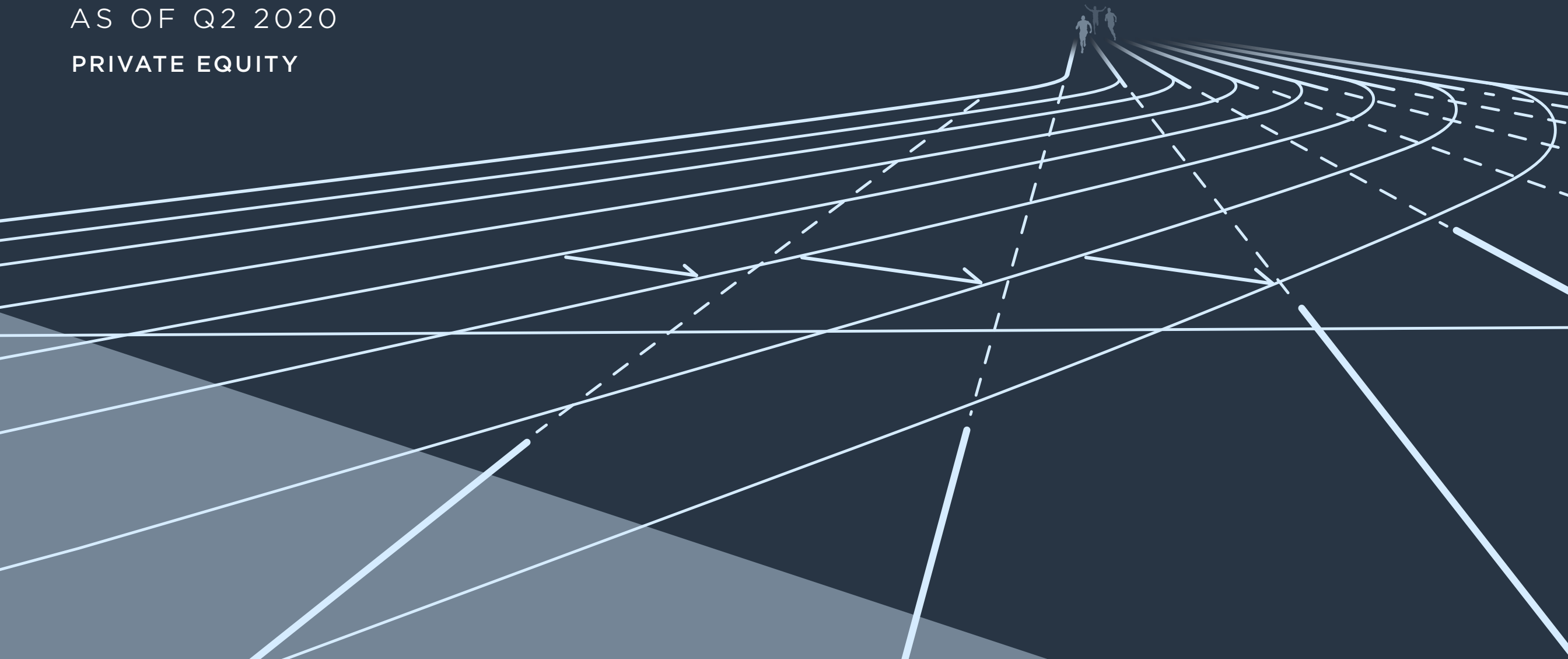




PitchBook Benchmarks

AS OF Q2 2020

PRIVATE EQUITY





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Introduction

PitchBook Benchmarks aim to help both LPs and GPs better understand fund performance relative to broader asset classes and other private market strategies. We present performance through several lenses—including internal rates of return (IRRs) and cash multiples—to provide a holistic view for assessing performance within and between strategies, as well as across vintage years. Furthermore, the returns of private market funds are measured relative to easily accessible public market substitutes using a public market equivalent (PME) metric.

We are expanding PitchBook Benchmarks to include additional slices based on fund strategy and geography, enabling performance comparisons with more representative peer groups. This quarter we are introducing dedicated PitchBook Benchmarks for North America, Europe, Private Equity, and Venture Capital, with more to be released in the future. To easily access the supporting data in this PDF, be sure to download the four accompanying Excel data packs. Links for those packs and the other Benchmark reports are below:

Excel data packs:

- [Global](#)
- [Europe](#)
- [North America](#)
- [Private equity](#)
- [Venture capital](#)

PitchBook Benchmark PDFs:

- [Global](#)
- [Europe](#)
- [North America](#)
- [Private equity](#)
- [Venture capital](#)

As transparency is fundamental to our benchmarking efforts, subscribers to the PitchBook Platform can utilize the data packs to gain direct access to all the underlying funds and performance metrics used to calculate our Benchmarks.

