British Private Equity & Venture Capital Association

//// November 2021

Performance and Public Market Equivalent Report 2020

A report on the returns generated by independent UK managed funds that raise capital from third-party investors, and comparison of these returns to public markets

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 2020 and to compare these returns to equivalent investments in the UK public equity markets – using the FTSE – All Share Total Return as the benchmark index. The performance statistics in this report are the result of the BVCA's Performance Measurement Survey, an annual survey of fund level cash flows and valuations collected from our members. The public market equivalent analysis uses the same underlying data set.

With a significant presence in the UK, developed over the past 30 years, private equity and venture capital investments 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).

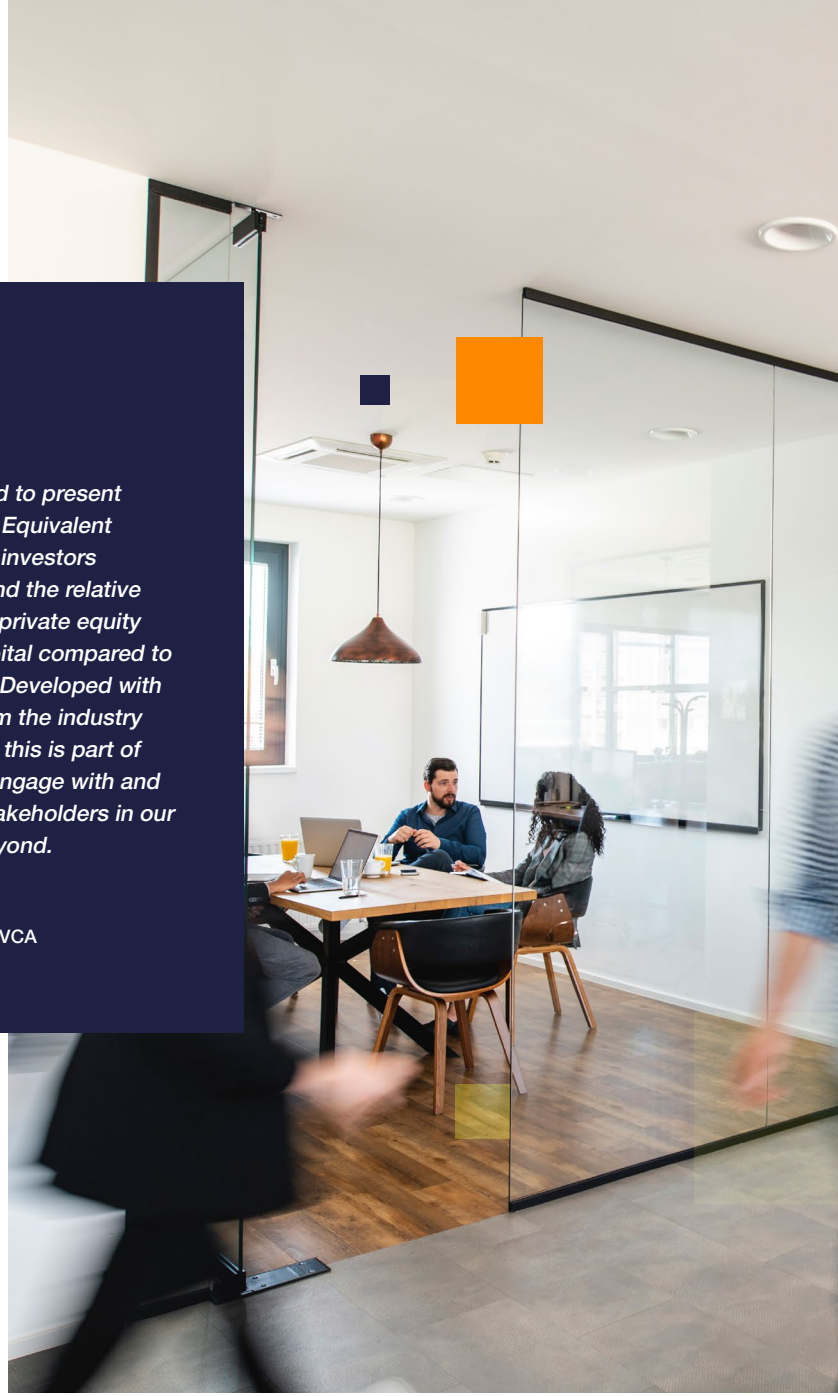
Both private equity and venture capital firms are focused on delivering sustainable growth for the companies in which they invest: venture capital funds typically support early stage and younger companies, holding minority stakes in the businesses, while private equity funds typically acquire controlling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

The Performance Measurement Survey (PMS) 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 the Performance Measurement Survey and this Public Market Equivalent analysis show us why.

For the 2020 Performance Measurement Survey, we received responses from 119 members out of a total eligible pool of 158 members, a response rate of 75%. For comparison, in 2019 we received response from 117 members out of a total of 154 who were eligible. The full Performance Measurement Survey Report is available on our website here and a shorter Highlights Paper can be found here.

This report uses the data collected for the 2020 Performance Measurement Survey and applies two main Public Market Equivalent ('PME') methodologies to compare the performance of the private equity and venture capital funds in our database to the UK public equity markets, specifically the FTSE All-Share Total Return Index.

> ***We are delighted to present a Public Market Equivalent analysis to help investors better understand the relative performance of private equity and venture capital compared to public markets. Developed with expert input from the industry and academics, this is part of our mission to engage with and learn from all stakeholders in our industry and beyond.***
>
> **Michael Moore**
> **Director General, BVCA**



Key findings – at a glance

Since 1986

Realised returns

1.43x

Across the industry as a whole **since 1986**, investors have received 1.43x their original invested capital

Total returns

1.80x

Across the industry as a whole **since 1986**, investors own assets which, if realised as at 31 Dec 2020, would mean investors receive 1.80x their original investment

Industry return since 1986

14.7% p.a.

Overall industry since inception internal rate of return **since 1986**

Capital Dynamics PME+

6.7% p.a.

The Capital Dynamics PME+ analysis implies that, if investors had made an equivalent investment in the FTSE All-Share Total Return Index, they would have received a return of 6.7%, significantly lower than the 14.7% achieved by private equity and venture capital

KS-PME

1.34x

Overall industry since inception KS-PME since 1986 – investors would have earned 34% more from investing in funds managed by our members than if they made equivalent investments in the FTSE All-Share Total Return Index

Since 1991

Realised returns

1.43x

Across the industry as a whole **since 1991**, investors have received 1.43x their original invested capital

Total returns

1.80x

Across the industry as a whole **since 1991**, investors own assets which, if realised as at 31 Dec 2020, would mean investors receive 1.80x their original investment

Industry return since 1991

15.1% p.a.

Overall industry since inception internal rate of return **since 1991**

Capital Dynamics PME+

Funds managed by our members **have collectively outperformed the FTSE All-Share Total Return** Index **every year since 1991,** when assessed using the Capital Dynamics PME+ methodology

KS-PME

Funds managed by our members **have collectively outperformed the FTSE All-Share Total Return** Index **every year since 1991** when assessed using the KS-PME methodology, with the exception of 2006 when performance was equal

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Foreword

Kerry Baldwin
BVCA Chair 2021/2022, Co-Founder and Managing Partner, IQ Capital

"The BVCA analysis shows that the private equity and venture capital funds in our dataset collectively have outperformed the public market as represented by the FTSE All-Share Total Return Index every year since 1991"

We are pleased to present this report on private equity and venture capital performance which specifically seeks to compare the performance of funds managed by BVCA member firms with UK public equity markets, as represented by the FTSE All-Share Total Return Index, using two Public Market Equivalent ('PME') methodologies.

The core data for this analysis is the performance measurement survey dataset, which collects fund level cash flows and year end valuations from BVCA members. The BVCA has published details of industry performance for many years, the most recent of which can be found here.

Comparing private investment performance with public markets

Private equity and venture capital is one of many asset classes available to investors, so it is important to have a way of comparing the relative performance of private equity and venture capital to public markets. This comparison can sometimes be challenging because of the illiquid nature of the investments and the fact that it is not possible to calculate a Since Inception IRR for public markets.

Fortunately, this subject is one which has received considerable attention from both the academic community and industry practitioners, which has led to the development of a series of Public Market Equivalent methodologies which have been tried and tested over many years. This report guides the reader through the key methodologies and presents results of one returns-based PME methodology (the Capital Dynamics PME+) and one multiples-based methodology (KS-PME) across various time horizons.

Outperforming public markets

The findings are striking. The BVCA analysis shows that the private equity and venture capital funds in our dataset collectively have outperformed the public market as represented by the FTSE All-Share Total Return Index every year since 1991. The sole exception to this is 2006, when private equity and venture capital outperformed on one PME measure and was equal on the other.

The FTSE All-Share Total Return Index is definitively the most appropriate index to use given the nature of the BVCA data set, but we recognise that analyses with different indices could produce different results. The BVCA intends to explore producing a PME analysis using different indices and different subsets of our data in future years.

