeaways from the report.

Finally, the **appendices** cover methodology, definitions, worked examples and the list of responding firms.

We also present a separate [Data Tables Addendum](#) with the results of our calculations in total and by investment stage and subcategory or type of investment for each of the measures used in this report. This includes analysis by vintage year band to enable a more precise comparison to the funds in our dataset.

Who is this report written for?

This report is primarily written for individuals who have a finance background and are at least somewhat familiar with private equity and venture capital, although we have endeavoured to explain the key concepts as clearly as possible.

If you have any questions or comments on this report, including technical queries, please feel free to reach out to the BVCA research team.

[Get in touch >](#)



Private equity and venture capital explained

How does a private equity or venture capital fund work?

What is a private equity and venture capital fund?

Independent private equity and venture capital firms typically raise money from institutional investors such as pension funds, insurance companies and family offices. This money is committed to a fund and is drawn down over several years as investments get made. The fund (often structured as a limited partnership) is managed by a private equity or venture capital firm, known in industry parlance as a 'General Partner' or 'GP'.

The capital is used to invest in companies that, typically, are not listed on a stock exchange, either for a minority or majority equity stake. The firm will generally also invest their own money into the funds they manage to ensure their interests are aligned with that of their investors.

Private equity and venture capital funds usually have an initial life-span of 10 or more years and it is intended by the end of this period that they will have returned to investors' share of the original money, plus any additional returns made. This generally requires

the investments to be exited for cash or listed shares, before the end of the fund's life.

The investors in the funds first receive any distributions generated by a fund and it is only when these returns pass a certain point, known as the 'hurdle rate' (typically around 8%), that the private equity or venture capital firm receives any pay-out, known as carried interest. For further explanation on how carried interest is calculated, please refer to Appendix 3.

The fund lifecycle

A first step in understanding and interpreting private equity and venture capital returns is to understand the cyclical nature of these funds and how the cashflow profile develops over the life span of the fund.

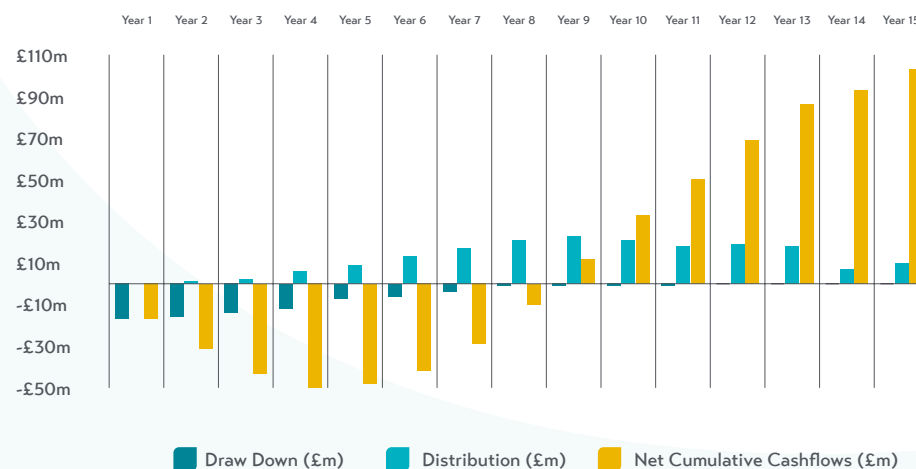
Investments into portfolio companies tend to take place in the beginning of a fund's life. In the case of the BVCA members that have historically participated in the survey, the majority of raised capital (78%) is drawn down and invested during the first four years of activity.

Distributions, on the other hand, tend to start being more significant after about five years, with the majority of money (70%) being paid back to investors during years five to ten of a fund's life span.

Chart 1 shows an illustration of the draw downs, distributions and net cumulative cashflow in each year of a fund's life.

A private equity and venture capital firm will frequently have more than one fund active at the same time, at different stages of the lifecycle. For some of the analysis in this report we group funds by vintage year, i.e. by the year in which they first draw down capital. Funds within each vintage year are likely to be at a broadly similar stage in the fund lifecycle.

Chart 1 – Illustrative cash flow (£m) by life stage of the fund



Private equity and venture capital explained

Measuring private equity and venture capital performance

There are two principal ways investors measure performance of private equity and venture capital funds:

1. By looking at the annualised percentage return on investment, known as the Internal Rate of Return ('IRR'). This accounts for the size and timing of cashflows and valuations.
2. By looking at the proportion of the initial invested capital which is returned, known as the Multiple of Invested Capital ('MOIC'). This measure only considers the size of the return and does not account for the time value of money.

For private equity funds which are still investing and have not yet distributed all of their assets, there are two types of multiple which are frequently considered:

1. The ratio of Distributed Capital to Paid-In Capital ('DPI'). The DPI multiple represents the total amount distributed to investors as a percentage of total capital drawn down from investors for a given period.

2. The ratio of Total Value to Paid-In Capital ('TVPI'). The TVPI multiple represents the total amount distributed plus the residual value attributable to investors as a percentage of total capital drawn down from investors for a given period.

Individual investors and fund managers will find that different combinations of these metrics work best for them in assessing their private equity and venture capital portfolios. When these institutions invest in a fund, they will have information rights, including detailed reporting requirements on performance and fees.

Illustrative example: IRR, DPI and TVPI

In our example we have a private equity fund which was launched in year 1 and is currently in year 5 of its life, with cash flows as shown in the table below:

Year	Amount (£m)	Description
1	-10	Drawdown
2	0	
3	0	
4	15	Distribution
5	5	Valuation

As at the end of year 5, the key performance metrics in this example fund are:

- IRR: 24% (Annualised return calculated using the IRR function in excel – Please note that the BVCA uses the XIRR function to calculate returns presented in this report)
- DPI: $15/10 = 150\%$ or 1.5x the initial investment
- TVPI: $(15+5)/10 = 200\%$ or 2x the initial investment.



Private equity and venture capital explained

Different ways of looking at IRRs

The life cycle of a fund is important because it affects the different ways in which IRRs can be looked at. Firstly, to be able to calculate the actual return of a fund, the fund has to be terminated and to have liquidated all its assets, with proceeds returned to investors – any interim measures will necessarily require an estimation of the residual value of the fund's investments.

Since inception IRR

Since inception IRR is the most meaningful way in which to measure private equity and venture capital funds' performance, as it refers to the IRR of a fund since its first draw down. This therefore most closely reflects the return an investor would achieve if they invested at the start of a fund.

As illustrated in chart 1, funds are mostly investing and only returning small amounts of capital to investors during the first four years of their life so any calculated IRR would not be meaningful and would not provide an accurate indication of what that fund performance could be at liquidation. To avoid this issue, we only include funds that are at least four years old

in our since inception return measures. For this report, since inception returns comprise of funds that started investing between 1980 and 2017.

Since inception IRR by vintage year

The BVCA classifies the vintage year of a fund as the first year in which the fund made a draw down. Since inception returns by vintage year are useful when analysing the returns delivered to date of funds at different stages of a fund's life cycle. For example, the vintage 2012 in this report will contain all funds that started investing in 2012, and therefore are currently 10 years old, having most likely invested the majority of their capital and distributed a significant proportion back to investors. Since inception returns by vintage year are also useful for analysing the impact that economic cycles can have on fund performance.

Since inception starting from a specific year

A new measure presented in the report for the first time last year is since

inception starting from a specific year. This measure is a pooled since inception return for all funds starting at a certain vintage, and excluding the four most recent vintages. For instance, since inception starting from 2012 includes cashflows from all funds of vintages between 2012 and 2017, therefore funds that are between five and ten years old. This means that the funds included in the since inception starting from 2012 category, will probably have invested the majority of their capital and distributed a large proportion of it as well.

This measure is very important because it allows us to show since inception returns for the industry, and at the same time, remove any historical bias that may exist due to past performance. As an example, the since inception IRR starting from 2000 removes from our calculations funds which were active during the 1980s and 1990s when the market was very different from today.

Horizon IRRs

Horizon IRRs look backwards at specific time horizons. For instance, the ten

year horizon IRR in this report looks at the performance of the industry for the past ten years (between January 2012 until December 2021) – this measure will include cashflows from all funds that were active at some point during the last ten years, regardless of lifecycle stage. The one year horizon figures are more volatile and inappropriate as a realistic measure of performance, since it is generally not possible to invest in a private equity or venture capital fund for just one year. It may, however, be used as an indicator of how well the UK industry performed during that year.



Private equity and venture capital explained

Investment stages and subcategories

Given the depth and breadth of the Performance Measurement Survey dataset, we are able to calculate the returns for several different subsets of the data. We look at this in two ways: firstly, by Investment stage, and secondly by subcategory.

Investment stage refers to the size and stage of development of the companies which the fund is looking to invest in.

The current investment stage classifications which BVCA uses are:

- Venture
- Small private equity (Invests less than £10 million of equity in each transaction. 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)
- Mid-market private equity (Invests between £10 million to £100 million of equity in each transaction)

- Large private equity (Invests more than £100 million of equity in each transaction)

These investment stages have applied since 1996 ('1996 vintage funds onwards')

Between 1980 and 1995 ('pre-1996 vintage funds') the investment stage classifications which applied were:

- Early stage
- Development
- Mid-private equity
- Large private equity
- Generalist

The investment stage reclassification from 1996 onwards was driven by changes in the market at that time, with a growth in the size of funds being raised and a step up in terms of volume of activity in the venture space.

Subcategory refers to the fund investment focus, whether by geography or sector.

The subcategories presented have remained consistent throughout the life of the Performance Measurement Survey. These are:

- UK (Invests over 60% of raised capital into UK companies)
- Non-UK
- Pan-European (Invests over 60% of raised capital into companies in two or more European countries which may include the UK)
- Technology (Invests over 60% of raised capital into technology companies)
- Non-Technology

Full definitions of each of the investment stages and subcategories are given in [Appendix 2](#).

The advantage in providing a more granular analysis of returns is that investors can see more clearly the returns associated with the types of investments they may wish to make and they can more accurately compare the performance of their existing investments to the funds in our dataset.



Capital raised

by investment stage and subcategory // data

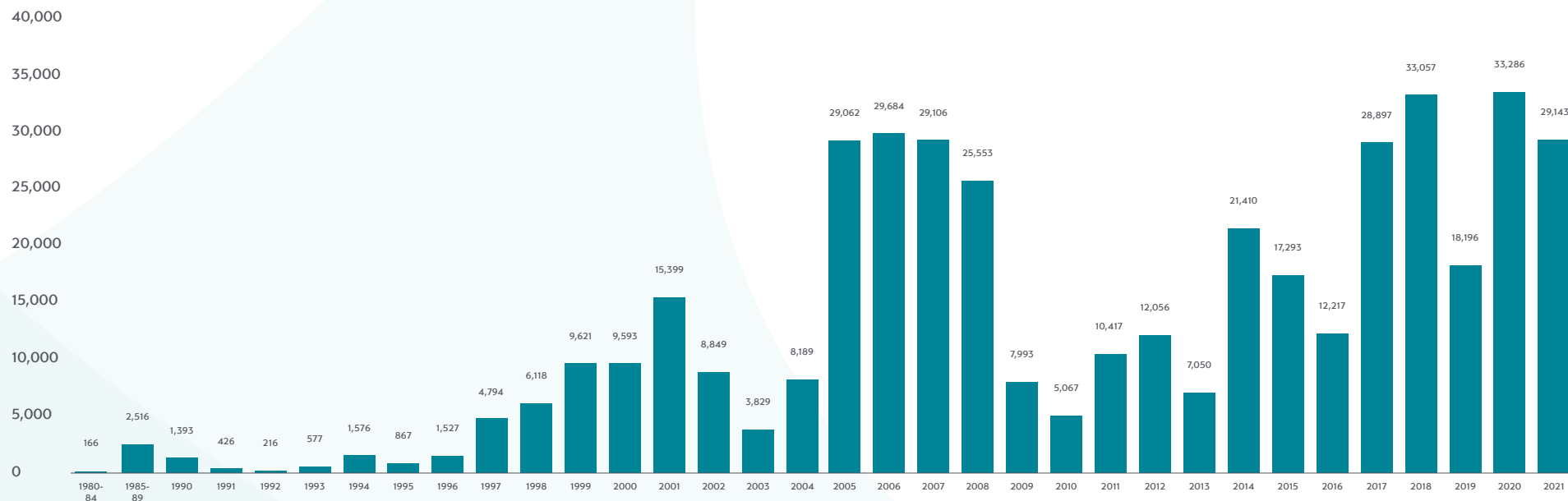
Chart 2 – Capital raised by investment stage and subcategory (£m)



Capital raised

by vintage year // data

Chart 3 – Capital raised by fund vintage year (£m)



See
commentary
on page 15

D

Table 1 – Number of funds by vintage year

Vintage year	1980-84	1985-89	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total
No. of funds	13	67	14	14	7	9	20	9	13	24	16	25	26	29	21	17	14	26	42	39	29	23	22	19	23	27	37	43	37	41	44	43	44	39	916



Capital raised

Commentary

Chart 2 – Capital raised by investment stage and subcategory

A

It is intuitive that large private equity funds have raised, to December 2021, substantially more capital as compared to other investment stages, representing 62% of total raised capital for funds with vintages 1996 onwards. 2021 fundraising was in line with the historical proportion.

B

UK focused funds, although representing 61% of the number of funds in our sample, raised only 15% of the total capital, reaching £64bn by December 2021.

In terms of capital raised, over 60% (£39bn) of UK funds are Mid Private Equity, reflecting the strength of the mid-market in the UK.

In contrast, 60% of the capital raised for Non-UK focused funds (£255bn) falls under Large Private Equity as the

larger funds are more likely to have the resources to support a broader geographic reach.