Our goal is to provide the most transparent, comprehensive and useful fund performance data for private market professionals. We hope that our Benchmarks prove useful in your practice, and we welcome any and all feedback that may arise as you make your way through our various benchmark groupings. Should there be any additional benchmark categories or data points you would like to see included in the future, please contact us directly at benchmarks@pitchbook.com.

Commitment pacing and cash flow models, as well as custom benchmarking analysis, can be made available upon request for PitchBook clients.



Methodology

Fund classifications

Private equity

Buyout
Growth/expansion
Mezzanine
Restructuring/turnaround
Diversified PE

Venture capital

Real estate

Real estate core
Real estate core plus
Real estate value added
Real estate opportunistic
Real estate distressed

Real assets

Infrastructure core
Infrastructure value added
Infrastructure opportunistic
Infrastructure greenfield
Energy
Timber
Metals/mining
Agriculture

Private debt

Direct lending
Bridge financing
Distressed debt
Credit special situations
Infrastructure debt
Venture debt
Real estate debt

Funds of funds

Secondaries

an LP report, (iv) a straight-line interpolation calculation is used to populate the missing data; interpolated data is used for approximately 10% of reporting periods, a figure that has been steadily declining.

Beginning with the PitchBook Benchmarks with data as of Q4 2019, we expanded our dataset to include funds with a reported IRR, even if the fund’s cash flow data does not meet the pooled calculation criteria.

We strive to maintain consistency from edition to edition of PitchBook Benchmarks, but fund classifications will change occasionally, and new funds will be incorporated into the dataset as we gather more information.

All returns data in this report is net of fees and carry.

Definitions and calculation methodologies

Fund count: Represents how many funds are included in a given sample. Note that some funds in our dataset have a reported IRR but lack sufficient cash flow information to be included in pooled calculations.

Median calculations: Shows the middle data point for a sample group.

Public market index returns: Instances where the return of a public market index is cited, we have calculated the annualized return for the given period. All public indices are total return and denominated in US dollars.

Standard deviation: Calculates the dispersion of reported IRRs for a given peer group using the sample-based standard deviation methodology.

Data composition

PitchBook’s fund returns data is primarily sourced from individual LP reports, serving as the baseline for our estimates of activity across an entire fund. For any given fund, return profiles will vary for LPs due to a range of factors, including fee discounts, timing of commitments and inclusion of co-investments. This granularity of LP-reported returns—all available on the PitchBook Platform—provides helpful insight to industry practitioners but results in discrepancies that must be addressed when calculating fund-level returns.

To be included in pooled calculations, a fund must have: (i) at least one LP report within two years of the fund’s vintage, and (ii) LP reports in at least 45% of applicable reporting periods. To mitigate discrepancies among multiple LPs reporting, the PitchBook Benchmarks (iii) determine returns for each fund based on data from all LP reports in a given period. For periods that lack



Vintage year: The vintage year is based on the year that a fund makes its first capital call. If the year of the initial call is unknown, the year of the final close is used as the vintage year. However, if a firm publicly declares via press release or a notice on their website a fund to be of a particular vintage different than either of the first conditions, the firm's classification takes precedence.

Quarterly return: The percentage change in aggregate NAV is calculated for each group of funds in a sample, considering contributions and distributions during the quarter. This makes the calculation tantamount to a quarterly compounded growth rate.

Internal rate of return (IRR): IRR represents the rate at which an historical series of cash flows are discounted so that the net present value of the cash flows equals zero. For pooled calculations, any remaining unrealized value in the fund is treated as a distribution in the most recent reporting period. This explains why some vintages show high IRRs but low DPI values.

Horizon IRR: Horizon IRR is a capital-weighted pooled calculation that shows the IRR for a certain range in time. For example, the one-year horizon IRR figures in the report may show the IRR performance for the one-year period beginning in Q2 20x0 through the end of Q1 20x1 while the three-year horizon IRR is for the period beginning in Q2 20x0 through the end of Q1 20x3.