A PME analysis is an important part of enabling investors to understand the relative returns generated by private equity and venture capital, and we are pleased to be able to contribute to the literature available on this topic.

We would like to thank the BVCA members who contributed data as part of our performance measurement survey. We give special thanks to the members of the Performance Measurement Survey Review Board, who provided technical advice to the BVCA and helped ensure the robustness of the processes undertaken to produce this report, and to Professor David Robinson, Dr Phillippe Jost and Guillaume Gin, who kindly checked the PME methodologies applied in this report.

Kerry Baldwin

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 this report, which is a companion to the Performance Measurement Survey report. 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.

Robustness of results

The verification procedures for the Performance Measurement Survey are set out in the main report. The survey response rate, sign off rate and the data verification procedures undertaken as part of the PMS report give the Board confidence that the data set is robust. The methodologies used in the PME analyses in this report have been reviewed and approved by the Board. The BVCA Research team provided a sample PME calculation for all methodologies in this report to three independent reviewers: Professor David Robinson (Duke University), and Dr. Phillipe Jost and Guillaume Gin (both at Capital Dynamics), who independently reviewed and confirmed that the calculations were being applied correctly in the BVCA models. To preserve confidentiality of member submissions, the models were populated with dummy data before sharing with the reviewers.

Selection of benchmark index

A key input into any PME analysis is the public market benchmark, or index, which will be used as the comparison to the private market performance. Having considered the nature of the BVCA Performance Measurement Survey data set – the range of fund sizes, investment sectors, investment geographies and investment sizes, the Board recommended the use of the FTSE All-Share Total Return Index as the best comparator for the entire dataset. If, in future, the BVCA decides to produce more granular analysis (for example, looking at venture only), then a different index may be appropriate for subsets of the data.

Overall results

The results are compelling, and highlight the need for a reliable relative measure of performance as well as an absolute measure. 2005-2007 are the years with the lowest performance on an IRR measure, and yet these years have performed at least as well as the FTSE All-Share Total Return Index on a PME basis.

We are pleased to be able to contribute to the available research into the returns from private equity and venture capital funds to investors, and we hope that this Public Market Equivalent analysis will 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

Current board members

Mark Drugan
Capital Dynamics

Kathleen Bacon
formerly of HarbourVest Partners

Graeme Keenan
Pantheon

Fraser McLatchie
SEP

Professor David Robinson
Duke University

Jeremy Lytle
ECI

Guide to this report

Albeit in less detail than the Performance Measurement Survey, this report analyses the performance of funds managed by members of the British Private Equity and Venture Capital Association and then compares the performance of these funds to the UK public market, as represented by the FTSE All-Share Total Return Index, using different PME methodologies.

This report is structured as follows:

- Section 1 **(Measuring Investment Performance)** explains how investment performance is measured for public equity portfolios and for private equity and venture capital funds.
- Section 2 **(Benchmarking Performance)** first explains why comparing the performance of private equity and venture capital to public equity is not a straight forward process and why Public Market Equivalent (PME) analysis is the best way of making this comparison. Secondly, it explains in detail three common PME methodologies (KS-PME, LN-PME and Capital Dynamics PME). Lastly, it explains the different sections of our performance analysis (Since Inception, Since Inception by Vintage Year and Since Inception Starting From a Specific Vintage Year).
- Section 3 **(Performance & Benchmarking - Since Inception Analysis)** provides a Since Inception analysis of the performance of the funds of members of the British Private Equity and Venture Capital Association and how that performance compared to equivalent investments in the UK public equity market.
- Section 4 **(Performance & Benchmarking - Since Inception Analysis by Vintage Year)** provides a Since Inception analysis by vintage year of the performance of the funds managed by our members and how that performance compared to equivalent investments in the UK public equity market.
- Section 5 (**Performance & Benchmarking – Since Inception Analysis Starting from a Specific Vintage Year)** provides a Since Inception analysis, starting at different vintage years, of the performance of the funds managed by members of the British Private Equity and Venture Capital Association and how that performance compares to equivalent investments in the UK public equity market.
- Section 6 **(Conclusion)** summarises the key findings from the report.

A **further reading** section is included at the end of the report for readers wishing to explore the existing published literature on PME.

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 performance measurement, although we have endeavoured to explain the key concepts as clearly as possible.

If you are new to private equity and venture capital performance measurement and public market equivalent analyses, then sections 1 and 2 cover the methodologies you will need to understand and interpret the results in later sections.

If you are already familiar with these concepts, then you may wish to go straight to sections 3-5 where we present our results.

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

Measuring Investment Performance

Public Equities vs. Private Equity

Public equities

Institutional investors, such as pension funds, asset managers and mutual funds, invest capital on behalf of their clients. To optimise gains and decrease risk, fund managers diversify their investments into different asset classes – the "asset allocation" process.

The public equity market is particularly popular amongst professional investors. Buying and selling stocks is fairly easy, making it a more liquid asset class compared to other options. A public equity portfolio can be easily diversified across different industries and there is a potential to earn higher returns than (less risky) alternatives, such as government bonds.

In simple terms, when analysing the performance of a public equity portfolio, one looks at: the value of the portfolio at the beginning of the calendar year (B), the value of the portfolio at the end of the year (E) and any distributions of interest or dividends (D) during that period. A yearly return can be calculated as:

$$\text{Return (\%)} = \frac{E + D - B}{B}$$

Risks are usually measured by looking at the variation of the value of the portfolio within this time frame, and this simple calculation is possible because investors can buy and sell listed assets at any point in the year.

Private equity

Investing in private equity and venture capital is different to investing in public equity markets, with the main difference being the liquidity of the investment and the length of time an investor is required to commit to a fund.

A private equity or venture capital fund will raise capital until it reaches a pre-defined target, when the fund closes and no new investors can join.

Once an investor has made a commitment to a fund, it may not be called upon for a period of months or even years, and when this commitment is called for, to fund an investment, this may be varying amounts and at irregular intervals.

Once a fund starts deploying capital, it spends on average four years mostly investing into portfolio companies and distributing back very little to investors. It is often only after around the fifth or sixth year of a fund's life that investors start receiving distributions (i.e. getting their capital back). This will last for as long as there is unrealised capital to be distributed - the life of a fund is typically between eight and fifteen years.

Private equity and venture capital is therefore considered to be a long-term asset class, and not suitable for investors who are likely to need to access their capital at short notice.

As a result of these features, a number of different metrics are used to give investors the greatest possible understanding of the performance of their investments in private equity and venture capital funds. In this report, as well as in the BVCA's Performance Measurement Survey, we focus on money multiples (particularly DPI and TVPI) and Internal Rates of Return (IRRs). The following pages provide a brief explanation of each of these measures.

Measuring Investment Performance

DPI and TVPI Multiples

Money multiples are the simplest metric of return and provide a cash-on-cash measure of how much investors are receiving. They are calculated by dividing the value of the returns by the amount of money invested.

Due to its simplicity, multiples are often used in the private equity and venture capital industry, as they offer an easy way to show the scale of the returns an investment has generated, without taking into account the time value of money.

Two multiples that are often reported by funds are Distributed to Paid-In Capital (DPI) and Total Value to Paid-In Capital (TVPI), which differ in terms of whether or not they include residual values. Please see an example to the right of how to calculate each type of multiple.

Table 1 – Multiples example

	Paid-in	Distribution	Residual Value
21/01/2013	**-100**		
29/05/2013	**-50**		
03/04/2014		30	
07/10/2014	**-100**		
26/01/2015		110	
01/01/2015	**-50**		
23/04/2017		90	
15/03/2018	**-50**		
01/05/2019	**-50**		
10/09/2020		150	
31/12/2020			200
Total	**-400**	380	200

$$DPI_t = \frac{CD_t}{\text{Paid — in Capital}}$$

$$TVPI_t = \frac{CD_t + RV_t}{\text{Paid — in Capital}}$$

$$DPI_{31/12/20} = \frac{380}{400} = 0.95x$$

$$TVPI_{31/12/20} = \frac{380 + 200}{400} = 1.5x$$

Where:

CD = Cumulative distributions
RV = Residual value
t = point in time being analysed

A DPI of 0.95x means that investors have already received 95% of the total capital that was drawn down during the fund's life. A TVPI of 1.5x means that if the fund were to liquidate their assets at 31 December 2020 at the given valuation, investors would get back 1.5x their original investment.

Measuring Investment Performance

IRRs

The Internal Rate of Return (IRR) is the expected compound annual rate of return that will be earned by a fund and is a metric used to measure and compare returns on an investment (in our case, an investment into a private equity or venture capital fund).

IRRs calculate a return by looking at all of the cashflows from the fund over a given period, taking into account drawdowns, distributions and, if the fund still has residual value, the latest valuation of assets held.