C

It is not surprising that funds focusing on technology investments have raised only 16% of total capital, as the majority of funds included in this pool are Venture Capital funds, therefore raising and investing less than private equity funds.

This is not to say that private equity funds do not invest in technology businesses, just that they are less likely to have dedicated technology funds (our definition of a technology fund is one which has the intention to invest 60% or more of the capital in technology businesses).

Chart 3 – Capital raised by vintage year

When looking at capital raised by vintage year, it is important to keep in mind that the total amount of capital raised in a given year also depends on the number of new funds launched in

that specific vintage. We classify funds into vintage years based on the date of their first drawdown rather than the date the capital was committed.

D

Although slightly down compared to 2020, 2021 was still a strong year for fund creation, with 39 funds of that vintage year raising £29bn. This continues the trend seen since 2014 with over 35 new funds created each year indicating the ongoing strong investor confidence in the asset class.

Notes

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 as the surveys use different eligibility criteria.

The two main differences are 1) 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; and 2) 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. 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.

It is also important to keep in mind that the Capital Raised figures published by the BVCA refer only to Capital Raised by our member firms, therefore do not comprise the entire UK industry.

Since inception performance

by investment stage and subcategory IRR and multiples // data and commentary

As of December 2021, funds with vintages between 1980 and 2017 have delivered a since inception IRR of 14.9%. This strong return is supported by a DPI of 1.37x and by a TVPI of 1.85x. The since inception return for vintages post 1996 (therefore between 1996 and 2017) is also robust, delivering an IRR of 14.7%, DPI of 1.36x and TVPI of 1.85x.

Chart 4 – Since inception IRR (%) by investment stage and subcategory



Since inception performance

by investment stage and subcategory IRR and multiples // data and commentary

Table 2 – DPI and TVPI multiples

	No. of funds	Distributions multiple (DPI)	Total value multiple (TVPI)
Pre-1996 vintage funds			
Early stage	24	1.70x	1.70x
Development	35	1.72x	1.72x
Mid private equity	33	1.76x	1.76x
Large private equity	26	1.92x	1.92x
Generalist	35	2.43x	2.43x
Subtotal pre-1996	153	1.97x	1.97x
1996 vintage funds onwards			
Venture	167	1.00x	1.87x
Pre-2002 vintage funds	42	0.93x	0.97x
2002 vintage funds onwards	125	1.02x	2.21x
Small private equity	128	1.18x	1.87x
Mid private equity	227	1.07x	1.66x
Large private equity	71	1.52x	1.93x
Subtotal 1996 onwards	593	1.36x	1.85x
Grand total all funds	746	1.37x	1.85x
Subcategories (all vintages)			
UK	486	1.29x	1.71x
Non-UK	260	1.39x	1.88x
Pan-European	252	1.44x	1.88x
Technology	195	1.30x	2.25x
Non-Technology	551	1.39x	1.80x

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Historical Analysis

Funds which started before 1996 have identical DPI and TVPI indicating that all the funds from these vintages have been fully liquidated by December 2021. The 15.6% IRR presented on the bar graph is the actual return received by investors in those vintages. A DPI of 1.97x indicates that investors almost doubled their initial investment.

B

Investment Stages

With the exception of pre-2002 Venture funds, all investment categories have delivered a DPI of 100% or higher by December 2021, meaning investors as a whole have at least broken even. Large private equity continues to display the highest return numbers of all investment stages, both in terms of IRRs and DPI multiples.

Venture performance was significantly impacted by the dot.com bubble in the early 2000s, with funds which started investing before 2002 producing particularly weak returns. The industry has since grown strongly, so we split the venture figures by initial investment year so that the post-2002 performance can be more clearly seen. We note that the TVPI and DPI are very different for venture funds, indicating a significant proportion of value remains unrealised. We discuss venture further in Section 5.



Since inception performance

by investment stage and subcategory IRR and multiples // data and commentary

Table 2 – DPI and TVPI multiples

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Technology	195	1.30x	2.25x
Non-Technology	551	1.39x	1.80x



Overall results – 1996 onwards

A DPI of 1.36x indicates that by December 2021, funds starting from 1996 onwards have in aggregate returned back to investors 1.36x the initial capital committed for investment and fees.

The discrepancy between TVPI and DPI indicates that there is still a considerable amount of unrealised investment to be liquidated and realised. Taking into account the residual value, the TVPI yielded by BVCA members is 1.85x of the capital committed by investors as of December 2021.



Subcategories

All of the subcategories included in our survey have delivered DPI of over 1.2x since inception to December 2021. Pan-European funds (funds that invest in two or more European countries) are the star performers, reporting the highest DPI multiple of 1.44x and the highest IRR since inception of 16.2% to December 2021.

Technology focused funds (funds that invest at least 60% of committed capital into technology companies) are reporting the highest TVPI multiple of 2.25x, although this subcategory also has the widest gap between the distributions multiple and the total value multiple, implying significant unrealised value in these funds' portfolios.



Since inception performance

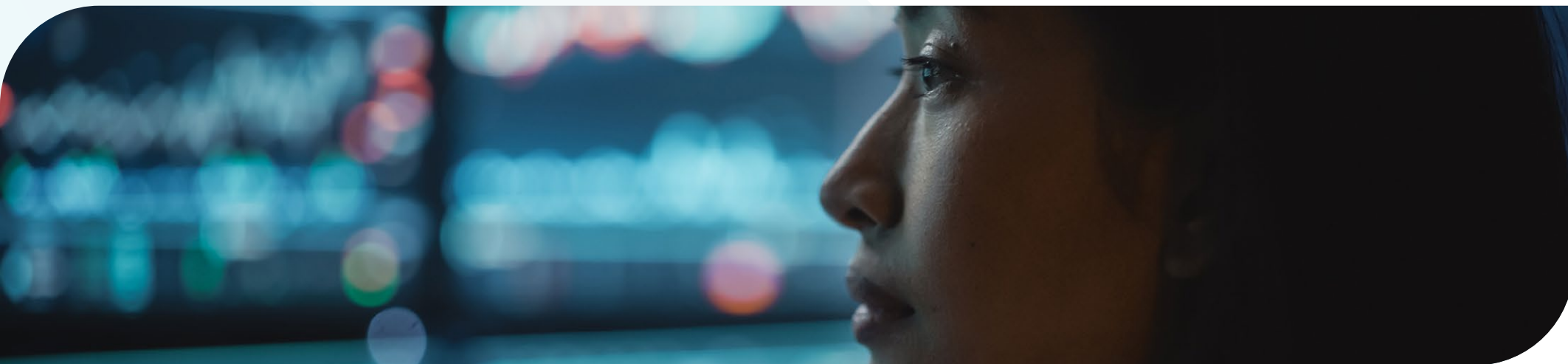
by investment stage and subcategory // commentary on range of returns results

Figures presented in chart 2 and table 4 on the previous pages represent the pooled return across the data set by investment stage and subcategory. Investing in private equity and venture capital funds does involve putting capital at risk, and it is important that this is understood and recognised by investors and policy makers alike.

We illustrate this point on charts 5, 6 and 7 on the following pages, which present the range of returns achieved by funds by investment stage (venture, small, mid- and large private equity) looking at IRR, DPI and TVPI, and can be used to benchmark performance of funds in each specific year.

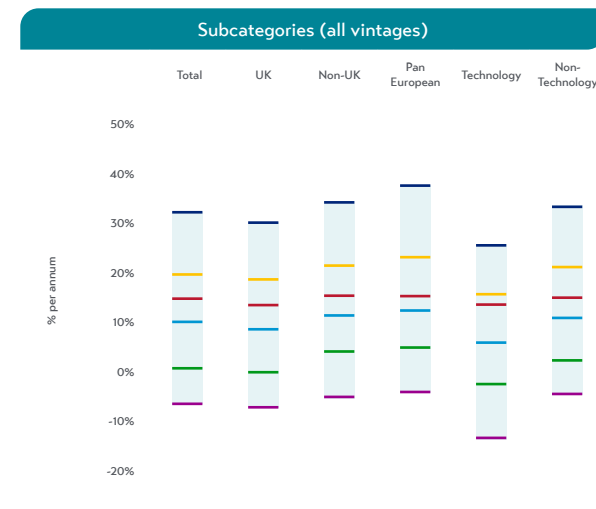
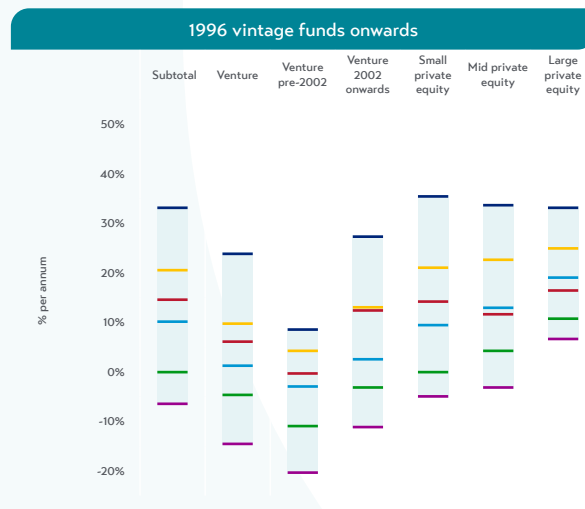
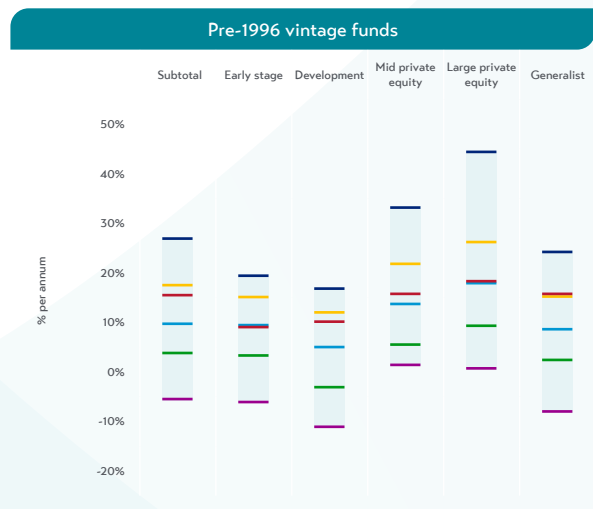
Key observations from these charts are:

- The variation in the returns from different funds is significant, so diversification is essential to manage this risk. Just as most investors in public equities own a portfolio of stocks rather than shares in just one company, institutional investors will typically invest in multiple private equity and venture capital funds with a view to maximising the risk-adjusted returns on the overall private equity and venture capital investment portfolio.
- Just like investments in the stock market can go down as well as up, not all investments in private equity and venture capital funds earn a return. We find that when we cut the data, whether this is by stage of investment or by category / type of fund, the lowest performing funds across categories have failed to generate a positive return for investors.
- However, the returns from investing in private equity and venture capital can be impressive. Focusing on post-1996 vintage funds, we can see that, aside from the pre-2002 venture funds, the top performing funds at all stages have returned 2.5x the initial capital to investors with an IRR of more than 11%.



Range of returns IRR by investment stage and subcategories

Charts 5, 6 and 7 – Range of returns – Since inception IRR (%) by investment stage and subcategory



Tables 3,4 and 5 – Range of returns – Since inception IRR (%) by investment stage and subcategory

No. of funds	153	24	35	33	26	35
Pooled return	15.6	9.3	10.2	15.8	18.2	15.8
10th percentile	27.0	19.5	16.9	33.2	44.5	24.3
25th percentile	17.6	15.2	12.1	21.9	26.3	15.3
Median	9.8	9.5	5.1	13.8	18.0	8.7
75th percentile	3.9	3.4	-3.0	5.6	9.4	2.5
90th percentile	-5.4	-6.0	-11.0	1.5	0.8	-7.9
Interdecile range	32.4	25.5	27.9	31.6	43.7	32.2
Range of returns	111.6	53.0	62.9	47.6	68.0	111.6

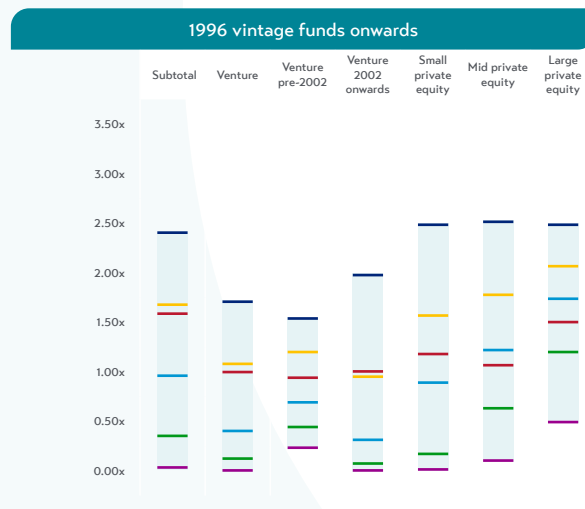
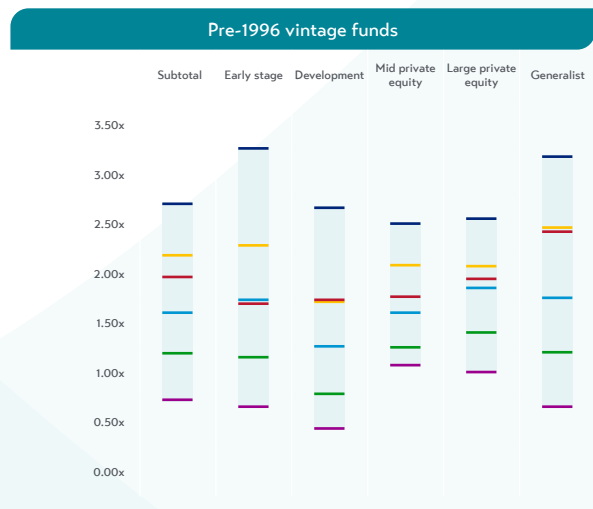
No. of funds	593	167	42	125	128	227	71
Pooled return	14.7	8.4	-0.5	12.6	14.4	11.6	16.6
10th percentile	33.2	23.9	8.6	26.7	35.5	34.4	33.2
25th percentile	20.6	9.8	4.3	13.1	21.1	22.7	25.0
Median	10.2	1.3	-2.9	2.6	9.5	13.0	19.1
75th percentile	0.0	-4.6	-10.9	-3.1	0.0	4.3	10.8
90th percentile	-6.4	-14.5	-20.3	-11.1	-4.9	-3.1	6.7
Interdecile range	39.6	38.4	28.9	37.8	40.4	37.5	26.5
Range of returns	256.4	218.2	98.7	210.4	111.3	256.4	90.1