Quarterly IRR: Calculated as the aggregate percentage change in aggregate NAV for each group of funds in a sample, considering contributions and distributions during the quarter. Interpolated and extended data are not used in this calculation. Preliminary data is only available for global benchmarks and will be published when 60% or more of NAV is captured for all private capital funds. Note that individual fund strategies may vary from that 60% threshold.

$$\text{Quarterly percentage change} = \left[\frac{\text{NAV at end of quarter} + \text{distributions during the quarter} - \text{contributions during the quarter}}{\text{NAV at the beginning of the quarter}} \right] - 1$$

Distributions to paid-in (DPI) multiple: A measurement of the capital that has been distributed back to LPs as a proportion of the total paid-in, or contributed, capital. DPI is also known as the cash-on-cash multiple or the realization multiple.

Remaining value to paid-in (RVPI) multiple: A measurement of the unrealized return of a fund as a proportion of the total paid-in, or contributed, capital.

Total value to paid-in (TVPI) multiple: A measurement of both the realized and unrealized value of a fund as a proportion of the total paid-in, or contributed, capital. Also known as the investment multiple, TVPI can be found by adding together the DPI and RVPI of a fund.

Pooled calculations: Pooled calculations combine cashflow data from a group of funds to create a capital-weighted IRR value. All cash flows and NAVs for each fund in the sample group (e.g. all private capital funds, 2004 vintage VC funds, etc.) are aggregated in the calculation. For vintage-specific calculations, we begin the calculation in Q1 of the vintage year, regardless of which quarter a fund first called capital. In cases where the sample has unrealized value, the ending NAV is treated as a cash outflow in the last reporting period.

Equal-weighted pooled calculations: Using the same methodology as the pooled calculations, the equal-weighted version expresses each fund's cash flows and ending NAV as a ratio of fund size. The result is that each fund in these calculations has an equal impact on the output, regardless of the fund size.

Public market equivalent (PME) calculations: PME metrics benchmark the performance of a fund (or group of funds) against an index. A white paper detailing the calculations and methodology behind the PME benchmarks can be found at [pitchbook.com](https://pitchbook.com/resources/whitepapers/public-market-equivalent-pme-benchmarks). [PitchBook News & Analysis](#) also contains several articles with PME benchmarks and analysis. All PME figures are calculated using the Kaplan-Schoar PME method:

$$\text{PME}_{\text{KS-TVPI}, T} = \frac{\frac{\text{NAV}_T}{I_T} + \sum_{t=0}^T \left(\frac{\text{distribution}_t}{I_t} \right)}{\sum_{t=0}^T \left(\frac{\text{contribution}_t}{I_t} \right)}$$

When using a KS-PME, a value greater than 1.0 implies outperformance of the fund over the public index (net of all fees).

$$PME_{KS-TVPI} = \frac{\frac{NAV}{I_T} + \sum_{t=0}^T \left(\frac{\text{distribution}_t}{I_T} \right)}{\sum_{t=0}^T \left(\frac{\text{contribution}_t}{I_T} \right)}$$

PitchBook introduces new commitment pacing and cash flow models

Greater transparency.
More flexibility.
Differentiated data.



PitchBook has leveraged our massive private fund database to develop several models to help limited partners (LPs) better navigate private markets. These new models offer foresight into planning for commitment pacing and preparing for capital calls, allowing the user to customize for their specific allocations and assumptions.

All the models introduced in this series are available to PitchBook clients. We welcome any questions, comments, or inquiries at benchmarks@pitchbook.com.

Download the full Basics of Cash Flow Management series.