This annualised return takes into account the impact of time on the fund performance. Since an IRR is a discount rate that makes the Net Present Value (NPV) of all cashflows equal to zero in a discounted cashflow analysis, it can be calculated as:

$$0 = \underbrace{\sum_{t=1}^{T} \frac{C_t}{(1+IRR)^t} - C_0}_{\text{NPV of cash flows}}$$

Where:

Ct = Net Cash inflow during the period t
C0 = Total initial investment costs
IRR = Internal Rate of Return
t = The number of time periods

Time value:

The most important difference between an IRR and a money multiple is that the IRR takes into consideration the time value of money.

Table 2 – TVPI multiple and IRR examples

Period	Cashflow	Description
1	-10	Draw Down
2	15	Distribution
3	0	
4	5	Residual NAV
IRR	68%	
TVPI	2.0x	

Table 3 – TVPI multiple and IRR examples

Period	Cashflow	Description
1	-10	Draw Down
2	0	
3	15	Distribution
4	5	Residual NAV
IRR	37%	
TVPI	2.0x	

Notice how in our two examples, although the TVPI is the same, the IRR is not. This happens because of the time value of money. Receiving the distribution of 15 on period 2 is more valuable then receiving the same amount a period later (i.e. 1 year), hence the IRR for the second example is lower.

Please note that the BVCA reports multiples net of fees and without accounting for carried interest i.e. based on the cash flows received by investors.

Benchmarking Performance

Public Market Equivalents (PMEs)

Benchmarking the performance of investments in private equity and venture capital funds to other asset classes (such as public equities) is not a straightforward process. Private equity and venture capital fund returns are typically measured in a different way to other asset classes. IRRs and multiples are not ideal ways of comparing the performance of private equity and venture capital funds to public equity investments.

A Public Market Equivalent (PME) analysis is a method which allows investors to compare the performance of a private equity or venture capital fund, to the performance the public market would have generated over the same period using the same investment timings.

In general, the PME method is to create a theoretical fund that replicates the cashflows of private markets by buying and selling stocks of a specific index. The index is a hypothetical portfolio of investments that represent specific segments of an economy or sector. Creating a theoretical portfolio that invests at the same time and same amount into an index, allows the investor to gauge what the return of its investments would have been in the public equity market, by taking into consideration the market movements.

This section provides an overview of three different methodologies that will be explained in detail on the following pages:

- **Long-Nickels (LN-PME);**
- **Kaplan Schoar (KS-PME); and**
- **Capital Dynamics PME+.**

Later sections of this report present the results of our calculations using the KS-PME and Capital Dynamics PME+ methodologies.

A PME analysis is the fairest method of comparing the performance of the two asset classes, as it does indicate to the investor what the return of an equivalent public market investment would be.

In this report we will frequently use the term "equivalent investments" – by equivalent investments we mean investments of the same amount and at the same dates as those which took place in the private equity / venture capital funds.

The BVCA reports performance (DPI, TVPI and IRR) net of fees, whereas public equity will have trading costs. However, since the PME analysis implies that investments are made into an index, trading fees are negligible, making it a reasonable comparison.

For our analysis, we used the FTSE All-Share Total Return as the benchmark index. We use the FTSE All-Share Total Return Index because the total return indices has to be taken as the private equity and venture capital cashflows also contain dividends. An overview of the funds in our data set is given in the call out box. Taking into consideration the broad range of investment sizes and sectors, we require a broad based sterling denominated index to be comparable, making the FTSE All-Share Total Return the best index to compare against the BVCA data set.

Overview of funds in the BVCA PMS data set

Investment size
(by amount invested):

- 63% of the funds in our database invest in Large Private Equity (over £100 million invested in equity per transaction);
- 28% invest in Mid Private Equity (Between £10 and £100 million invested in equity per transaction);
- 5% invest in Small Private Equity (less than £10 million invested in equity per transaction); and
- 5% are Venture Capital funds.

Investment sectors / regions
(by number of funds):

- 29% of the funds in our dataset focus on technology.
- 63% of the funds in our dataset invest only in the UK, 30% in European countries (which may include the UK) and 7% in other regions.

From our other studies, such as the Report on Investment Activity, we know that our member firms invest in a varied range of sectors, particularly technology, consumer goods and services, business products and services, biotech and healthcare and financial and insurance activities.

Benchmarking Performance

The Long-Nickels PME (LN-PME)

The first of the PME methodologies created, the LN-PME mirrors the cashflows of the private equity or venture capital fund, and adjusts the final Net Asset Value (NAV) such that it reflects the movements of the public equity market. The methodology is as follows:

1) When there is a draw down, it is assumed that you buy the same amount of the index (so if there is a draw down of -100, it is assumed that an investment of 100 was bought).

2) When there is a distribution, it is assumed that you sell the same amount of the index (so if there is a distribution of 100, it is assumed that an investment of 100 was sold).

3) Calculating the LN-PME NAV:

To calculate the NAV, first we must find the amount of shares owned in our theoretical portfolio. For the first period, shares owned are simply the amount invested divided by the price of shares (therefore, 100 / 76.7 = 1.30).

For the remaining periods, we take the amount of shares of the previous period, and add or subtract the amount of shares bought or sold in the current period. In our example, in the second period we bought 0.6 shares (50 / 83.99) and we add it to the previous 1.3, leading us to 1.9 shares. In the third period of our example, we sell 0.34 share (30 / 88.45). Deducting this amount from the amount of shares from the previous period, we arrive at 1.56 shares. Once we have found the amount of shares owned in each period, we multiply it by the price of the index. That value will then be the Net Asset Value of the portfolio.

4) Calculating the LN-PME IRR:

Once we have found the value of the NAV at the last period, we use the same cashflows as the private equity or venture capital fund, but add the LN-PME NAV instead of the fund's NAV as a last distribution.

Table 4 – LN-PME example number 1

Date	Draw Down	Distribution	NAV	Net Cashflow	Index	Shares Owned	LN-NAV	LN Net Cash Flow	Starting from 2007
21/01/2013	100			-100	76.70	= 100 / 76.70 = 1.30	= 1.30 * 76.70 = 100	-100	
29/05/2013	50			-50	83.99	= 1.30 + (50 / 83.99) = 1.90	= 1.90 * 83.99 = 160	-50	15.9
03/04/2014		30		30	88.45	= 1.90 - (30 / 88.45) = 1.56	= 1.56 * 88.45 = 138	30	13.9
07/10/2014	100			-100	87.19	= 1.56 + (100 / 87.19) = 2.71	= 2.71 * 87.19 = 236	-100	14.3
26/01/2015		110		110	93.00	= 2.71 - (110 / 93.00) = 1.52	= 1.52 * 93.00 = 142	110	15.0
01/01/2016	50			-50	90.24	= 1.52 + (50 / 90.24) = 2.08	= 2.08 * 90.24 = 188	-50	13.1
23/04/2017		90		90	109.80	= 2.08 - (90 / 109.80) = 1.26	= 1.26 * 109.80 = 138	90	15.1
15/03/2018	50			-50	112.32	= 1.26 + (50/ 112.32) = 1.70	= 1.70 * 112.32 = 191	-50	14.9
01/05/2019	50			-50	120.73	= 1.70 + (50 / 120.73) = 2.12	= 2.12 * 120.73 = 256	-50	21.5
10/09/2020		150		150	105.14	= 2.12 - (150 / 105.14) = 0.69	= 0.69 * 105.14 = 73	150	14.2
31/12/2020			200	200	115.92	= 0.69	= 0.69 * 115.92 = 80	80	
IRR				11.5%				4.9%	

In this example, the private equity / venture capital fund would have an IRR of 11.5%. Had the investor made an equivalent investment in the public equity market, the IRR at 31 December 2020 would have been 4.9%

Benchmarking Performance

The Long-Nickels PME (LN-PME) – a common issue

The main issue with this methodology is that, if the private equity / venture capital fund greatly outperforms the benchmark, the LN-PME NAV would become negative, as seen in the example below. This can lead to a nonsensical comparison of the performance of a long-only private equity or venture capital fund, being compared against a short position in the public market.

Long & Nickels were the first to develop a measure of relative performance in private equity. Due to the issue explained in this section, several attempts were made to address the outperformance of the private equity and venture capital industry. Amongst them are (a) KS-PME and (b) Capital Dynamics PME+, which are explained in the following slides and are the methodologies we calculate in this report.