No. of funds	746	486	260	252	195	551
Pooled return	14.9	13.6	15.5	16.2	13.7	15.1
10th percentile	32.4	30.3	34.4	37.8	25.7	33.5
25th percentile	19.8	18.8	21.6	23.3	15.8	21.3
Median	10.2	8.7	11.5	12.5	6.0	11.0
75th percentile	0.8	0.0	4.2	5.0	-2.4	2.4
90th percentile	-6.4	-7.1	-5.0	-4.0	-13.3	-4.4
Interdecile range	38.8	37.1	39.4	41.9	39.1	37.9
Range of returns	256.4	256.4	114.3	105.4	169.3	202.5



Range of returns DPI by investment stage and subcategories

Charts 8, 9 and 10 – Range of returns – DPI multiple by investment stage and subcategory



Tables 6,7 and 8 – Range of returns – DPI multiple by investment stage and subcategory

No. of funds	153	24	35	33	26	35
Pooled return	1.97x	1.70x	1.72x	1.77x	1.92x	2.43x
10th percentile	2.70x	3.26x	2.66x	2.50x	2.55x	3.15x
25th percentile	2.18x	2.28x	1.71x	2.08x	2.07x	2.46x
Median	1.60x	1.73x	1.26x	1.60x	1.85x	1.75x
75th percentile	1.19x	1.15x	0.78x	1.25x	1.40x	1.20x
90th percentile	0.72x	0.65x	0.43x	1.07x	1.00x	0.65x
Interdecile range	1.98x	2.61x	2.24x	1.43x	1.55x	2.50x
Range of returns	5.32x	5.05x	4.92x	2.65x	4.00x	5.22x

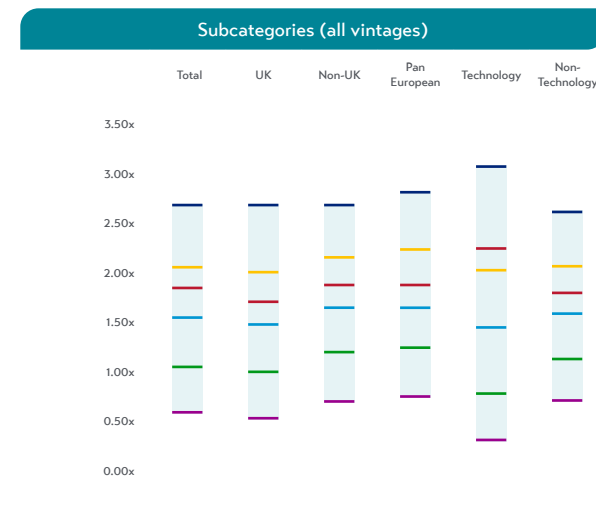
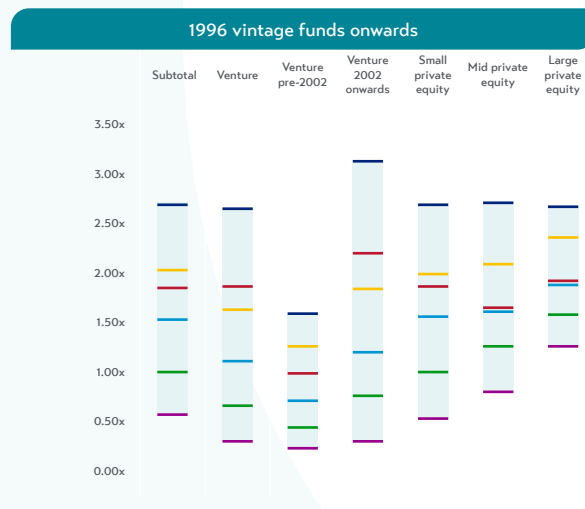
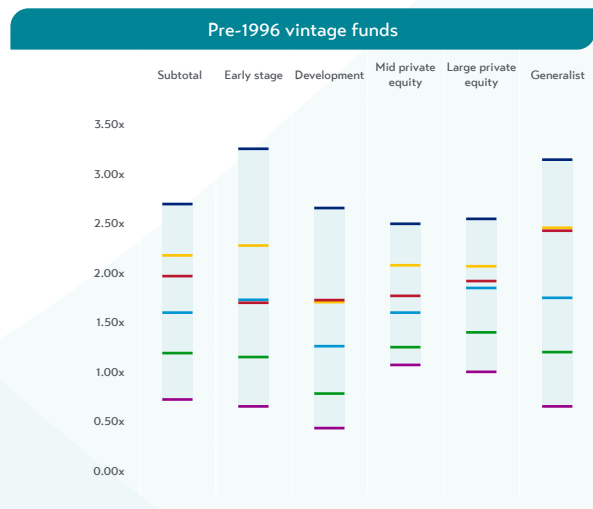
No. of funds	593	167	42	125	128	227	71
Pooled return	1.36x	1.00x	0.93x	1.02x	1.18x	1.07x	1.52x
10th percentile	2.41x	1.71x	1.54x	1.98x	2.49x	2.52x	2.49x
25th percentile	1.68x	1.08x	1.20x	0.95x	1.57x	1.78x	2.07x
Median	0.96x	0.40x	0.69x	0.31x	0.89x	1.22x	1.74x
75th percentile	0.35x	0.12x	0.44x	0.07x	0.20x	0.63x	1.20x
90th percentile	0.03x	0.00x	0.23x	0.00x	0.01x	0.10x	0.49x
Interdecile range	2.37x	1.71x	1.31x	1.98x	2.48x	2.42x	2.00x
Range of returns	7.23x	4.22x	1.95x	4.22x	7.23x	5.60x	3.01x

No. of funds	746	486	260	252	195	551
Pooled return	1.37x	1.29x	1.39x	1.44x	1.30x	1.39x
10th percentile	2.47x	2.59x	2.42x	2.51x	2.41x	2.53x
25th percentile	1.80x	1.87x	1.81x	1.87x	1.67x	1.89x
Median	1.19x	1.25x	1.26x	1.37x	0.87x	1.38x
75th percentile	0.47x	0.60x	0.59x	0.61x	0.33x	0.74x
90th percentile	0.08x	0.18x	0.22x	0.20x	0.12x	0.30x
Interdecile range	2.39x	2.41x	2.20x	2.31x	2.30x	2.23x
Range of returns	7.23x	7.23x	7.23x	7.23x	5.11x	7.23x



Range of returns TVPI by investment stage and subcategories

Charts 11, 12 and 13 – Range of returns – TVPI (%) multiple by investment stage and subcategory



Tables 9, 10 and 11– Range of returns – TVPI multiple by investment stage and subcategory

No. of funds	153	24	35	33	26	35
Pooled return	1.97x	1.70x	1.72x	1.77x	1.92x	2.43x
10th percentile	2.70x	3.26x	2.66x	2.50x	2.55x	3.15x
25th percentile	2.18x	2.28x	1.71x	2.08x	2.07x	2.46x
Median	1.60x	1.73x	1.26x	1.60x	1.85x	1.75x
75th percentile	1.19x	1.15x	0.78x	1.25x	1.40x	1.20x
90th percentile	0.72x	0.65x	0.43x	1.07x	1.00x	0.65x
Interdecile range	1.98x	2.61x	2.24x	1.43x	1.55x	2.50x
Range of returns	5.32x	5.05x	4.92x	2.65x	4.00x	5.22x

No. of funds	593	167	42	125	128	227	71
Pooled return	1.85x	1.87x	0.97x	2.21x	1.87x	1.66x	1.93x
10th percentile	2.69x	2.65x	1.59x	3.13x	2.69x	2.71x	2.67x
25th percentile	2.03x	1.63x	1.26x	1.84x	1.99x	2.09x	2.36x
Median	1.53x	1.11x	0.71x	1.20x	1.56x	1.61x	1.88x
75th percentile	1.00x	0.66x	0.44x	0.76x	1.00x	1.26x	1.58x
90th percentile	0.57x	0.30x	0.23x	0.30x	0.53x	0.80x	1.26x
Interdecile range	2.12x	2.35x	1.36x	2.82x	2.15x	1.91x	1.42x
Range of returns	9.07x	9.07x	1.95x	9.07x	7.31x	5.60x	3.79x

No. of funds	746	486	260	252	195	551
Pooled return	1.85x	1.71x	1.88x	1.88x	2.25x	1.80x
10th percentile	2.69x	2.69x	2.69x	2.82x	3.08x	2.62x
25th percentile	2.06x	2.01x	2.16x	2.24x	2.03x	2.07x
Median	1.55x	1.48x	1.65x	1.71x	1.45x	1.59x
75th percentile	1.05x	1.00x	1.20x	1.24x	0.78x	1.13x
90th percentile	0.59x	0.53x	0.70x	0.75x	0.31x	0.71x
Interdecile range	2.10x	2.16x	1.99x	2.07x	2.77x	1.92x
Range of returns	9.07x	7.31x	9.07x	9.07x	9.07x	9.07x



Since inception performance by vintage year

Returns by vintage year allow us to see how the industry performs at different stages of investment, but it also allows us a glimpse into the effects of economic cycles in performance. To give our readers a clear picture of the return of the industry over different vintage years, we present both IRRs since inception and the Distributed To Paid-In (DPI) and Total Value to Paid-In (TVPI) multiples.

Chart 14 – Since inception IRR (%) by vintage year to December 2021

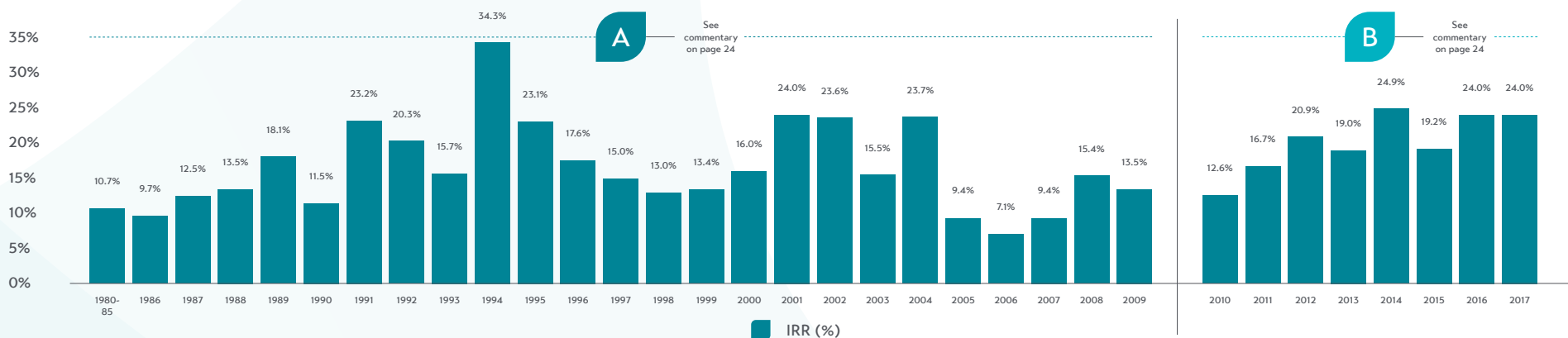
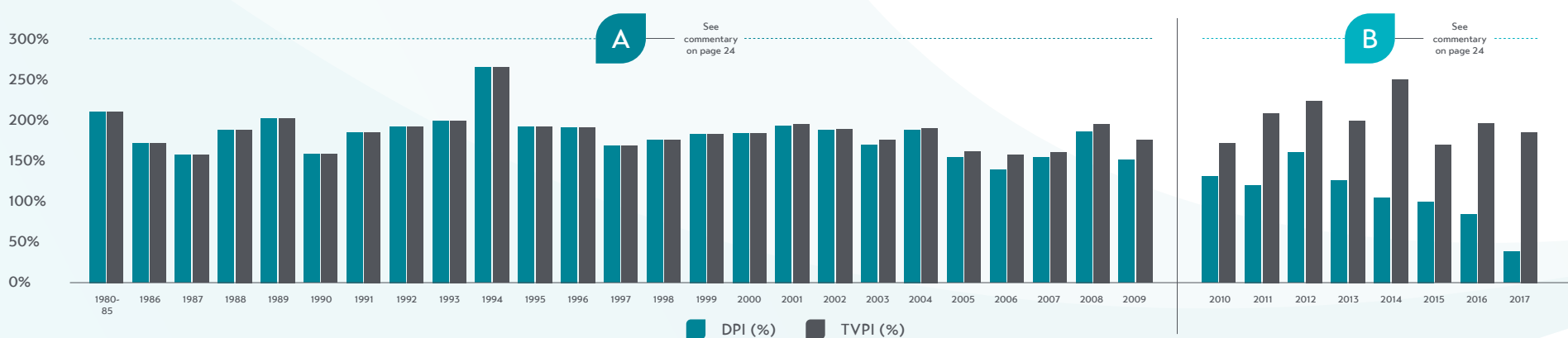


Chart 15 – Since inception multiples of invested capital by vintage year to December 2021



Since inception performance

by vintage year // commentary

A

Historical Performance

Money multiples for funds with vintages between 1980 and 2000 have the same value both for DPI and TVPI. This means that as these funds have finished distributing all their capital (and therefore are terminated). The IRR presented in our chart is the actual realised return for those vintages.