Private equity



Private equity

Horizon IRRs

Strategy	Q2 2020	1-year	3-year	5-year	10-year	15-year	20-year
Global PE	9.30%	8.04%	11.82%	12.18%	13.89%	12.04%	11.34%
North America PE	10.18%	9.49%	12.12%	12.41%	14.73%	12.64%	11.35%
Europe PE	8.16%	6.17%	13.78%	13.70%	12.88%	10.74%	11.98%
Rest of world PE	5.11%	2.09%	6.66%	7.70%	9.09%	9.44%	8.76%
PE < \$250M	2.89%	1.77%	8.60%	8.04%	10.36%	9.74%	7.46%
PE \$250M - \$500M	7.85%	6.25%	11.85%	12.31%	12.61%	12.43%	10.27%
PE \$500M - \$1B	4.72%	6.00%	11.60%	12.51%	12.59%	12.33%	10.25%
PE \$1B+	9.71%	8.48%	11.90%	12.21%	14.18%	12.02%	11.66%
Buyout	9.24%	7.77%	11.89%	12.36%	14.03%	12.14%	11.41%
Growth/expansion	12.10%	14.68%	15.80%	14.19%	14.02%	13.14%	12.20%
Other PE	4.23%	0.92%	3.56%	5.27%	10.89%	8.85%	8.88%
S&P 500	20.54%	7.51%	10.79%	10.79%	13.87%	8.78%	5.96%
MSCI All Country World Index	19.39%	2.64%	6.64%	7.04%	9.67%	6.96%	
Russell 3000	22.03%	6.53%	10.10%	10.11%	13.61%	8.73%	6.18%
Morningstar Europe	16.47%	-6.24%	0.53%	2.11%	6.50%	5.01%	4.42%
Morningstar Emerging Markets	19.74%	-3.14%	2.36%	3.56%	3.95%	7.35%	7.35%

Source: PitchBook. Geography: Global . Data as of June 30, 2020
Note: all public index values are total return CAGRs



Private equity

Equal-weighted horizon IRRs

Strategy	Q2 2020	1-year	3-year	5-year	10-year	15-year	20-year
Global PE	6.43%	5.69%	11.22%	11.53%	12.57%	11.95%	10.25%
North America PE	6.85%	7.23%	12.68%	12.73%	13.66%	12.60%	10.31%
Europe PE	5.60%	6.02%	11.96%	11.80%	11.55%	10.68%	11.81%
Rest of world PE	5.08%	-2.87%	2.93%	4.86%	6.83%	8.31%	6.88%
PE < \$250M	1.42%	0.56%	8.05%	7.55%	9.76%	9.18%	7.02%
PE \$250M - \$500M	7.78%	6.23%	12.12%	12.39%	12.85%	12.70%	10.37%
PE \$500M - \$1B	4.76%	5.98%	11.53%	12.46%	12.58%	12.32%	10.35%
PE \$1B+	7.87%	7.34%	11.85%	12.16%	13.54%	12.42%	11.62%
Buyout	6.11%	5.71%	11.66%	12.18%	12.99%	12.43%	10.48%
Growth/expansion	9.61%	6.69%	10.96%	10.86%	11.94%	11.54%	10.23%
Other PE	2.45%	2.90%	6.48%	5.86%	9.57%	8.40%	8.01%
S&P 500	20.54%	7.51%	10.79%	10.79%	13.87%	8.78%	5.96%
MSCI All Country World Index	19.39%	2.64%	6.64%	7.04%	9.67%	6.96%	
Russell 3000	22.03%	6.53%	10.10%	10.11%	13.61%	8.73%	6.18%
Morningstar Europe	16.47%	-6.24%	0.53%	2.11%	6.50%	5.01%	4.42%
Morningstar Emerging Markets	19.74%	-3.14%	2.36%	3.56%	3.95%	7.35%	7.35%

Source: PitchBook. Geography: Global . Data as of June 30, 2020
Note: all public index values are total return CAGRs