Table 5 – LN-PME example number 2

Date	Draw Down	Distribution	NAV	Net Cashflow	Index	Shares Owned	LN-NAV	LN Net Cash Flow	Starting from 2007
21/01/2013	100			-100	76.70	= 100 / 76.70 = 1.30	= 1.30 * 76.70 = 100	-100	
29/05/2013	50			-50	83.99	= 1.30 + (50 / 83.99) = 1.90	= 1.90 * 83.99 = 160	-50	15.9
03/04/2014		30		30	88.45	= 1.90 - (30 / 88.45) = 1.56	= 1.56 * 88.45 = 138	30	13.9
07/10/2014	100			-100	87.19	= 1.56 + (100 / 87.19) = 2.71	= 2.71 * 87.19 = 236	-100	14.3
26/01/2015		110		110	93.00	= 2.71 - (110 / 93.00) = 1.52	= 1.52 * 93.00 = 142	110	15.0
01/01/2016	50			-50	90.24	= 1.52 + (50 / 90.24) = 2.08	= 2.08 * 90.24 = 188	-50	13.1
23/04/2017		90		90	109.80	= 2.08 - (90 / 109.80) = 1.26	= 1.26 * 109.80 = 138	90	15.1
15/03/2018	50			-50	112.32	= 1.26 + (50/ 112.32) = 1.70	= 1.70 * 112.32 = 191	-50	14.9
01/05/2019	50			-50	120.73	= 1.70 + (50 / 120.73) = 2.12	= 2.12 * 120.73 = 256	-50	21.5
10/09/2020		250		250	105.14	= 2.12 - (250 / 105.14) = -0.26	**= -0.26 * 105.14 = -27**	250	14.2
31/12/2020			200	200	115.92	= -0.26	**= -0.26 * 115.92 = -30**	**-30**	
IRR				**15.6%**				**N/A**	

In this example, the private equity / venture capital fund would have an IRR of 15.6%. It is not possible to calculate the LN-PME as the index has had to be sold short.

Benchmarking Performance

Kaplan Schoar PME (KS-PME)

The KS methodology creates a relative measure of performance that directly compares an investment in private equity or venture capital funds to an equivalent investment in the public equity market. Thus, the results of the KS-PME can be viewed as a market-adjusted multiple of invested capital.

Calculating a KS-PME is a two step process:

1) Find the future value of each draw down and distribution, using the selected benchmark index. This requires taking the actual cashflow amount and multiplying it by the ratio of the benchmark index at the last valuation date, to the benchmark index at the actual date of the cash flow. Since the residual value is the Net Asset Value of the fund at the last point in time, it remains unchanged.

2) Sum the total future value of all distributions and the residual value, and divide it by the total future value of paid-in capital (i.e. total drawdowns). This is the same calculation as for a TVPI multiple.

In our example below, the TVPI multiple indicates that at the end of fund's life the investor is expected to receive 50% more than originally invested. The KS-PME multiple of 1.2x, implies that at the end of the fund's life, investors end up with 20% more than if they had made an equivalent investment in the public market.

Table 6 – KS-PME example

Date	Draw Down	Distribution	Residual Value	Index	Index Growth	KS Draw Down	KS Distribution	Residual Value
21/01/2013	-100			76.70	= (115.92 / 76.70) = 1.51	= (-100 * 1.51) = -151.14		
29/05/2013	-50			83.99	= (115.92 / 83.99) = 1.38	= (-50 * 1.38) = -69.01		
03/04/2014		30		88.45	= (115.92 / 88.45) = 1.31		= (30 * 1.31) = 39.32	
07/10/2014	-100			87.19	= (115.92 / 87.19) = 1.33	= (-100 * 1.33) = -132.96		
26/01/2015		110		93.00	= (115.92 / 93.00) = 1.25		= (110 * 1.25) = 137.11	
01/01/2016	-50			90.24	= (115.92 / 90.24) = 1.28	= (-50 * 1.28) = -64.23		
23/04/2017		90		109.80	= (115.92 / 109.80) = 1.06		= (90 * 1.06) = 95.02	
15/03/2018	-50			112.32	= (115.92 / 112.32) = 1.03	= (-50 * 1.03) = -51.61		
01/05/2019	-50			120.73	= (115.92 / 120.73) = 0.96	= (-50 * 0.96) = -48.01		
10/09/2020		150		105.14	= (115.92 / 105.14) = 1.10		= (150 * 1.10) = 165.38	
31/12/2020			200	115.92	= (115.92 /115.92) = 1			200
Total	**-400**	**380**	**200**			**-517**	**437**	**200**
TVPI	**1.5**					**1.2**		

Benchmarking Performance

Capital Dynamics PME+

A second generation of PME methodologies, the Capital Dynamics PME+ was developed to address the problem of short exposure that can happen with the LN-PME. It deals with the issue by fixing the closing NAV of the theoretical public equity portfolio to be the same as the closing NAV of the private equity / venture capital fund.

This is achieved by scaling the distributions by a factor λ such that the PME+ NAV at the end is equivalent to the private equity fund NAV. With this, the private equity fund and the theoretical fund have the same draw downs and final NAV, but different distributions.

The first step in conducting a Capital Dynamics PME+ analysis is finding the λ factor.

$$\lambda = \frac{\text{(Total shares bought} - \text{Total shares at the end of the period)}}{\text{Total shares sold}}$$

Therefore in our example:

$$\lambda = \frac{(4.46 - 1.73)}{4.72} = 0.579$$

Table 7 – Capital Dynamics PME+ - Calculating λ example

Date	Draw Down	Distribution	NAV	Net Cashflow	Index	Shares Bought	Shares Sold	Shares End
21/01/2013	100			-100	76.70	= 100 / 76.70 = 1.30	-	
29/05/2013	50			-50	83.99	=50 / 83.9 = 0.6	-	
03/04/2014		30		30	88.45	-	= 30 / 88.45 = 0.34	
07/10/2014	100			-100	87.19	=100 / 87.19 = 1.15	-	
26/01/2015		110		110	93.00	-	= 110 / 93.00 = 1.18	
01/01/2016	50			-50	90.24	= 50 / 90.24 = 0.55	-	
23/04/2017		90		90	109.80	-	= 90 / 109.80 = 0.82	
15/03/2018	50			-50	112.32	= 50/ 112.32 = 0.45	-	
01/05/2019	50			-50	120.73	= 50 / 120.73 = 0.41	-	
10/09/2020		250		250	105.14	-	= 250 / 105.14 = 2.38	
31/12/2020			200	200	115.92	-	-	= 200 / 115.92 = 1.73
Total						**4.46**	**4.72**	**1.73**

Benchmarking Performance

Capital Dynamics PME+

The second step of the Capital Dynamics PME+ methodology, is creating the cashflows of the theorical fund, using the ƛ factor to adjust distributions. As we have seen, for our example, the factor is calculated as:

$$ƛ = \frac{(4.46 - 1.73)}{4.72} = 0.579$$

Reflecting this on cashflows we get:

In this example, the private equity or venture capital fund would have an IRR of 15.6%. Had the investor made an equivalent investment in the public equity market, their IRR at 31 December 2020 would have been 4.4%.

There are other second generation PME methodologies which also address the shortness issue, such as the Modified PME (mPME) developed by Cambridge Associates. The BVCA research team has tested all of them and found that the Capital Dynamics PME+ methodology is the one that best applies to our dataset. The BVCA Performance Measurement Survey uses daily cash flows, which we can also use in the Capital Dynamics PME+ allowing us to maintain consistency in presenting investment performance. To apply the Modified PME, we would need to amalgamate cashflows on a yearly or quarterly basis, which may make our performance metrics inconsistent with the Performance Measurement Survey report.

Table 8 – Capital Dynamics PME+ example

Date	Draw Down	Distribution	NAV	Net Cashflow	PME+ Draw Down	PME+ Distribution	PME+ NAV	PME+ Net Cashflow
21/01/2013	100			-100	100			-100.00
29/05/2013	50			-50	50			-50.00
03/04/2014		30		30		= 30 * 0.579 = 17.37		17.37
07/10/2014	100			-100	100			-100.00
26/01/2015		110		110		= 110 * 0.579 = 63.69		63.69
01/01/2016	50			-50	50			-50.00
23/04/2017		90		90		= 90 * 0.579 = 52.11		52.11
15/03/2018	50			-50	50			-50.00
01/05/2019	50			-50	50			-50.00
10/09/2020		250		250		= 250 * 0.579 = 144.75		144.75
31/12/2020			200	200			200	200.00
IRR				**15.6%**				**4.4%**

Benchmarking Performance

Summary

Table 9 – Summary of methodologies

Methodology	Metric	Private Equity Outperformance if:	Description of Calculation	Strengths	Weaknesses
LN PME (Long-Nickels)	Annualized Rate	Estimated PME IRR < PE Fund IRR	Contributions to PE fund are converted to an equal purchase of shares in the public index. Distributions represent liquidation of share in public index. IRR calculation uses same contributions and distributions as PE fund, but with a different final period remaining value.	LN PME IRR is directly comparable to the PE Fund IRR, allowing an apples-to-apples comparison.	IRR sensitive to early distributions. Large distributions could cause a negative PME final period remaining value, making PME IRR calculation computationally impossible.
KS PME (Kaplan-Schoar)	Ratio	Value > 1	Calculated by discounting the private equity fund cash flows by the public market index value. The discounted distributions plus the current remaining value are divided by the discounted contributions to obtain the ratio.	The calculation looks at the ratio of outflows versus inflows as opposed to generating an IRR, which is time dependent and is easily manipulated. Easy to interpret.	Ignores the timings of cash flows.
Capital Dynamics PME+	Annualized Rate	Estimated PME IRR < PE Fund IRR	Uses a fixed scaling factor (lambda) to modify each distribution to ensure the PME final period remaining value is the same as the PE fund remaining value. IRR calculation uses modified distributions but same contributions and final period remaining value.	As for LN PME, with the added benefit of avoiding a final period negative remaining value, making PME IRR calculation possible in more cases.	PME+ does not match the cash flows perfectly.