Vintages between 1991 and 2004 have constantly delivered an IRR of over 13%, reaching a maximum of 34.3% for the 1994 vintage. These are mature vintages, with DPI and TVPI being very similar.

In terms of IRRs, the lowest performing vintages for the industry are between 2005 and 2007. These funds invested

a reasonable amount of capital before the crash of late 2008. They bought companies at high valuations and then the financial crisis struck, and a large amount of restructuring took place in portfolios from 2008 to 2010. The TVPI multiples for these vintages are reasonably strong at around 1.6x, however IRRs are lower than other vintage years due to the fact that funds had to hold onto investments longer than expected.

As expected, DPI and TVPI are not too dissimilar, indicating that funds in these vintages are approaching the end of their life cycle. Although the returns for these vintages on an IRR basis may appear disappointing relative to investments made in other years, private equity and venture capital is not immune to the impact of the economic cycle so a lower return is unsurprising.

As a reminder, funds which did not manage to deliver investors a return above the agreed hurdle rate will not receive any carried interest payments as investors have first call on all returns generated.

B

The last decade

The majority of funds of vintage year 2012 and onwards will still be active – investing in business to generate value for investors. We can see that the divergence between DPI and TVPI increases for younger funds, as they have not yet had chance to make significant realisations and will hold a lot of value in existing investee companies.

Relative to the 31 December 2020 results, we can see that both DPI and TVPI multiples have increased, with a high level of exit activity in 2021 plus continued strong valuations. The IRRs have also increased, although we caution that as the funds are active these are interim IRRs, and the final return to investors will reflect what can be realised when assets are eventually exited.

Based on current reported figures, the best performing vintages of the last decade is 2014 with an IRR of 24.9%, followed by vintage years 2016 and 2017 both at 24.0%. On a multiples basis, the 2014 vintage already has a DPI of 1.05x, meaning investors have received back more than their initial investment. Unsurprisingly, the 2016 and 2017 vintages have a DPI below 1 as they are still in the investment phase.

A note on subscription lines

Subscription lines (also known as subscription facilities) are where funds borrow money from banks or other financial institutions collateralised against the capital commitments made by investors. These are frequently used for administrative purposes where cash is needed quickly but it may take a short time to access the capital committed by investors. Subscription lines give flexibility and allow funds to respond quickly to opportunities when needed.

This year, for the first time, the BVCA has endeavored to capture some information on the use of subscription lines. We asked firms who submitted information to us this year whether each of their funds used subscription lines and if so for how long. While not a complete dataset, we found that while the vast majority of respondents do use subscription lines, nearly 80% of funds for which data was provided used subscription lines for 6 months or less. Anecdotally, we are aware that use of subscription lines may have increased over the past few years, driven by low interest rates and an expansion of this market. We intend to continue this question in future years, allowing us to identify any changes over time.

Use of subscription lines delays the drawdown of capital, reducing the amount of time capital is outstanding so the internal rate of return is increased for a given absolute return. The impact of subscription lines on the IRR is highest immediately after drawdown and reduces over the life of the investment. Credit facilities do have a cost – hence the importance of considering both IRRs and multiples when evaluating fund performance as described in a 2019 study¹. We are encouraged by the fact that not only are the IRRs high in recent years, but the TVPI multiples are also high (1.5x or greater), demonstrating that performance is good under both metrics.

¹“Distorting Private Equity Performance: The Rise of Fund Debt” by J. Albertus and M. Denes, published in 2019



Since inception performance

by vintage year // commentary and explanation of range of returns

Figures presented in charts 14 and 15 represent the pooled return across the data set by vintage year. As stated in section 3, investing in private equity and venture capital funds does involve putting capital at risk, and not all investments succeed.

We illustrate this point on from a vintage year perspective on charts 16, 17 and 18 on the following pages, which present the range of returns achieved by funds within each vintage year looking at IRR, DPI and TVPI, and can be used to benchmark performance of funds in each specific year.

Key observations from these charts are:

- The variation in the returns from different funds is significant, so diversification is essential to manage this risk. As discussed earlier, just as most investors in public equities own a portfolio of stocks rather than shares in just one company, institutional investors will typically invest in multiple private equity and venture capital funds with a view to maximising the risk-adjusted returns on the overall private equity and venture capital investment portfolio.
- As investments in the stock market can go down as well as up, not all investments in private equity and venture capital funds earn a return. In every single year in our dataset, the lowest performing funds have failed to generate a return for investors.
- The returns from investing in private equity and venture capital can be very strong. Taking the 2003 vintage year as an example, the top performing funds (10th

decile) delivered an IRR of over 45% alongside a multiple of 2.5x invested capital (on both a distributed value and a total value basis). As funds started in 2003 are now 18 years old and have repaid the vast majority of funds to investors, this is a real return.



Range of returns IRR by vintage year // data

Chart 16 – Range of returns – Since inception IRR (%) by vintage year

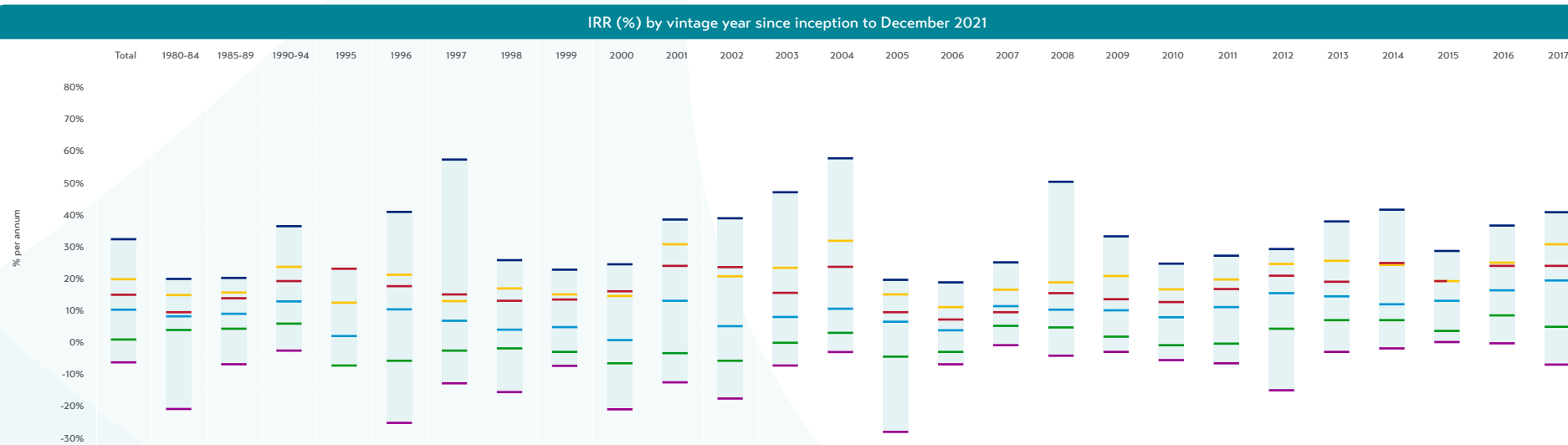


Table 12 – Range of returns – Since inception IRR (%) by vintage year

No. of funds	746	13	67	64	9	13	24	16	25	26	29	21	17	14	26	42	39	29	23	22	19	23	27	37	43	37	41
Pooled return	14.9	9.4	13.8	19.2	23.1	17.6	15.0	13.0	13.4	16.0	24.0	23.6	15.5	23.7	9.4	7.1	9.4	15.4	13.5	12.6	16.7	20.9	19.0	24.9	19.2	24.0	24.0
10th percentile	32.4	19.9	20.2	36.5	n/a	41.0	57.5	25.8	22.8	24.5	38.6	39.0	47.2	57.9	19.6	18.8	25.1	50.5	33.3	24.7	27.2	29.3	38.0	41.7	28.7	36.7	40.9
25th percentile	19.8	14.8	15.6	23.7	12.4	21.2	12.9	16.9	15.0	14.5	30.8	20.7	23.4	31.9	15.0	11.0	16.5	18.8	20.8	16.6	19.7	24.6	25.6	24.3	19.2	25.0	30.8
Median	10.2	8.1	8.9	12.8	1.9	10.3	6.7	3.9	4.7	0.6	13.0	5.0	7.9	10.5	6.4	3.7	11.3	10.2	10.0	7.8	11.0	15.4	14.4	11.9	13.0	16.3	19.4
75th percentile	0.8	3.8	4.2	5.8	-7.4	-5.9	-2.7	-2.0	-3.1	-6.7	-3.5	-5.9	-0.3	2.9	-4.6	-3.1	5.1	4.6	1.7	-1.0	-0.5	4.2	6.9	6.9	3.5	8.4	4.8
90th percentile	-6.4	-21.1	-7.0	-2.7	n/a	-25.5	-13.0	-15.7	-7.5	-21.2	-12.7	-17.8	-7.4	-3.2	-28.3	-7.1	-1.0	-4.3	-3.1	-5.7	-6.7	-15.2	-3.1	-2.0	0.0	-0.4	-7.1
Interdecile range	38.8	41.0	27.2	39.2	n/a	66.5	70.5	41.4	30.4	45.7	51.3	56.7	54.6	61.1	47.9	25.9	26.1	54.8	36.5	30.4	33.9	44.4	41.2	43.7	28.7	37.2	47.9
Range of returns	256.4	56.8	67.6	74.2	91.9	83.3	98.2	68.1	44.7	101.4	82.9	86.4	74.8	71.2	90.2	94.6	56.0	93.8	61.0	62.0	43.6	59.0	97.3	196.9	128.2	196.2	64.2



Range of returns DPI by vintage year // data

Chart 17 – Range of returns – DPI multiple by vintage year

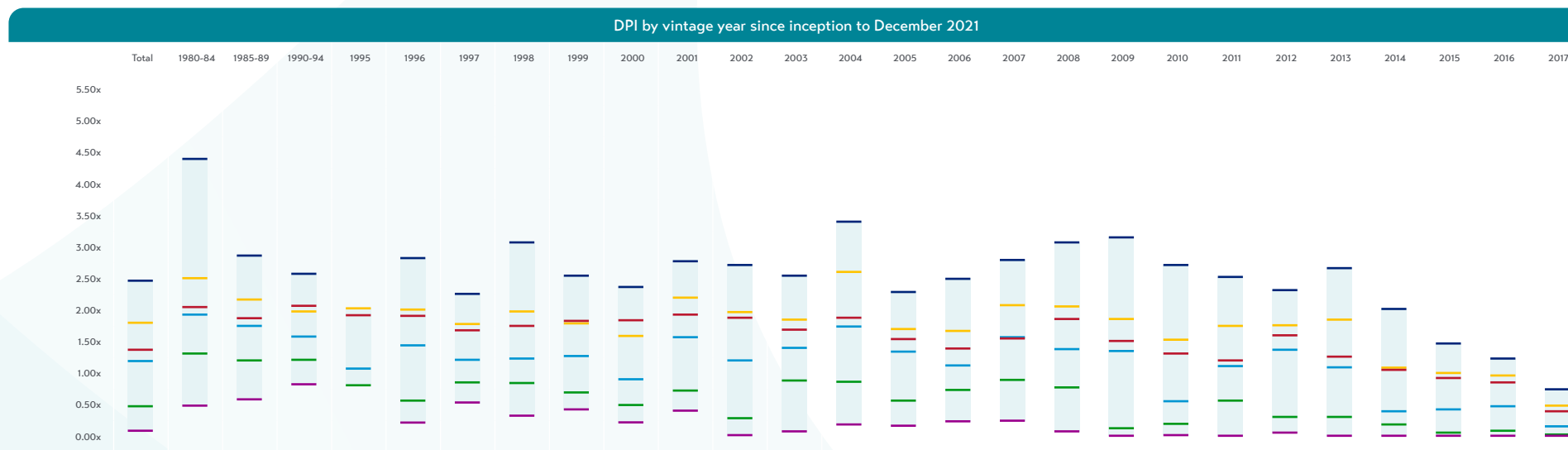


Table 13 – Range of returns – DPI multiple by vintage year

No. of funds	746	13	67	64	9	13	24	16	25	26	29	21	17	14	26	42	39	29	23	22	19	23	27	37	43	37	41
Pooled return	1.37x	2.05x	1.85x	2.07x	1.92x	1.91x	1.68x	1.75x	1.83x	1.84x	1.93x	1.88x	1.69x	1.88x	1.54x	1.39x	1.55x	1.86x	1.51x	1.31x	1.20x	1.60x	1.26x	1.05x	1.00x	0.85x	0.39x
10th percentile	2.47x	4.41x	2.87x	2.58x	n/a	2.83x	2.26x	3.08x	2.55x	2.37x	2.78x	2.72x	2.55x	3.41x	2.29x	2.50x	2.80x	3.08x	3.16x	2.72x	2.53x	2.32x	2.67x	2.02x	1.47x	1.23x	0.74x
25th percentile	1.80x	2.51x	2.17x	1.98x	2.03x	2.01x	1.78x	1.98x	1.79x	1.59x	2.20x	1.97x	1.85x	2.61x	1.70x	1.67x	2.08x	2.06x	1.86x	1.53x	1.75x	1.76x	1.85x	1.06x	0.92x	0.96x	0.48x
Median	1.19x	1.95x	1.75x	1.58x	1.07x	1.44x	1.21x	1.23x	1.27x	0.90x	1.57x	1.20x	1.40x	1.74x	1.34x	1.12x	1.57x	1.38x	1.35x	0.55x	1.11x	1.37x	1.09x	0.39x	0.42x	0.47x	0.15x
75th percentile	0.47x	1.31x	1.20x	1.21x	0.80x	0.56x	0.85x	0.84x	0.69x	0.49x	0.72x	0.28x	0.88x	0.86x	0.56x	0.73x	0.89x	0.77x	0.12x	0.19x	0.56x	0.30x	0.30x	0.18x	0.05x	0.08x	0.02x
90th percentile	0.08x	0.48x	0.58x	0.82x	n/a	0.21x	0.53x	0.32x	0.42x	0.21x	0.40x	0.01x	0.07x	0.18x	0.16x	0.23x	0.24x	0.07x	0.00x	0.01x	0.00x	0.05x	0.00x	0.00x	0.00x	0.00x	0.00x
Interdecile range	2.39x	3.93x	2.29x	1.76x	n/a	2.62x	1.73x	2.77x	2.13x	2.16x	2.37x	2.70x	2.48x	3.23x	2.14x	2.27x	2.56x	3.01x	3.16x	2.70x	2.53x	2.27x	2.67x	2.02x	1.47x	1.23x	0.74x
Range of returns	7.23x	4.92x	5.05x	4.18x	4.97x	3.03x	2.44x	4.41x	2.45x	3.50x	5.47x	2.84x	2.61x	4.00x	2.43x	3.60x	5.60x	7.23x	3.61x	2.98x	4.40x	2.74x	4.82x	4.41x	2.98x	2.61x	2.74x