Source: Adapted from Preqin Special Report: Public Market Equivalent (PME) Benchmarking, 2015.

Benchmarking Performance

Time frames used in this report

In this report, both the performance of the UK private equity and venture capital industry, as represented by the activity of BVCA member firms, and the Public Market Equivalent analysis are conducted using three different time frames:

1) Since Inception:

Since Inception performance refers to the performance of a fund since its first draw down. This, therefore, is the measure that most closely reflects the return an investor would achieve if they invested at the start of a fund. Funds that are four years old or less are excluded from our Since Inception analysis as during the first four years of a fund's life, they are mostly investing and only returning small amount of capital to investors, therefore any calculated measure of performance would not provide an accurate indication of what the return could be at the end of the fund's life. Hence, the Since Inception returns in this report include funds with vintages between 1986 to 2016.

2) Since Inception 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 2011 vintage in this report will contain all funds that started investing in 2011, 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 to analysing the impact that economic cycles can have on fund performance.

3) Since Inception Starting From a Specific Year:

A new measure presented by the BVCA in the Performance Measurement Survey report this 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 2011 includes cashflows from all funds of vintages between 2011 and 2016, therefore funds that are between five and ten years old. This means that the funds included in the Since Inception starting from 2011 category will probably have invested the majority of their capital and distributed a large proportion of it as well.

Note: Please note that in our Performance Measurement Survey we start our Since Inception analysis in 1980. This report starts the analysis in 1986 as this is the first year where data is available for the FTSE All-Share – Total Return index.

Performance & Benchmarking

Since Inception Analysis

Table 10 – Since Inception Multiples And IRR

DPI	TVPI	IRR
1.43x	1.80x	14.7%

Table 11 – Since Inception KS-PME and Capital Dynamics PME+

KS-PME	PME+
1.34x	6.7%

Here we present a high level Since Inception analysis of our database, which includes cashflows for funds with vintages between 1986 and 2016 managed by BVCA members.

Our results show that investors have already received 1.43x the total capital that was invested by the funds of member firms. A TVPI of 1.80x indicates that if funds in this pool were to liquidate their assets at 31 December 2020 at given valuation, investors would get back 1.8x their original investment.

The KS-PME multiple of 1.34x, implies that BVCA members funds generated 1.34x what investors would have earned if they had made an equivalent investment into the public equity market.

In terms of IRRs, the overall return of the industry for funds that started investing from 1986 until 2016 is 14.7%. The Capital Dynamics PME+ analysis implies that, if investors had made an equivalent investment into the public equity markets, they would have received a significantly lower return of 6.7%.

Note: KS-PME and Capital Dynamics PME+ figures were calculated using the FTSE All-Share Total Return Index

Performance & Benchmarking

Since Inception Analysis by Vintage Year // data

Chart 1 – Since Inception DPI and TVPI by Vintage Year

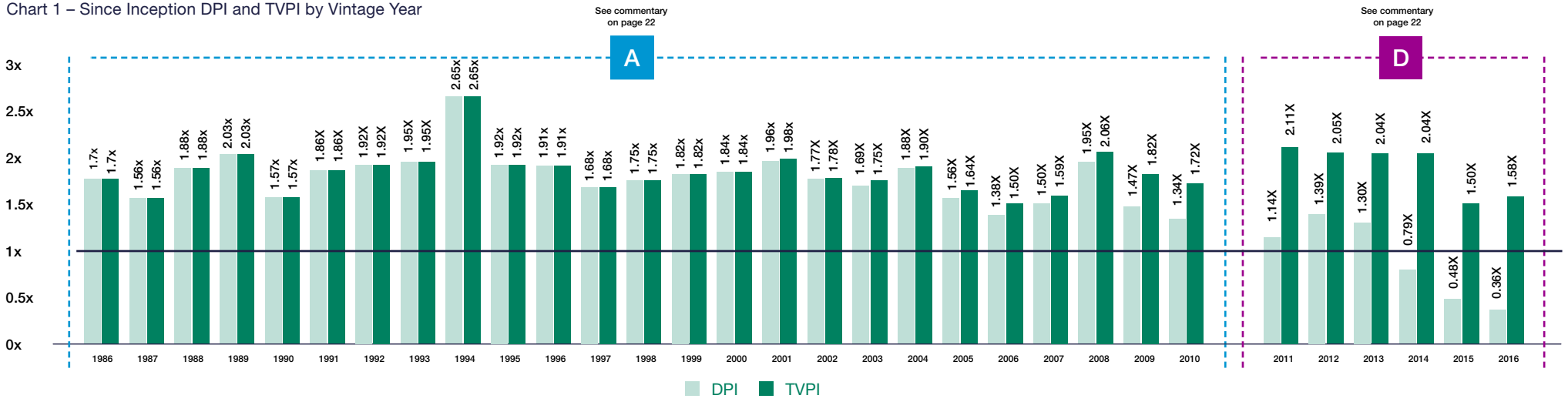
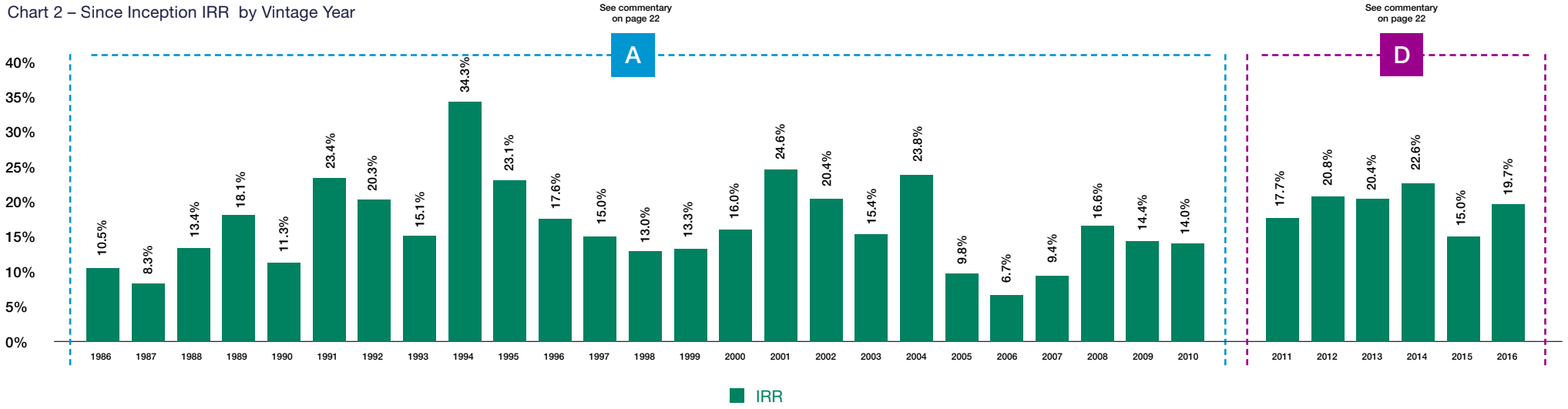


Chart 2 – Since Inception IRR by Vintage Year



Performance & Benchmarking

Since Inception Analysis by Vintage Year // data

Chart 3 – Since Inception KS-PME by Vintage Year

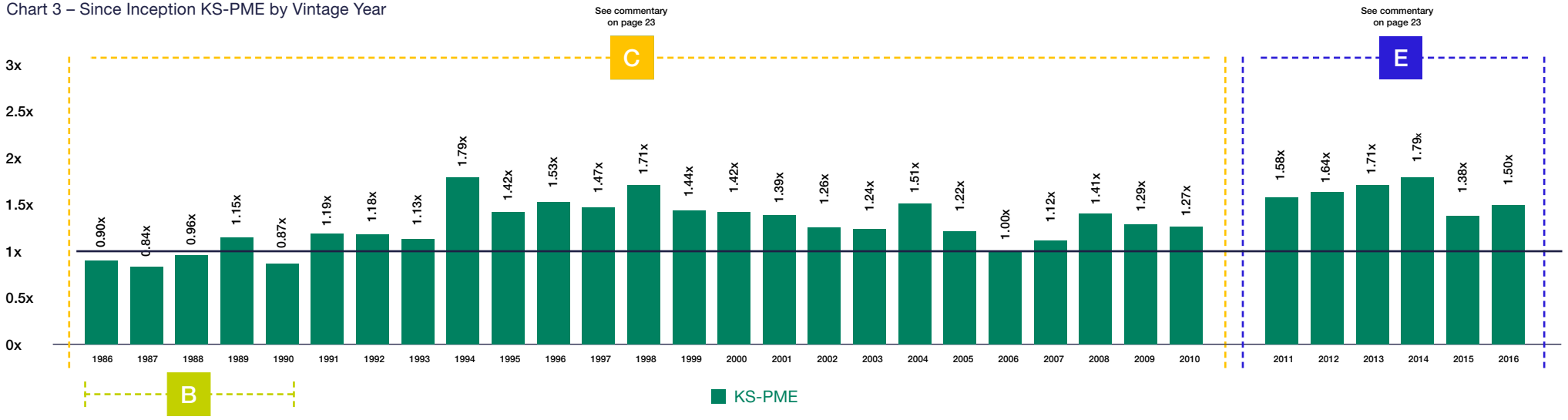
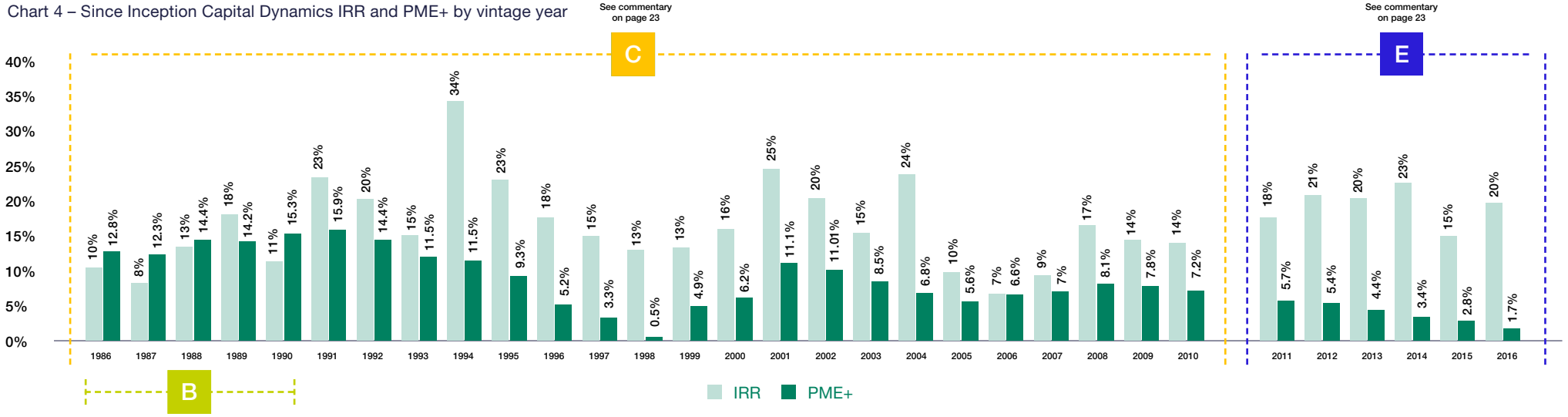


Chart 4 – Since Inception Capital Dynamics IRR and PME+ by vintage year



Note: KS-PME and Capital Dynamics PME+ were calculated using the FTSE All-Share Total Return Index

Performance & Benchmarking

Since Inception Returns by Vintage Year // commentary

Historical analysis

A

The first observation from Chart 1 is that for vintages up to 2000, the DPI and TVPI multiples are the same. This means that the funds from these vintages have already terminated, liquidating their assets, and the TVPI presented in our chart is the realised multiple they achieved. Vintages between 1986 and 2000 distributed back to investors, on average, 1.8x their original investment.

A

Likewise, as there is no estimation of a final Net Asset Value, the IRRs presented in Chart 2 for vintages between 1986 and 2000 are the actual IRR achieved by these vintages.

B

Charts 3 and 4 show that the 1986 to 1990 period were not good vintages for private equity / venture capital funds when compared to the public market. Our KS-PME analysis indicates that with the exception of 1989, where investors received 15% more by investing in private equity / venture capital funds as compared to an equivalent investment in the public markets, the remaining vintages on this band had a stronger performance in the public equity market. Investors received between 10 and 16% less by investing in funds managed by BVCA members than they would have received from an equivalent investment in public equities.

A B

This outperformance of public equity between 1986 and 1990 is confirmed by the Capital Dynamics PME+ analysis. With the exception of 1989, where investors received 18.1% of return, as compared to 14.2% that would have been received from an equivalent investment in public equity, the remaining vintages in this group had a stronger performance in the public equity market. The lowest performing vintage for funds managed by BVCA members was 1987, where investors only earned an IRR of 8.3%, which compares to 12.3% they would have received had they made equivalent investments in public equity.

C

The KS-PME analysis shows that since 1991, with the exception of 2006 (where the KS-PME multiple is 1x), investors have generated higher return from investing in private equity / venture capital funds than they would have generated had they made equivalent investments in the public equity market.

C

This is once again confirmed by the Capital Dynamics PME+ analysis. Since 1991, investors have received a higher IRR from investing in private equity / venture capital funds than they would have received had they made equivalent investments in the public equity market. This includes the 2006 vintage, where the IRR of our members was 6.7%, compared to a 6.6% IRR that would have been achieved from investments in public equities.

A C

Moreover, the vintages 2005 – 2007 were the worst performing vintages for the funds managed by BVCA members. Still, compared to the public equity market, performance was good. Our KS-PME analysis shows 2006 breaking even and 2005 and 2007 returning at least 12% more than the investor would have received from an equivalent investment in public equities. The Capital Dynamics PME+ confirms this, with 2005 delivering a return of 9.8% (as compared to 5.6% from an equivalent investment in public equities), 2006 returning 0.1% more than an equivalent investment in public equities and 2007 returning 9.4% (as opposed to 7%).

Performance & Benchmarking

Since Inception Returns by Vintage Year // commentary

The last decade

As in our Performance Measurement Survey and for the reasons explained in Section 1, this analysis excludes the four most recent vintages (2017 – 2020) from our calculations, so commentary in this section refers to funds with first drawdowns between.

D

As we can observe in Chart 1, for vintages between 2011 and 2014, funds managed by BVCA members are expected to distribute back to investors over 2x of what was initially invested. Vintages between 2011 and 2013 have a Distributed to Paid-in (DPI) multiple of above 1x, which means that investors have already received more than originally invested and 2014 has a DPI of 0.79x, meaning that investors have nearly received their initial investment money back, which is a strong number bearing in mind that these funds are very much still in active mode.

D

In terms of IRR, the funds of vintages between 2011 and 2014, are the best performing funds of the past decade, with returns consistently above 17%. As already mentioned, these funds still have unrealised capital to be distributed back to investors, but should valuations continue increasing at the current pace, then we would expect that the final return once these funds are realised will also be above the average of previous vintages.

E

Chart 3 highlights that the KS-PME for vintages between 2011 to 2014 also show promising results, and indicate that if funds in this pool were to liquidate their assets at 31 December 2020 at the given valuation, BVCA member funds would have generated 1.58x what investors would have earned if they had made similarly timed investments in the public markets.

E

The Capital Dynamics PME+ analysis for vintages 2011 to 2014 agrees with our KS-PME results, showing a significant difference between investing in private equity / venture capital funds as opposed to equivalent investments in public equities. For the vintage 2014, for instance, the interim IRR achieved by funds managed by BVCA members as of December 2020 gives an IRR of 22.6%, whereas an equivalent investment in public equities yields only 3.4%.

D E

2015 and 2016 are less mature vintages and will be earlier on in the investment phase, having fewer investments realised to date. The 2015 vintage has already distributed back to investors almost 50% of capital paid-in and funds are expected to return 1.5x the initial investment by the end of their life. 2016 vintage funds have already distributed back 36% of capital paid-in and funds are expected to return to investors 1.58x their initial investment by the end of their life. The difference between DPI and TVPI indicates that funds in this pool

D E

still have a lot of unrealised capital, and therefore, room for growth through value creation, meaning that the TVPI for these vintages could increase even further. The KS-PME results indicate that for investors in these vintages BVCA member funds generated 1.38x what investors would have earned if they had made similarly timed investments in the public markets.

D E

IRRs for vintages 2015 and 2016 should be analysed with care, as a good proportion of the IRR calculation is based on unrealised investments. Still, our analysis shows that if funds in this pool had liquidated their assets at 31 December 2020 at the given valuations, investors would have seen a return of 15% (2015) and 19.7% (2016), as opposed to 2.8% (2015) and 1.7% (2016) from equivalent investments in the public equity market.