Range of returns TVPI by vintage year // data

Chart 18 – Range of returns – TVPI multiple by vintage year

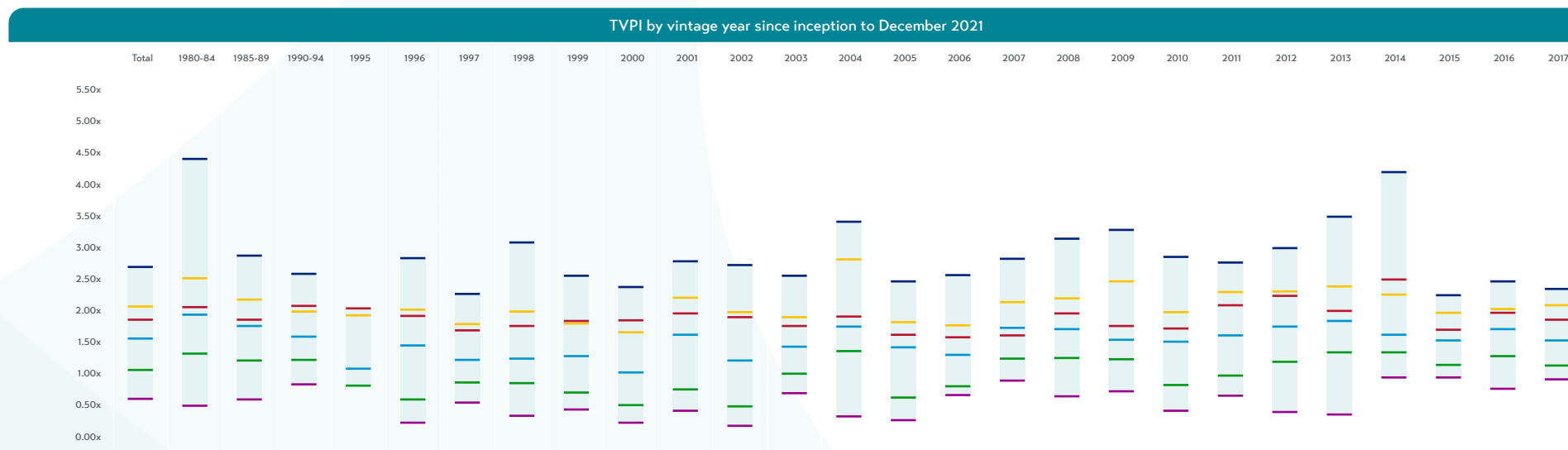


Table 14 – Range of returns – TVPI multiple by vintage year

No. of funds	746	13	67	64	9	13	24	16	25	26	29	21	17	14	26	42	39	29	23	22	19	23	27	37	43	37	41
Pooled return	1.85x	2.05x	1.85x	2.07x	1.92x	1.91x	1.68x	1.75x	1.83x	1.84x	1.95x	1.89x	1.75x	1.90x	1.61x	1.57x	1.60x	1.95x	1.75x	1.71x	2.08x	2.23x	1.99x	2.49x	1.69x	1.96x	1.85x
10th percentile	2.69x	4.41x	2.87x	2.58x	n/a	2.83x	2.26x	3.08x	2.55x	2.37x	2.78x	2.72x	2.55x	3.41x	2.46x	2.56x	2.82x	3.14x	3.28x	2.85x	2.76x	2.99x	3.49x	4.20x	2.24x	2.46x	2.34x
25th percentile	2.06x	2.51x	2.17x	1.98x	2.03x	2.01x	1.78x	1.98x	1.79x	1.65x	2.20x	1.97x	1.89x	2.81x	1.81x	1.76x	2.13x	2.19x	2.46x	1.97x	2.29x	2.30x	2.38x	2.25x	1.96x	2.02x	2.08x
Median	1.55x	1.95x	1.75x	1.58x	1.07x	1.44x	1.21x	1.23x	1.27x	1.01x	1.61x	1.20x	1.42x	1.74x	1.41x	1.29x	1.72x	1.70x	1.53x	1.50x	1.60x	1.74x	1.85x	1.61x	1.52x	1.70x	1.52x
75th percentile	1.05x	1.31x	1.20x	1.21x	0.80x	0.58x	0.85x	0.84x	0.69x	0.49x	0.74x	0.47x	0.99x	1.35x	0.61x	0.79x	1.23x	1.24x	1.22x	0.81x	0.96x	1.18x	1.33x	1.33x	1.13x	1.27x	1.12x
90th percentile	0.59x	0.48x	0.58x	0.82x	n/a	0.21x	0.53x	0.32x	0.42x	0.21x	0.40x	0.16x	0.68x	0.31x	0.25x	0.65x	0.88x	0.63x	0.71x	0.40x	0.64x	0.38x	0.34x	0.93x	0.93x	0.75x	0.90x
Interdecile range	2.10x	3.93x	2.29x	1.76x	n/a	2.62x	1.73x	2.77x	2.13x	2.16x	2.37x	2.56x	1.87x	3.11x	2.21x	1.91x	1.94x	2.51x	2.57x	2.45x	2.12x	2.61x	3.15x	3.26x	1.31x	1.71x	1.43x
Range of returns	9.07x	4.92x	5.05x	4.18x	4.97x	3.03x	2.44x	4.41x	2.45x	3.50x	5.47x	2.84x	2.44x	4.00x	3.36x	3.50x	5.60x	7.16x	5.33x	2.94x	4.04x	7.17x	4.82x	4.78x	3.12x	9.07x	2.53x



Since inception starting from a specific year

Are legacy funds skewing the current return results?

IRR calculations have an implicit re-investment assumption – all cash flows are assumed to be able to be reinvested at the calculated return through the life of the investment. Early cashflows can have an outsized impact on the result as these are assumed to be reinvested for a longer period of time – thus if funds starting at the beginning of our sample in 1980 performed exceptionally well, then this could still have an impact on the overall since inception return for the industry today.

As the investment environment today is very different from the 1980s and 1990s, an important question naturally arises about whether the industry-wide since inception return since 1980 is a reasonable measure of current industry performance.

To give our readers a clear picture of since inception return and to split out the impact of legacy funds on current reported performance, we are now presenting since inception return starting from different points in time. The results are shown overleaf.

Refreshing the concept

Since inception return is calculated as a pooled return for the entire industry, excluding the four most recent vintage years (2018–2021). Since inception starting from, therefore, refers to all funds starting at a certain vintage up to the 2017 vintage. For instance, since inception return starting from 2007 represents the return for all funds of vintage 2007 onwards until 2017. Since 2017 is the last vintage included in the calculations. Since inception return starting From 2017 refers to funds with vintage 2017 only.



Since inception starting from a specific year

UK findings

The main take away from chart 19 is that although including legacy funds may inflate industry performance, this does not appear to be the case for UK private equity and venture capital funds. Indeed, removing older funds actually increases the more recent performance of the UK private equity and venture capital industry.

There is no doubt that the early 2000s were a difficult period, but despite the lower performance of the vintages 2005 to 2007, which will have had a large impact on the since inception returns starting from 2002 to 2007 vintages, the industry still delivered a net return to investors of over 13% in its most difficult times.

Since 2008, regardless of which year you take as your starting point, the UK private equity and venture capital industry has delivered net since inception returns of at least 18%, reaching a maximum of 24% for funds with vintage starting from 2016 and 2017. These funds are now between four and five years of age and are

mostly at the lifecycle stage where they have made several investments but may not have realised a large number of assets. The interim IRRs are therefore likely to be materially driven by the year end valuations of the current portfolio.

Chart 19 – Since inception IRR (%) starting from a specific year



Table 15 – Number of funds included in each starting from category

Vintage year	1980	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
No. of funds in calculation	746	666	602	515	489	460	439	422	408	382	340	301	272	249	227	208	185	158	121	78	41



Since inception performance starting from IRRs by investment stage and subcategory // data

The following five pages present the data tables showing the since inception results starting from each vintage year for each investment stage and subcategory. Commentary on the venture and mid private equity investment stages and technology subcategory results can be found on page 35.

Table 16 – Since inception IRR (%) starting from a specific year by investment stage and subcategory – Part 1

	Starting from 2017	Starting from 2016	Starting from 2015	Starting from 2014	Starting from 2013	Starting from 2012	Starting from 2011	Starting from 2010	Starting from 2009	Starting from 2008	Starting from 2007
1996 vintage funds onwards											
A Venture	27.1	52.6	40.8	31.9	29.8	27.0	26.2	24.2	23.4	21.3	18.1
Small Private Equity	28.4	26.6	18.7	17.5	17.7	20.2	19.5	16.9	16.9	15.7	15.2
B Mid Private Equity	18.9	19.7	17.3	18.1	18.0	17.8	17.4	16.7	16.6	16.1	14.9
Large Private Equity	25.7	24.1	25.4	26.0	25.6	24.6	24.6	24.5	22.4	19.5	15.9
Grand total all funds	24.0	24.0	22.5	23.4	23.1	22.6	21.6	20.8	19.9	18.4	15.7
Subcategories											
UK	29.0	23.6	19.0	17.5	16.9	18.3	17.8	18.4	18.5	16.5	15.1
Non-UK	23.8	24.0	23.3	24.5	24.2	23.5	22.2	21.2	20.1	18.7	15.8
Pan-European	20.5	22.0	21.7	23.9	23.8	23.4	22.0	21.1	19.9	18.4	15.4
C Technology	28.6	32.4	31.0	30.3	28.9	28.2	27.8	28.2	27.7	26.8	23.7
Non-Technology	22.3	21.5	20.8	20.9	20.7	19.9	19.2	20.4	18.3	17.3	17.3
Total number of funds	41	78	121	158	185	208	227	249	272	301	340



Since inception performance starting from IRRs by investment stage and subcategory continued // data

Table 17 – Since inception IRR (%) starting from a specific year by investment stage and subcategory – Part 2

Continued	Starting from 2006	Starting from 2005	Starting from 2004	Starting from 2003	Starting from 2002	Starting from 2001	Starting from 2000	Starting from 1995	Starting from 1990	Starting from 1980
1996 vintage funds onwards										
A Venture	15.5	14.7	14.6	13.8	12.6	10.6	8.4	n/a	n/a	n/a
Small Private Equity	14.9	11.5	11.5	11.8	11.8	15.3	15.0	n/a	n/a	n/a
B Mid Private Equity	11.3	10.8	n/a	11.2	11.5	12.1	12.5	n/a	n/a	n/a
Large Private Equity	14.6	13.8	14.2	14.3	14.9	16.0	16.4	n/a	n/a	n/a
Grand total all funds	13.8	13.0	13.3	13.4	13.8	14.7	14.8	14.8	15.2	14.9
Subcategories										
UK	13.2	11.8	12.0	12.3	12.1	12.3	11.7	12.1	13.7	13.6
Non-UK	13.9	13.1	13.5	13.5	14.0	15.1	15.4	15.4	15.6	15.5
Pan-European	13.5	12.8	13.2	13.3	13.8	14.9	15.2	15.9	16.5	16.2
C Technology	18.3	18.0	19.0	18.7	18.4	16.9	15.5	14.8	14.6	13.7
Non-Technology	12.9	12.2	12.4	n/a	13.0	14.3	14.7	14.8	15.3	15.1
Total number of funds	382	408	422	439	460	489	515	602	666	746



Since inception performance starting from Multiples by investment stage and subcategory // data

Table 18 – DPI and TVPI starting from a specific year by investment stage and subcategory – Part 1

	Starting from 2017		Starting from 2016		Starting from 2015		Starting from 2014		Starting from 2013		Starting from 2012		Starting from 2011		Starting from 2010		Starting from 2009		Starting from 2008		Starting from 2007	
	DPI	TVPI	DPI	TVPI	DPI	TVPI	DPI	TVPI	DPI	TVPI	DPI	TVPI	DPI	TVPI	DPI	TVPI	DPI	TVPI	DPI	TVPI	DPI	TVPI
A 1996 vintage funds onwards																						
Venture	0.02x	1.77x	0.82x	3.82x	0.64x	3.16x	0.55x	3.06x	0.57x	2.91x	0.64x	2.75x	0.65x	2.73x	0.64x	2.65x	0.88x	2.63x	0.85x	2.57x	0.93x	2.46x
B																						
Small Private Equity	0.29x	1.82x	0.51x	1.86x	0.47x	1.69x	0.47x	1.65x	0.52x	1.66x	0.66x	2.00x	0.68x	1.98x	0.77x	1.97x	0.80x	1.99x	0.84x	1.94x	0.89x	1.94x
Mid Private Equity	0.20x	1.59x	0.32x	1.64x	0.45x	1.66x	0.50x	1.75x	0.55x	1.75x	0.58x	1.75x	0.74x	1.83x	0.77x	1.81x	0.80x	1.81x	0.84x	1.80x	0.92x	1.79x
Large Private Equity	0.49x	1.97x	0.59x	1.92x	0.79x	1.87x	0.91x	2.09x	0.93x	2.09x	1.04x	2.09x	1.04x	2.09x	1.05x	2.10x	1.07x	2.07x	1.28x	2.05x	1.33x	1.96x
Grand total all funds	0.39x	1.85x	0.50x	1.88x	0.65x	1.82x	0.75x	1.98x	0.78x	1.98x	0.87x	2.01x	0.90x	2.02x	0.92x	2.01x	0.95x	1.99x	1.11x	1.98x	1.17x	1.92x
C Subcategories																						
UK	0.36x	1.93x	0.56x	1.77x	0.60x	1.75x	0.60x	1.72x	0.66x	1.72x	0.74x	1.86x	0.76x	1.85x	0.85x	1.86x	0.92x	1.88x	0.96x	1.84x	1.02x	1.83x
Non-UK	0.39x	1.84x	0.49x	1.89x	0.66x	1.83x	0.77x	2.03x	0.80x	2.03x	0.90x	2.04x	0.92x	2.05x	0.93x	2.03x	0.96x	2.01x	1.13x	2.01x	1.20x	1.94x
Pan-European	0.31x	1.70x	0.46x	1.80x	0.67x	1.76x	0.80x	2.00x	0.84x	2.01x	0.92x	2.02x	0.95x	2.03x	0.95x	2.01x	0.98x	1.99x	1.17x	1.99x	1.23x	1.92x
Technology	0.46x	2.01x	0.54x	2.22x	0.53x	2.20x	0.92x	2.70x	1.01x	2.66x	1.00x	2.64x	1.03x	2.64x	1.02x	2.62x	1.07x	2.64x	1.06x	2.62x	1.11x	2.58x
Non-Technology	0.36x	1.79x	0.49x	1.77x	0.67x	1.74x	0.71x	1.81x	0.72x	1.81x	0.84x	1.87x	0.87x	1.89x	0.90x	1.88x	0.93x	1.87x	1.11x	1.88x	1.18x	1.83x
Total number of funds	41		78		121		158		185		208		227		249		272		301		340	



Since inception performance starting from

Multiples by investment stage and subcategory continued // data

Table 19 – DPI and TVPI starting from a specific year by investment stage and subcategory – Part 2

Continued	Starting from 2006		Starting from 2005		Starting from 2004		Starting from 2003		Starting from 2002		Starting from 2001		Starting from 2000		Starting from 1995		Starting from 1990		Starting from 1980		
	DPI	TVPI	DPI	TVPI	DPI	TVPI	DPI	TVPI	DPI	TVPI	DPI	TVPI	DPI	TVPI	DPI	TVPI	DPI	TVPI	DPI	TVPI	
1996 vintage funds onwards																					
A	Venture	1.01x	2.37x	1.02x	2.35x	1.02x	2.34x	1.04x	2.28x	1.02x	2.21x	1.02x	2.09x	0.97x	1.93x	n/a	n/a	n/a	n/a	n/a	n/a
B	Small Private Equity	0.94x	1.92x	1.01x	1.86x	1.05x	1.85x	1.07x	1.86x	1.07x	1.86x	1.19x	1.88x	1.18x	1.88x	n/a	n/a	n/a	n/a	n/a	n/a
	Mid Private Equity	0.91x	1.67x	0.95x	1.65x	0.97x	1.66x	0.98x	1.66x	1.00x	1.66x	1.03x	1.67x	1.04x	1.67x	n/a	n/a	n/a	n/a	n/a	n/a
	Large Private Equity	1.37x	1.95x	1.40x	1.92x	1.42x	1.92x	1.42x	1.92x	1.44x	1.92x	1.47x	1.92x	1.49x	1.93x	n/a	n/a	n/a	n/a	n/a	n/a
	Grand total all funds	1.20x	1.88x	1.24x	1.85x	1.26x	1.85x	1.26x	1.85x	1.28x	1.85x	1.31x	1.86x	1.33x	1.86x	1.36x	1.85x	1.37x	1.85x	1.37x	1.85x
Subcategories																					
	UK	1.04x	1.77x	1.04x	1.74x	1.06x	1.74x	1.10x	1.74x	1.10x	1.73x	1.13x	1.73x	1.26x	1.71x	1.23x	1.69x	1.26x	1.70x	1.29x	1.71x
	Non-UK	1.22x	1.90x	1.27x	1.87x	1.29x	1.87x	1.29x	1.87x	1.31x	1.87x	1.34x	1.88x	1.39x	1.88x	1.39x	1.88x	1.39x	1.88x	1.39x	1.88x
C	Pan-European	1.26x	1.88x	1.30x	1.85x	1.32x	1.85x	1.32x	1.85x	1.35x	1.85x	1.38x	1.86x	1.44x	1.86x	1.43x	1.87x	1.44x	1.88x	1.44x	1.88x
	Technology	1.25x	2.50x	1.25x	2.50x	1.31x	2.42x	1.30x	2.41x	1.30x	2.40x	1.29x	2.36x	1.30x	2.28x	1.29x	2.25x	1.30x	2.25x	2.25x	1.30x
	Non-Technology	1.19x	1.78x	1.24x	1.76x	1.25x	1.76x	1.26x	1.76x	1.28x	1.77x	1.32x	1.78x	1.38x	1.79x	1.37x	1.79x	1.38x	1.79x	1.80x	1.39x
	Total number of funds	382		408		422		439		460		489		515		602		666		746	



Since inception performance starting from

Results by investment stage and subcategory // data

A

Venture

Funds that started investing prior to 2001 delivered since inception net return below 10% (Table 17). The recovery from the dot-com bubble (1998 – 2001) is clear for Venture Capital funds that started investing from 2004 onwards, which delivered a since inception return of 14.6%. Out of the 107 funds included in this category, 95 funds are still active (89%) and 12 have been fully liquidated (11%). 89% of the active funds included in the starting from 2004 metric are from vintages between 2004 and 2013 (making them between eight and seventeen years old as of Dec 2021) and therefore are currently at a stage where they mostly distribute the remaining unrealised capital back to investors.

Moving forward a decade, funds that started investing from 2014 onwards have reached a since inception return of 31.9%, further highlighting the current strong returns of the asset class. In total, there are 34 funds included in this category, all of them still active. 32.4% of these funds are

from the 2014 vintage (hence currently seven years old), 23.5% are from the 2015 vintage (six years old funds), 26.5% are from the 2016 vintage (five years) and 17.6% are from 2017 vintage (four years). As the majority of these funds are still at the beginning of the process of distribution back to investors, caution is advised when looking at returns for funds that are less than ten years old, as estimated unrealised capital plays a big role in IRR calculations. For the Venture funds starting from 2014 vintage, distributed to paid-in-capital has reached 0.55x. This is more than a half of the initial investment, whereas Total Value to Paid in Capital is at 3.0x implying investors will triple their money if the remaining portfolio can be realised at current valuations.

To illustrate this more clearly, let's look at Venture funds starting from the 2016 vintage. The since inception IRR for all venture capital funds of these funds has reached an all-time high of 52.6%. The high return is impacted by the high valuations observed at the end of 2021, as distributed to paid-in capital for this group of funds is at 0.81x, whereas total value to paid-in

capital is at 3.82x. It is unsurprising that valuations are high for this group, as out of the fifteen funds included in this category, nine invest in technology companies, which is the sector that saw the biggest increase in multiples throughout 2021. The sample size is also very small, so this performance may be skewed by a small number of extremely good performances.

B

Mid Private Equity

The BVCA classifies as mid private equity funds that invest between £10 million and £100 million in equity. This category of investment stage is becoming increasingly popular. Between 1996 (when the BVCA started classifying funds by investment size) and 2000, the average number of new funds focusing on mid private equity per vintage year was nine. The same number was the average of new funds per vintage year between 2001 and 2010. More recently, between 2011 and 2021, the average number of new funds per vintage year has increased to 13, reaching a high of 20 new mid market funds in 2015.

Investment returns since inception have grown from 10.8% for funds starting from vintage 2005 to 18.1% for funds investing from 2014 onwards. Funds that started investing from 2016 have the highest since inception net return of 19.7% for this investment stage, keeping in mind that these funds are currently five years old and therefore are just starting the process of distributing capital back to investors.

We observe that the ratio of distributed to paid-in capital is at 0.32x whereas the ratio of Total Value to Paid in Capital is at 1.64x, indicating very promising returns for investors in these funds should valuations stay at current levels.



Since inception performance starting from

Results by investment stage and subcategory // data



Technology Focus

The BVCA classifies as technology-focused funds that invest over 60% of their capital into technology companies. The growth in performance for technology focused funds is not surprising given the long-term growth of the technology sector, going from 15.5% IRR for funds that started investing since 2000 to 30.3% IRR for funds that started investing from 2014 onwards. Consistent with previous commentary, we observe the highest IRR for funds investing from vintage year 2016 onwards, which recorded a since inception IRR of 32.4%.

The strong performance of technology-focused funds that started investing from 2014 is also reflected in the multiples, with distributed to paid-in capital reaching 0.92x and total value to paid-in capital reaching 2.7x. Investors in these funds have already nearly received back all of the funds invested to date via distributions. Only two funds are completely liquidated, leaving significant unrealised capital left to be distributed to investors.



Horizon performance

IRR by investment stage // data and commentary

One year horizon

As a preliminary note, it is important to point out that the one year horizon should be interpreted with caution. Funds usually mature between seventh and tenth years. In the context of the post-pandemic environment, 2021 was an excellent year for the UK private equity and venture capital industry. The overall one year return increased 65.6% vs. 2020 (19.5%) reaching a total of 31.5%. There is a good mix of active funds within our dataset at different stages of the investment cycle, with roughly one third being four years old or less, one third being between five and ten years old and the remaining funds being over ten years old, suggesting that this return is unlikely to be skewed by having a concentration of funds in a particular lifecycle stage. All investment stages performed well in 2021, with even the lowest performing investment stage, Mid Private Equity, reporting a one year horizon return of over 20%.

In contrast to what we found in 2020, Small Private Equity demonstrated the highest one-year horizon return at over 38%, a remarkable increase from

the single digit returns from previous years which was driven by a significant increase in distributions.

Ten year horizon

The ten year horizon varies less year on year. Out of the 685 active funds included in this category, 45% are over ten years old (the NAV as of December 2021 for these funds represents less than 11% of the overall NAV for 2021, hence these funds are currently distributing a small proportion of unrealised capital). 36% of the funds are between five and ten years old (still distributing a reasonable proportion of unrealised capital – the NAV of those funds represents 65% of total 2021 NAV) and 31% are young funds, four years old or less, currently investing more than distributing. This suggests that the ten year horizon return of 17.5% is a reliable metric, as the majority of funds included in this calculation have already divested the majority of their investments.

In line with previous years' results, large private equity continues to outperform other investment stages on the ten year horizon, achieving a return of 23.3% in 2021.

Chart 20 – Horizon performance – IRR (%) by investment stage

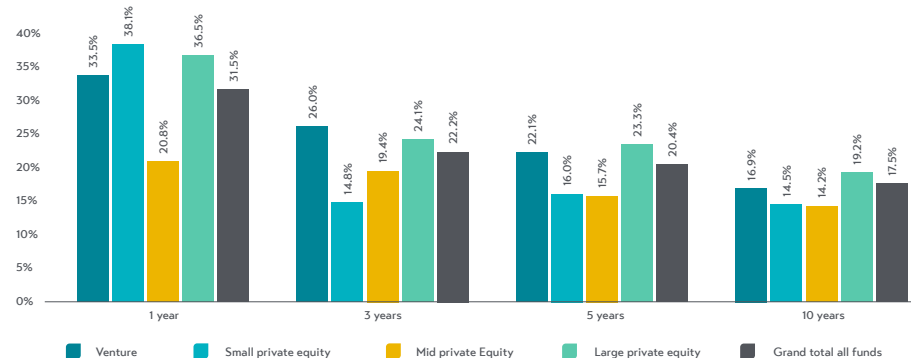


Table 20 – Horizon performance – IRR (%) for BVCA members and FTSE indices

No. of funds	1 year	3 years	5 Years	10 Years	Since Inception
PE and VC	31.5	22.2	20.4	17.5	14.9
FTSE ALL-SHARE INDEX	18.3	8.3	5.4	7.7	n/a
FTSE 100 INDEX	18.4	7.1	4.7	6.9	n/a
FTSE 250 INDEX	16.9	12.9	8.0	11.7	n/a
FTSE 350 INDEX	18.2	8.1	5.2	7.6	n/a

Source: FTSE Russell

FTSE Performance

All FTSE indices bounced back strongly in 2021, showing large positive one-year returns, in contrast to the negative returns from holding these indices in 2020. Post pandemic, we saw the economy re-open with a revival in the aviation, financial services and consumer goods sectors, which were particularly impacted by the pandemic and associated lockdowns in 2020. Moreover, as private equity is studied over a long-term period, we are pleased to see that the 10- and 5-year horizon performance is strong with 17.5% and 20.4% respectively.