Performance & Benchmarking

Since Inception Analysis Starting From a Specific Vintage Year // data

Refreshing the concept: Since Inception return is calculated as a pooled return for the entire industry, excluding the last four most recent vintage years. Since Inception Starting From, therefore, refers to all funds starting at a certain vintage up to the 2016 vintage. For instance, Since Inception return starting from 2007 represents the return for all funds of vintage 2007 onwards until 2016. Since 2016 is the last vintage included in the calculations, Since Inception Return Starting From 2016 refers to funds with vintage 2016 only.

Chart 5 – Since Inception DPI and TVPI starting from a specific vintage year

See commentary on page 26

See commentary on page 27

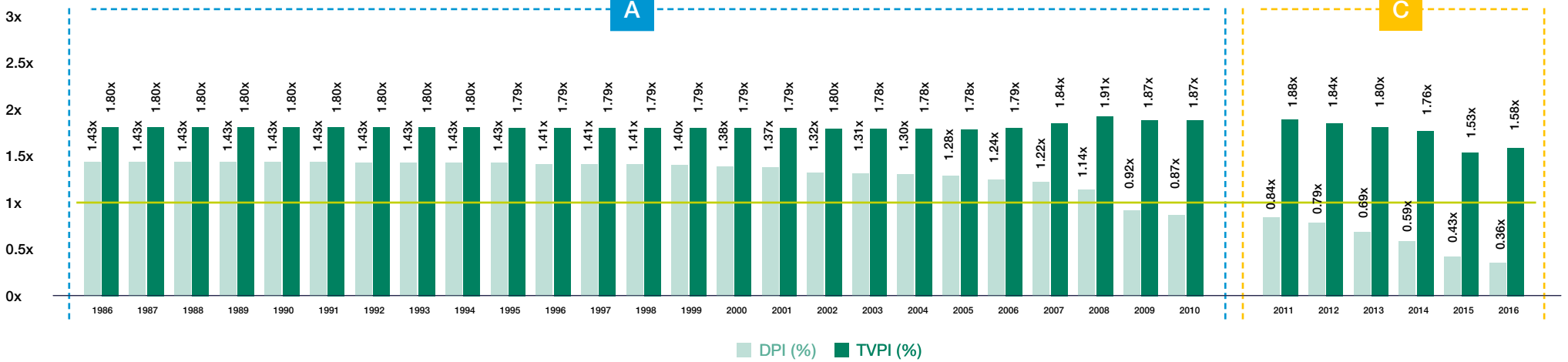
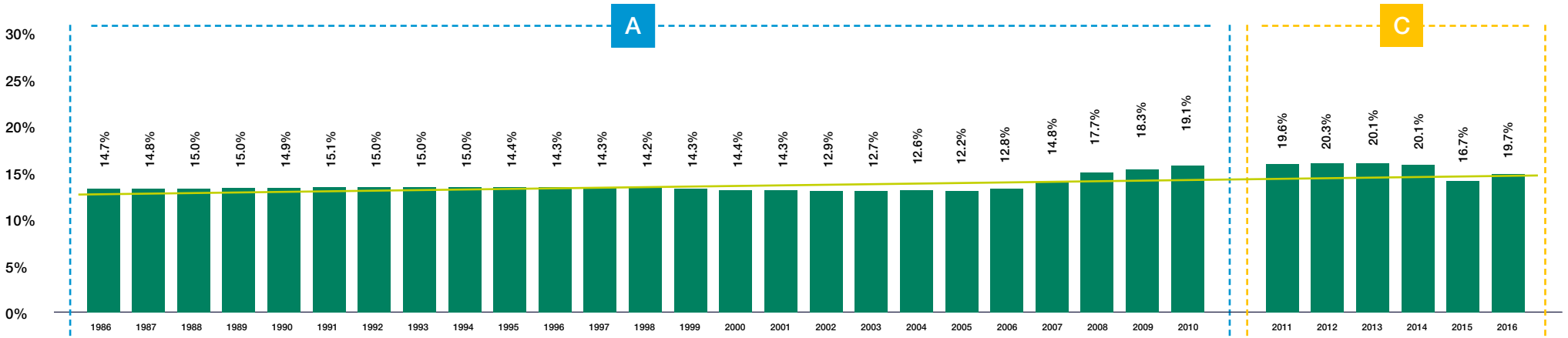


Chart 6 – Since Inception IRR starting from a specific vintage year

See commentary on page 26

See commentary on page 27



Performance & Benchmarking

Since Inception Analysis Starting From a Specific Vintage Year // data

Chart 7 – Since Inception KS-PME starting from a specific vintage year

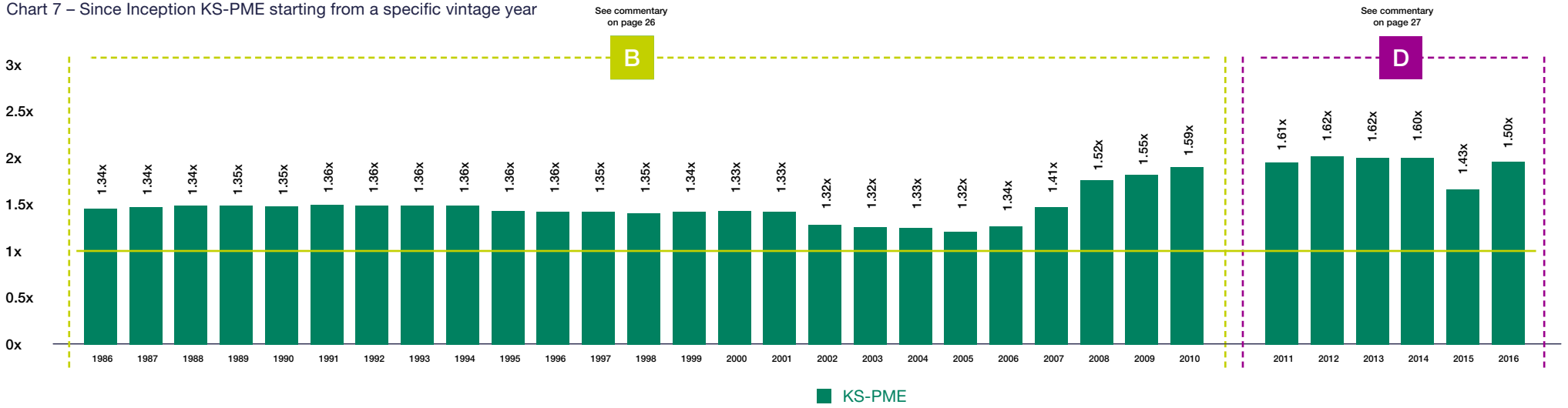
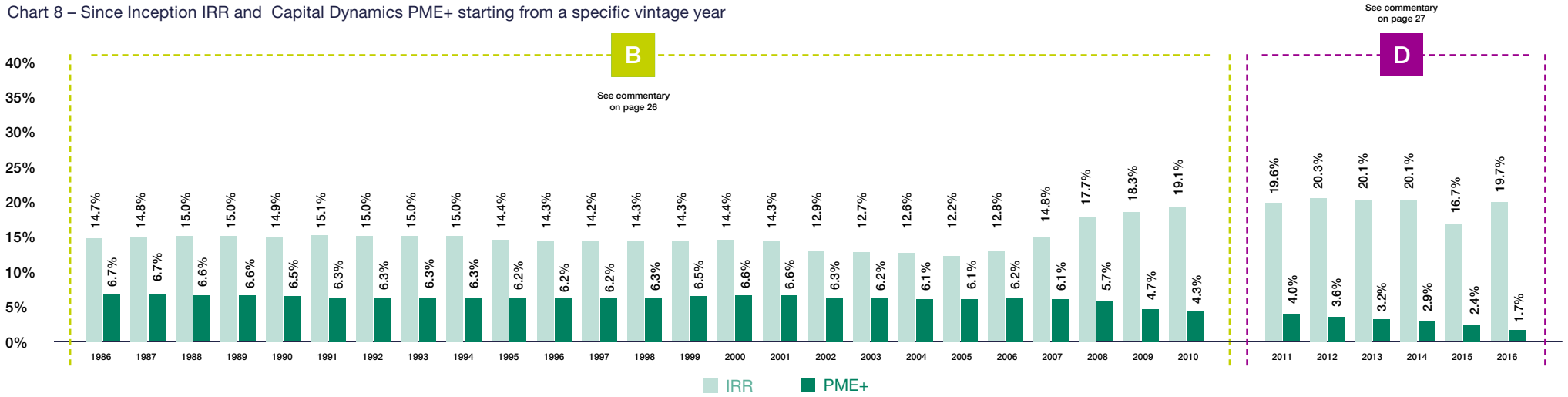


Chart 8 – Since Inception IRR and Capital Dynamics PME+ starting from a specific vintage year



Note: KS-PME and Capital Dynamics PME+ were calculated using FTSE All-Share Total Return Index

Performance & Benchmarking

Since Inception Analysis Starting From a Specific Vintage Year // commentary

Historical analysis

A

As was highlighted in the Performance Measurement Survey, IRR calculations have an implicit re-investment assumption, with all cash flows assumed to be able to be reinvested at the calculated return through the life of the investment. This means that early cashflows can have an outsized impact on the result, as these are assumed to be reinvested for a longer period of time. Chart 6 shows that removing older funds actually improves the more recent performance of the UK private equity and venture capital Industry.