Horizon performance

IRR by subcategories

One year horizon

UK-focused funds (funds that invest over 60% of raised capital into the UK) reported a notably high one year return during 2021, with IRR going from 5.6% in 2020 to 13.6% in 2021. The return for this subcategory was mainly affected by the fact that during 2021, UK focused funds notably increased the level of distributions back to investors.

Non UK-focused funds have slightly increased with 30.9% vs last year 21.9%, as they have increased proportionally both investments and distributions.

Ten year horizon

As the most long term horizon, the ten year return for all subcategories showed the smallest change vs 2020. The overall return increased slightly vs 2020, going from 13.9% last year to 17.5% in 2021. As for the one-year horizon, this positive increase is largely due to the fact that many funds distributed more to investors during 2021 than in previous years.

Regional Focus

Historically, Pan-European funds (funds that invest in two or more European countries) outperformed all other regional categories. This year, for the first time, UK focused funds have jumped ahead for the one-year returns in 2021, and Non-UK funds (that is, funds that invest over 60% of capital committed outside the UK, including Europe but also North America, Asia, Middle East etc) delivered a higher return across the five and ten year horizons.

Technology Focus

Maintaining historical trends, technology focused funds continue delivering the highest returns of all subcategories, constantly above 21%. The performance of Technology funds across all time horizons has increased relative to 2020 with the largest increase being the one year horizon (27.4% in 2020 vs. 48.6% in 2021).

Chart 21 – Horizon performance – IRR (%) by investment subcategory

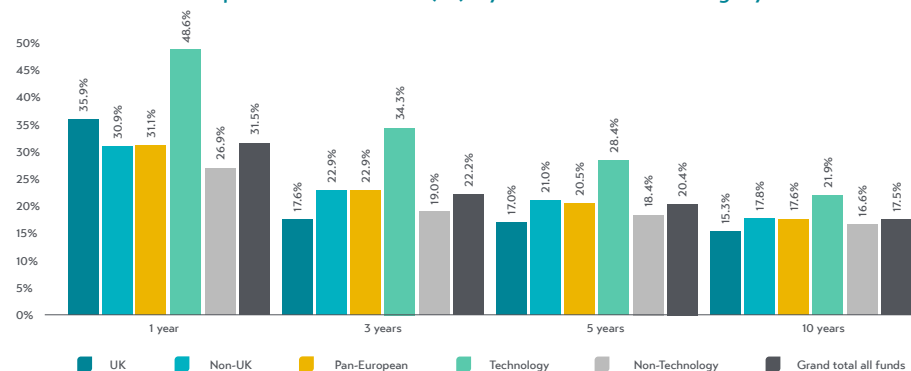


Table 21 – Horizon performance – IRR (%) for BVCA members and FTSE indices

No. of funds	1 year	3 years	5 Years	10 Years	Since Inception
PE and VC	31.5	22.2	20.4	17.5	14.9
FTSE ALL-SHARE INDEX	18.3	8.3	5.4	7.7	n/a
FTSE 100 INDEX	18.4	7.1	4.7	6.9	n/a
FTSE 250 INDEX	16.9	12.9	8.0	11.7	n/a
FTSE 350 INDEX	18.2	8.1	5.2	7.6	n/a

Source: FTSE Russell



Conclusion

This report uses a large dataset of fund level cash flows and valuations from 1980 to 2021 to provide significant detail on the returns achieved for investors in private equity and venture capital funds. The findings are clear:

- Private equity and venture capital has continued to perform strongly through 2021, with investors showing their confidence in the asset class by committing nearly £30bn of additional capital to funds managed by our members.
- Analysis in this report demonstrates that the asset class performs well in the short, medium and long term with returns being reasonably resilient throughout the economic cycle.
- While both public and private markets reflected the post-pandemic economic rebound in 2021, private equity and venture capital funds in our sample have collectively continued to outperform the FTSE All Share over one, three, five and ten year horizons.
- The valuations observed as at 31 December 2021 have been a key driver of increased returns for younger funds, particularly those in the venture and / or technology spaces. These valuations reflected strong underlying top line growth which was seen in these sectors at that time. More recent economic turbulence through 2022 suggests that not all of these investments are likely to be able to be realised at the expected level.
- From a wider economic and political perspective, the world in 2022 is clearly less certain and more volatile than in 2021. This makes investors and businesses more cautious. We have seen both deal volumes and deal values falling. While this means that some funds may not achieve the interim returns they expected as at 31 December 2021, investments made in the more cautious times of 2022 may turn out to be the best of the decade.
- Our range of returns analysis shows that, whilst the industry's performance as a whole is very strong, returns vary between individual private equity and venture capital funds. Some funds ultimately may not generate a positive return (in which case the firm will not receive carried interest if returns are below the hurdle agreed with investors) whilst others greatly outperform the pooled industry returns presented in this report. Investors in private equity and venture capital funds are typically institutional, well-advised investors, who will be aware of the spectrum of returns.

investment stage, subcategory and vintage year. We hope this will prove a valuable resource for industry participants, researchers and others wishing to learn more about the performance of private equity and venture capital.

We would like to conclude by thanking all BVCA members who contributed to our performance measurement survey, without which this report would not have been possible.

We are aware that there is significant literature available on private equity performance, and we are pleased to be able to contribute to the evidence around the performance of UK private equity and venture capital in this latest edition of this long running study.

All tables in this report are available on the BVCA website in excel format, along with more granular analysis by

If you would like to discuss anything within this report please contact Suzi Gillespie, Head of Research at the BVCA at research@bvca.co.uk.



Appendices

1. Methodology
2. Definitions
3. Example IRR calculation with carried interest
4. List of responding firms



Appendix 1

Methodology

Eligibility criteria

To be eligible for inclusion in the 2021 survey, the private equity or venture capital firm must:

- Be a full BVCA member on 28 February 2022
- Raise money from third-party investors;
- Manage that money from the UK (although it may be invested elsewhere);
- The fund structure is a typical limited partnership with a fixed, long-term fund life.

Venture Capital Trusts (VCTs), EIS funds, listed private equity investment companies and funds not open to external investors (e.g. where a firm is investing from its own balance sheet) have been excluded from the survey.

The BVCA represents the vast majority of private equity and venture capital firms 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 and data has been rolled forward or supplemented where possible. Firms that have never been members of the BVCA are not included.

Response rates

164 BVCA members were deemed to have at least one fund which met the criteria above. Of these members, we received data from 114 firms, a response rate of 70%.

Confidentiality

The BVCA treats the performance data received from members with the utmost confidentiality. Only the research team within the BVCA are able to access the fund level information. The PwC Research team who support this work receive the data under a strict confidentiality agreement, and only the small number of individuals working directly on the project at PwC have access to the data.

Data collection

The BVCA manages the data collection and review process. BVCA members

submit their cash flow and valuation data for qualifying funds via the BVCA's online data collection portal, the European Data Cooperative, or by spreadsheet.

Our survey collects information for each eligible fund on an annual basis as follows:

- Amounts drawn down (i.e. amounts paid by investors into the private equity or venture capital fund);
- Distributions (i.e. amounts paid by the private equity or venture capital fund to the investors); and
- Net Asset Value (i.e. the residual value of the assets of the private equity or venture capital fund net of any provision for 'carried interest'). The Net Asset Value collected for the 2021 survey is as at 31 December 2021.

As the Net Asset Value is after allowance for any carried interest, all results shown in this report are returns to investors.

We also collect information on whether the valuations are completed in line

with IPEV guidelines and whether the valuations provided are audited.

This year, for the first time, we collected information on whether funds were using subscription line financing, and if so over what term.



Appendix 1

Methodology

Review and quality control procedures

BVCA research team review and feedback loop

Each submission is individually reviewed by the BVCA research team, who raise any queries with the submitting firm. The BVCA then calculates the IRR to 31 December 2021 for each fund where cash flow data has been submitted and asks the private equity or venture capital firm to verify the IRR is correct, with sign off requested from an appropriately senior member of the firm.

If the figures are incorrect, then the firm has the opportunity to amend the data provided.

As senior individuals will always know the fund IRRs, this additional check provides us with further comfort that the cash flow and valuation data which has been provided is correct.

Of the 114 submissions, 94 firms, (83% of submissions) confirmed their IRRs by the time we closed the feedback process.

PwC and BVCA calculation verification

The aggregated data is then provided to PwC Research who perform internal consistency checks on the data.

For the first time this year, the BVCA has developed the capability to calculate all the data tables for this report in house.

The BVCA and PwC run parallel analyses for all data tables as a cross check to ensure the calculations agree, thus providing verification of the calculations within the BVCA's new model.

Due to minor changes in the dataset identified after the commencement of the PwC analysis, the figures published in this report are the output from the BVCA calculations. We confirm that output from the calculations on the original dataset provided to PwC and the BVCA model using the same input file agree exactly.

Valuations

Valuations of unrealised investments are the most judgemental element of the information provided to us by

participating firms. The vast majority of firms have confirmed to us that they conduct valuations using the International Private Equity and Venture Capital Valuation (IPEV) Guidelines which were first introduced in March 2005. However, as noted at the end of this report, neither PwC nor the BVCA has independently checked the valuation data, nor confirmed that the IPEV Guidelines have been adhered to. 58% of the funds surveyed contain unrealised investments, which are usually stated at fair value in accordance with these Guidelines, and which are included when calculating interim measures of performance.

Performance Measurement Survey Review Board

The Performance Measurement Survey Review Board is a group of experienced professionals who support the BVCA research team by:

- Providing guidance on methodology and technical questions
- Using their personal knowledge or contacts to advise on individual firm eligibility where this is not known to the BVCA

and if necessary, reaching out to individuals at these firms to encourage prompt submission of data

- Using their extensive experience in the industry to assist in the interpretation of results, and to sense check the overall results against what they are seeing elsewhere.

The Review Board supports the BVCA with its work but does not have access to the underlying data.

The Board has six members in line with the Terms of Reference for the Board set out on the BVCA website, with members from general partner firms, limited partner firms and academia. Details of the members of the Review Board can be found in the Report from the Performance Measurement Survey Review Board (page 6) in which they present their opinion of the robustness of this survey.

The BVCA is very grateful to these individuals for the contribution of their time and expertise throughout the production of this report.



Appendix 1

Methodology

Performance measurement metrics

Multiples

For an explanation on how the DPI and TVPI multiples are calculated, please refer to page 10.

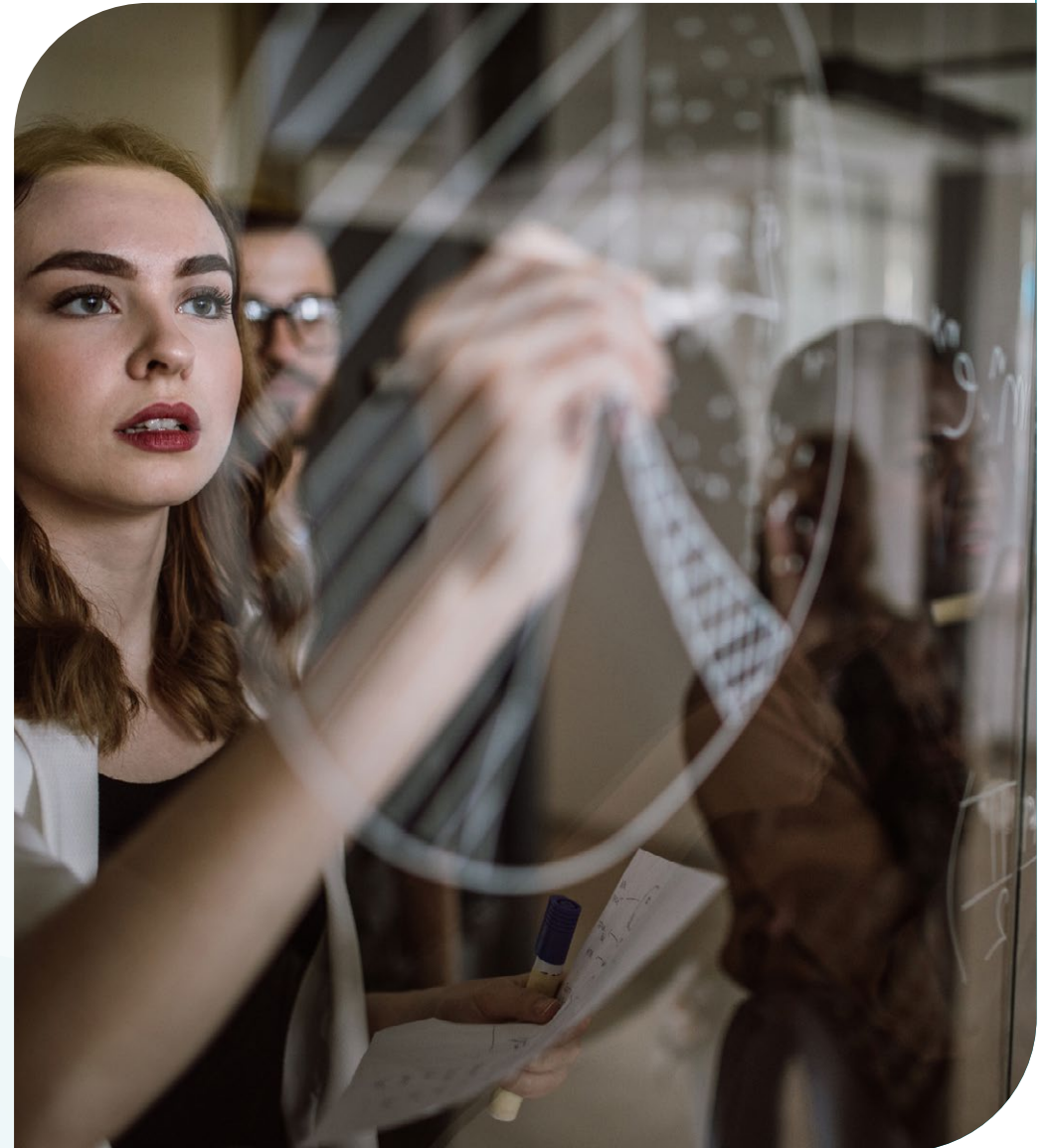
Internal Rate of Return

For an explanation on how IRRs are calculated, please refer to page 10. Note that the BVCA works with pooled daily cash flows provided by our members. To maintain this level of granularity within our calculations we use the XIRR function instead of IRR.