B

Chart 8 shows that the story for public equities is the opposite. The Capital Dynamics PME+ analysis shows that removing historical performance decreases the return that investors would have received if they made equivalent investments in public equities.

A

In terms of multiples, the first observation from Chart 5 is that regardless of when we start the calculations, the TVPI multiple is constantly above 1.5x. This means that investors that started investing in private equity and venture capital funds between 1986 to 2016, are expected to receive at least 1.5x their original investment back.

B

Our Since Inception Starting From a Specific Vintage Year KS-PME analysis reiterates what is observed in the Capital Dynamics PME+ analysis for the same time horizons, with KS-PME multiples constantly above 1x, meaning that regardless of when we start our return calculations, investors received a greater return from investing in private equity and venture capital funds than they would if they made an equivalent investment in the public equity market.

A

The DPI for the collective of funds that started investing between 1986 and 2008 is already above 1x, with a minimum of 1.14x for funds that started investing from 2008 onwards. This means that these funds have already distributed back 14% of return back to investors, on top of the initial investment. A TVPI of 1.91x means that it is expected that funds that started investing from 2008 onwards are currently anticipated to return over 190% of the initial investment back to investors.

B

The KS-PME multiple for funds that started investing between 1986 and 2006 is constantly above 1.3x. This means that if funds in this pool were to liquidate their assets at 31 December 2020 at the given valuation, BVCA members with funds starting in these vintages would have generated at least 1.3x more than an equivalent investment in public equities would have.

B

For funds that started investing between 2007 and 2010, the KS-PME multiple is above 1.4x, reaching 1.59x for funds that started investing in 2010. This means that BVCA members who started investing from 2010 onwards are likely to generate 1.59x what an equivalent investment in public equities would do.

A B

In terms of IRR, the worst returns in our Since Inception Starting From a Specific Vintage Year analysis are for funds that started investing between 2002 and 2006, still these funds delivered as of December 2020 an IRR consistently above 12%. Equivalent investments in public equities would have yielded no more than 6.3% over this period.

A B

Performance certainly improved for funds that started investing between 2008 and 2010, with the private equity and venture capital industry delivering IRRs as of December 2020 consistently above 17%, reaching 19.1% for funds that started investing in 2010. The performance of the public equity market did not follow the same pace as that of private equity and venture capital funds, as equivalent investments for this group of funds would not have returned above 5.7%, and would have delivered as little as 4.3% for funds that started investing from 2010 onwards.

Performance & Benchmarking

Since Inception Analysis Starting From a Specific Vintage Year // commentary

The last decade

C

Chart 5 shows that expected returns for funds with vintages between 2011 and 2016 are promising, funds that started investing from 2011 onwards are expected to return back to investors 1.88x their initial investments. A DPI of 0.84x means that funds in this pool have already distributed back to investors 84% of their initial investment.

D

As can be observed in Chart 7, our KS-PME analysis shows that if these funds had been liquidated at 31 December 2020 at current valuation, investors would have generated 1.61x what they would have earned from an equivalent investment in public equities.

C

Funds that started investing from 2015 onwards still have a low DPI (0.43x) as these funds are still five and six years old, therefore at the beginning of the process of redistribution back to investors. A TVPI of 1.53x indicates that investors are expected to receive back at least 50% more than their initial investment.

D

The KS-PME analysis shows that, had the funds that started investing from 2015 onwards been liquidated at 31 December 2020, private equity and venture capital investors would have generated 1.43x what investors would have earned from equivalent investment in the public equity market. For funds that started investing from 2012 onwards, that difference in performance would have been 62%.

C

A similar result is seen in the IRRs, with vintages between 2011 and 2016 showing excellent returns. Should valuation levels keep growing at the current pace, funds that started investing from 2011 onwards are expected deliver a return of 19.6%, and a maximum of 20.3% for funds that started investing from 2012 onwards.

D

Our Capital Dynamics PME+ analysis shows that for funds that started investing from 2012 onwards, if an equivalent investment was made in the public equity markets, the expected return would have been no more than 3.6% p.a.

C D

The difference between investments in private equity and venture capital as opposed to public equities becomes more accentuated on later vintages (2015 – 2016). As we can observe, if these private equity and venture capital funds had been liquidated at the end of 2020, investors would have been expected to receive 16.7% (for funds that started investing from 2015 onwards) and 19.7% for funds that started investing in 2016. If equivalent investments had been made on public equities and liquidated at December 2020, investors would have received 2.4% of return (for funds that invested from 2015 onwards) and 1.7% for funds that started investing in 2016.

Conclusion

This report uses a large dataset of fund level cashflows and valuations from 1986 to 2020, as well as daily prices for the FTSE All-Share Total Return Index. We have provided significant detail on the returns achieved for investors by funds managed by BVCA members, and how these returns compare to equivalent investments in public equity. Our findings are clear:

- Our Since Inception analysis shows that funds that started investing between 1986 and 2016 have already distributed back to investors 1.43x of the original capital invested; if funds had liquidated their assets at 31 December 2020 at the given valuations, investors would have received back 1.8x their original investment. The pooled IRR achieved by these funds by December 2020 was 14.7%.
- The KS-PME analysis shows that for funds that started investing between 1986 and 2016, BVCA member funds generated 1.34x what investors would have earned from an equivalent public equity investment. The Capital Dynamics PME+ analysis showed that equivalent investments would have returned 6.7% by December 2020.
- Our Since Inception by Vintage Year analysis has shown that with the exception of 1989, vintages between 1986 and 1990 had a stronger performance on equivalent investments in public equities than on private equity and venture capital funds.
- The KS-PME and Capital Dynamics PME+ analyses both confirmed that since 1991, investors have received higher returns from private equity and venture capital funds than they would have received had they made an equivalent investment in public equities.
- Vintages between 2005 and 2007 are the worst performing vintages for the funds of our member firms. Despite the lower returns, with the exception od 2006, where the KS-PM equals 1x (breaking even with public equity), both in our KS-PME and Capital Dynamics PME+ analysis, the industry still outperformed the public equity market.
- The KS-PME analysis shows that for the later vintages (2011 – 2014) BVCA members generated 1.58x what investors would have earned if they had made similarly timed investments in the public markets.
- The Since Inception Starting From analysis highlighted that removing historical cashflows from our calculations actually increases the performance of the industry over time. The Capital Dynamics PME+ analysis shows that the opposite happened for equivalent investments in the public market: as older cashflows are removed from the calculations, performance decreases over time.

In Summary: from 1991 onwards, regardless of how we choose to analyse the performance of funds managed by members of the British Private Equity and Venture Capital Association, and regardless of which PME methodology is used, funds managed by our members outperformed the FTSE All-Share Total Return Index.

We are aware that there is significant literature available on private equity performance, including public market equivalent analyses, and we are pleased to be able to contribute to the evidence around the performance of UK private equity and venture capital funds in this report.

All data tables in this report are available on the BVCA website in excel format. 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 funds.

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.

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.

Further reading

The authors found the papers below to be helpful in developing an understanding of the various PME methodologies, and would recommend these to readers wanting to understand more about this topic:

- BVCA. Private Equity Performance Measurement - BVCA Perspectives Series, 2015.
- Capital Dynamics. Public benchmarking of private equity. Quantifying the shortness issue of PME, July 2015.
- Griffiths et al. Benchmarking Private Equity The Direct Alpha Method, February 2014.
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Contacts and useful resources

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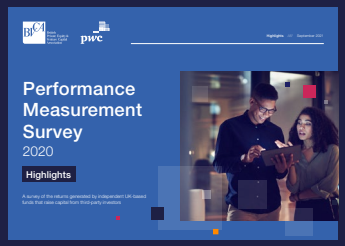

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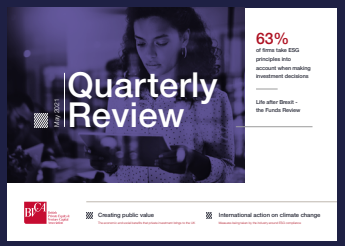

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About the BVCA

The British Private Equity & Venture Capital Association (BVCA) voices the private equity and venture capital industry's economic and social benefits to the UK. We represent the industry to politicians, policymakers, media, institutional investors, the business community, and the general public - our external stakeholders. Our work enables the Government to have a deeper understanding of the value we provide when shaping new policy and how our industry operates. We have 750 members, including 470 private equity and venture capital firms and their investors, as well as advisers and financial institutions. We help our members develop best practice, develop relationships, and make informed decisions by sharing the latest knowledge and expertise. We provide training for the industry to ensure the highest standards of skills and competencies.

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