Horizon Returns

To calculate the Horizon IRRs, we:

- (i) select a specific horizon (e.g. 5 years);
- (ii) aggregate the NAVs of all funds as at 31 December of the year before the horizon (i.e. for a 5-year horizon as at December 2021, we use the fund NAVs as at 31 December 2016), and treat this amount as the first draw down;
- (iii) calculate the aggregated net cash flows for everyday until 31 December 2021;
- (iv) add the aggregated fund NAVs as at 31 December 2021; and
- (v) calculate the Horizon IRR on the resulting cashflows.



Appendix 2

Definitions

Capital statistics

Capital raised / funds raised

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

Paid in capital

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

Return metrics

IRR

The annualised internal rate of return (IRR) achieved over a period of time, based on the portfolio cash flows and valuations.

DPI

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

TVPI

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

Return inputs

Cash flow

Transfer of capital into and out of a business.

Drawdown

Fund manager collecting capital from investors.

Distribution

Fund manager returning capital to investors.

Time periods

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.

Since inception

From the actual start of the fund (i.e. from the first drawdown) up to a particular point in time. This measure of return most closely reflects the return a primary investor would have achieved.

Horizon

Horizon IRRs look backwards at specific time horizons. This measure includes cashflows from all funds that were active at some point during horizon period, regardless of which part of the life cycle the fund is in.

Types of return

Net return

The return represents the 'net' return to investors after costs and fees. Provision is made for carried interest, which would have been payable if the residual valuation had been realised at the valuation date.

Gross return

The return represents the 'gross' return to investors before costs, fees and carried interest provision.

Investment stage

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 per transaction.

Mid Private Equity

Invests in private equity with £10 million to £100 million of equity invested per transaction.

Large Private Equity

Invests in private equity with more than £100 million of equity invested per transaction.

Generalist

Invests across all stages of private equity.

Note: The same definitions of mid-private equity and large private equity apply throughout the life of the survey.



Appendix 2

Definitions

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 Private Equity

Invests in private equity 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.

Fund Subcategories

(apply to all vintages)

UK

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

Non-UK

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

Pan-European

Invests in more than two European countries.

Technology

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

Non-Technology

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

Mathematical terms

Pooled return

We pool all cash flows and valuations as if they were one fund, and calculate the IRR or multiples on this set of combined, or pooled, cash flows. This gives the IRR or return for the total sample of funds being analysed, with funds implicitly being weighted by size.

Range of returns

The range of returns analysis demonstrates the variation in performance between different funds. Within each range, a portfolio's results are defined in terms of a percentile ranking. Ranges can be subdivided by

quartiles, deciles and percentiles (see below). 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.

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 3

Example IRR calculation with carried interest

As explained earlier in this report, private equity and venture capital firms are typically entitled to a profit share, called carried interest, once fund investors have been repaid their initial capital investment plus a designated “preferred return” or “hurdle rate” (typically around 8-10%). This mechanism aligns the interests of the firm with that of investors and incentivises the firm to maximise a fund’s performance over the long term.

This appendix sets out a worked example of how carried interest might be calculated for a fund, and demonstrates the difference between ‘gross return’ (i.e. the total returns of the fund including carried interest), and ‘net return’ (i.e. the total returns due to investors).

It is the net return after carried interest which is presented in this survey i.e. the returns actually due to investors.

Sample carried interest calculation to produce an interim IRR

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 valuation date (in this case 31 December 2021) and that the residual value is distributed according to the rules laid out when the fund was set up.

In order to calculate the interim IRR to investors, we need to know not only the fund cash flows and a current valuation estimate, but also the rules on how returns are divided between investors and fund managers. These will vary by fund, with most funds having a hurdle rate of around 8-10%. It is only after this is achieved that the private equity or venture capital firm is entitled to any share in the fund’s profits (carried interest).



Appendix 3

Example IRR calculation with carried interest

For the purpose of our worked example, we have made the following assumptions:

Cash flows (set out in the table opposite)

Fund size – £20 million

Draw down – £17 million (85%)

Distributed – £12.25 million.

Residual net asset value (NAV) at 31 December 2021 (before carried interest) – £12 million.

Distribution priority (Waterfall)

- i) 100% to investors until commitments returned
- ii) 100% to investors until a 'preferred return' of 10% pa compound is achieved (i.e. a hurdle rate of 10%)
- iii) 100% to manager until payments equal 25% of ii)
- iv) 80% to investors, 20% to the private equity fund thereafter.

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 2021 and distributed simultaneously.

This example produces an interim IRR before carried interest of 12.9%.

Cash flow date	Amount (£m)	Comment
01-Feb-17	-2,000,000	10% draw down from investors
10-Jun-17	-2,000,000	10% draw down from investors
25-Nov-17	-2,000,000	10% draw down from investors
03-Apr-18	-2,000,000	10% draw down from investors
09-Sep-18	-2,000,000	10% draw down from investors
12-Dec-18	-2,000,000	10% draw down from investors
05-May-19	-2,000,000	10% draw down from investors
15-Oct-19	1,500,000	Cash distribution to investors
11-Nov-19	-1,000,000	5% draw down from investors
29-Mar-20	2,500,000	Cash distribution to investors
27-Jun-20	1,000,000	Cash distribution to investors
18-Sep-20	-2,000,000	10% draw down from investors
29-Apr-21	3,000,000	Cash distribution to investors
12-Aug-21	1,500,000	Cash distribution to investors
15-Dec-21	2,750,000	Cash distribution to investors
31-Dec-21	12,000,000	Residual NAV



Appendix 3

Example IRR calculation with carried interest

The IRR in this example is above the 10% hurdle rate and a proportion of this return will be allocated to the private equity or venture capital firm in the form of carried interest.

To calculate the net IRR for investors after carried interest, we need to apply the distribution priority waterfall set out on the previous page.

Firstly, we identify the net asset value (NAV) required to produce the preferred return of 10% to investors as of 31 December 2021. Back solving the cash flows on the previous page to achieve a compounded annualised return of 10% means that the investors must be allocated £10,098,788 out of the £12,000,000 net asset value.

This leaves an excess of £1,901,212 to be allocated between the investors and the fund manager.

At this point, the minimum gain attributable to investors would be £5,348,788 (£10,098,788 + £12,250,000 - £17,000,000).

Once investors have been allocated their preferred return, the fund manager becomes entitled to an amount

equivalent to 25% of the minimum profit achieved (i.e. £1,337,197) in accordance with distribution priority item iii) which allows the fund to 'catch up' such that the profit share ratio between investors and the manager remains 80/20 overall.

Any remaining excess amount is then divided in line with distribution priority iv) and split 80% / 20% between the investors and the fund manager.

In our example, this means that 20% of the remaining excess of £564,015 (£1,901,212 - £1,337,197) would be allocated to the fund manager and the remainder to the investors. The manager would now have received 20% of total profits, that is, 20% of (£5,348,788 + £1,337,197 + £564,015).

The net IRR to investors is calculated by using the cash flows on the previous page but substituting the £12,000,000 net asset value with solely the net asset value due to investors, in this case £10,550,000.

The interim IRR after carried interest in this example is therefore 10.7% p.a. It is this figure which is reported in the BVCA Performance Measurement Survey.

Of the £12,000,000 residual NAV, £11,435,985 has been allocated as follows:

£4,750,000	To the investors to make draw downs equal to distributions
£5,348,788	To the investors to produce the preferred return - ii)
£1,337,197	To the manager to produce 20% of gains at the preferred return point - iii)
£11,435,985	

The residual £564,015 (£12,000,000-£11,435,985) is to be allocated in accordance with condition iv):

£451,212	To the investors
£112,803	To the manager
£564,015	

In total the £12,000,000 has been allocated as follows:

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

Please note 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 £10,098,788 condition iii) could not be fulfilled in its entirety and the interim IRR would be exactly 10% pa.



Appendix 4

List of responding firms

- 3i
- 4Bio Ventures Management
- Abingworth LLP
- Accel
- ACF Investors
- Alchemy Partners LLP
- Aliter Capital LLP
- ALSA Ventures
- Amadeus Capital Partners Limited
- AnaCap Financial Partners Limited
- Anthemis Group
- Apax Partners UK Ltd
- Apiary Capital LLP
- Apis Partners LLP
- Apposite Capital LLP
- Ascension Ventures
- Astorg
- August Equity LLP
- Bain Capital Europe LLP
- Baird Capital
- Balderton Capital
- Beech Tree Private Equity
- Bestport Ventures LLP
- BlueGem Capital Partners LLP
- Bowmark Capital LLP
- Bregal Capital LLP
- Bridgepoint
- Bridges Fund Management Limited
- Cairngorm Capital
- Cambridge Innovation Capital
- CBPE Capital
- CGE Partners LLP
- Cinven Limited
- Circularity Capital
- Clarendon Fund Managers Limited
- Clean Growth Investment Management LLP
- Cordovan Capital Management
- Crane Venture Partners
- CVC Capital
- Development Bank of Wales
- Duke Street
- Dunedin LLP
- ECI Partners LLP
- EKA Ventures
- Elysian Capital LLP
- EMK Capital
- Endless LLP
- Epiris LLP
- Equistone Partners Europe Limited
- ETF Partners
- Exponent Private Equity LLP
- FPE Capital LLP
- Freshstream
- Frog Capital Limited
- G Square Healthcare Private Equity LLP
- GHO Capital LLP
- Graphite Capital Management LLP
- Growth Capital Partners LLP (GCP)
- Herald Investment Management Limited
- Hg
- Hiro Capital LLP
- Horizon Capital LLP
- Inflexion Private Equity
- Inverleith
- IQ Capital Partners LLP
- Kester Capital LLP
- Key Capital Partners LLP
- Kings Park Capital
- KKR & Co.
- Livingbridge EP LLP
- Lonsdale Capital Partners
- Magenta Partners LLP
- Mayfair Equity Partners
- Mercia Asset Management
- MMC Ventures Ltd
- MML UK Advisor LLP
- Mobeus Equity Partners
- Nesta Investment Management LLP
- NorthEdge Capital LLP
- Notion Capital
- Oakley Capital Limited
- Oxford Capital
- Oxx
- Palamon Capital Partners, LP
- Palatine Private Equity LLP
- Par Equity LLP
- Penta Capital LLP
- Pentech Ventures LLP
- Permira Advisers (London) Ltd
- Phoenix Equity Partners
- Piper PE LLP
- Primary Capital Partners LLP
- Rutland Partners LLP
- Seedcamp
- SEP
- Silverfleet Capital
- Solingen Private Equity Limited
- Sovereign Capital
- STAR Capital Partnership LLP
- Sussex Place Ventures
- SV Health Managers LLP
- Synova LLP
- Target Global
- TDR Capital LLP
- Technology Venture Partners
- Tenzing
- Terra Firma Capital Partners Limited
- Top Technology Ventures Limited
- True.
- Vespa Capital LLP
- Vision Capital LLP
- Vitruvian Partners LLP
- WestBridge Fund Managers Limited
- YFM Equity Partners

The BVCA would like to thank all firms who contributed to the 2021 edition of the Performance Measurement Survey



Contacts & useful resources

BVCA Performance Measurement Survey 2021 Highlights

BVCA Performance Measurement Survey 2021 Data Pack

Growing Great British Businesses

BVCA Report on Investment Activity 2021

Measuring the contribution of private equity and venture capital to the UK economy in 2021

If you would like to discuss this report on the industry's contribution more generally, please contact any of the following:



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The BVCA would like to thank the individuals who served on the Performance Measurement Survey Review Board during the preparation of this report.

We would also like to extend our thanks to all firms who responded to our Performance Measurement Survey.

About the BVCA

The British Private Equity & Venture Capital Association (BVCA) is the voice of private capital in the UK.

We have been advocating for the UK's private equity and venture capital industry for almost 40 years, helping it to uphold its vision and achieve its goals. We actively represent this diverse community of long-term investors, enabling them to speak with one clear and consistent voice to society, including the Government, media and MPs.

We connect institutional investors, fund managers, companies, advisers and service providers together, with our membership currently comprising more than 700 businesses from across the private capital ecosystem. This includes more than 325 PE and VC firms, 100 institutional investors and 220 professional services firms.

The BVCA supports its members to help companies grow and achieve their long-term ambitions, creating value for the country, both economically and socially. From creating medicines to protect us against COVID-19, to backing innovative companies in their quest to find solutions to our low-carbon future, private capital also plays a critical role in addressing society's future challenges.

Together we are invested in a better future.



The data within this report was collated and analysed by the BVCA and PwC Research. While PricewaterhouseCoopers LLP (PwC) and the BVCA have made every effort to ensure the reliability of the data included in this report, they do not assume any responsibility for any inaccuracy in the data nor for the accuracy of the underlying amounts submitted by the participating private equity and venture capital funds. The survey is based on valuations provided by each participating fund. Neither the BVCA nor PwC have independently checked the valuation data, or independently confirmed that the International Private Equity and Venture Capital Valuation Guidelines have been adhered to.

The data used in the preparation of the report has not been independently verified, validated or audited by the BVCA or PwC. This publication has been prepared for general guidance on matters of interest

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