Global PE



Global PE

IRR by vintage

Pooled IRRs

IRR hurdle rates

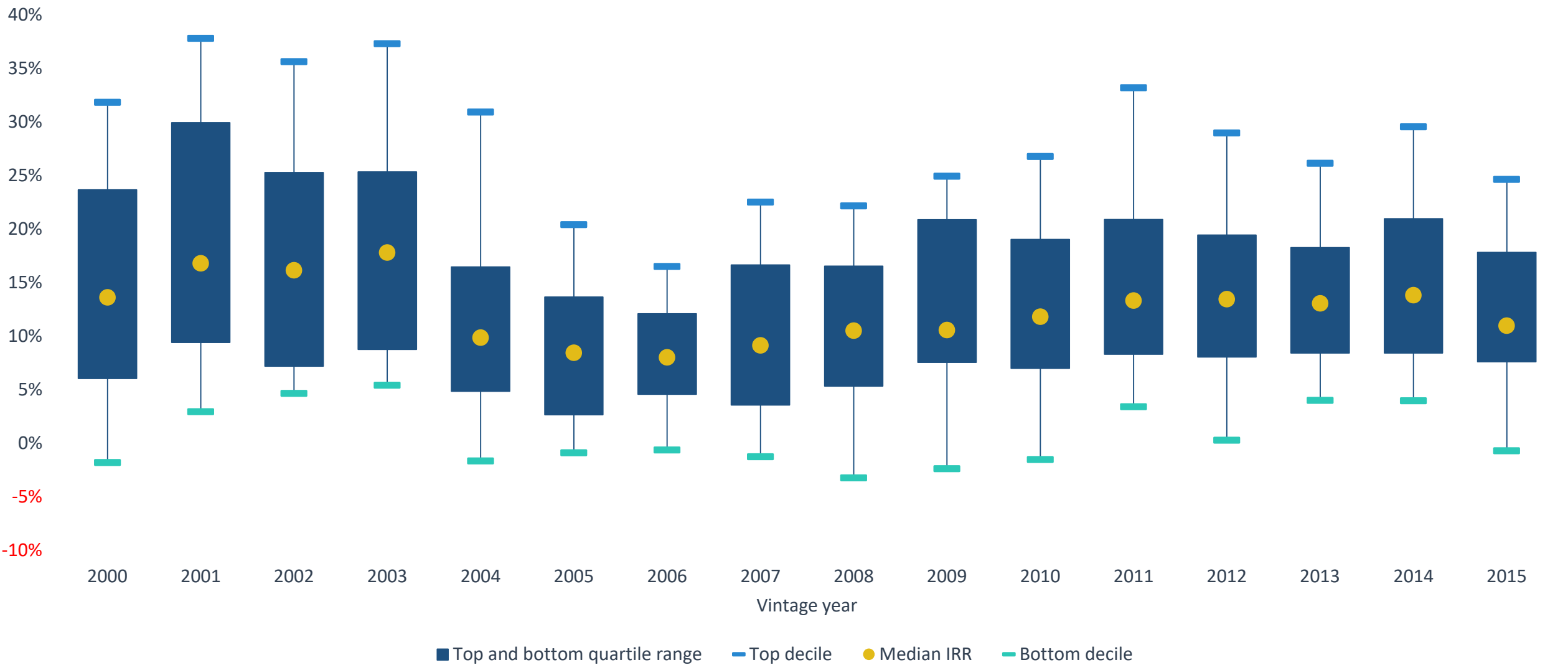
Vintage year	Pooled IRR	Equal-weighted pooled IRR	Number of funds	Top decile	Top quartile	Median IRR	Bottom quartile	Bottom decile	Standard deviation	Number of funds
Pre-1996	19.97%	10.44%	6	36.55%	28.59%	16.67%	9.86%	-2.85%	18.35%	87
1996	11.34%	8.04%	24	23.46%	17.26%	5.96%	0.38%	-6.53%	13.77%	36
1997	9.78%	7.51%	25	26.85%	13.41%	7.46%	0.14%	-3.93%	15.94%	34
1998	6.52%	5.27%	42	20.31%	14.30%	8.19%	0.80%	-8.41%	10.90%	58
1999	9.88%	11.23%	40	24.58%	17.85%	11.79%	4.85%	-0.42%	11.60%	57
2000	15.93%	12.40%	51	31.81%	23.65%	13.60%	6.03%	-1.81%	12.48%	71
2001	24.26%	20.23%	35	37.78%	29.91%	16.78%	9.41%	2.93%	17.51%	43
2002	20.44%	16.70%	36	35.60%	25.27%	16.14%	7.20%	4.64%	20.62%	52
2003	18.08%	15.08%	24	37.28%	25.32%	17.79%	8.75%	5.41%	12.82%	34
2004	11.82%	10.95%	51	30.91%	16.46%	9.85%	4.85%	-1.66%	17.72%	60
2005	9.33%	9.02%	78	20.40%	13.64%	8.43%	2.66%	-0.90%	12.09%	96
2006	7.40%	7.20%	114	16.48%	12.08%	8.00%	4.58%	-0.64%	8.39%	146
2007	9.02%	9.32%	116	22.50%	16.64%	9.13%	3.56%	-1.27%	11.92%	143
2008	12.44%	10.09%	114	22.15%	16.52%	10.50%	5.32%	-3.25%	14.31%	136
2009	13.51%	13.96%	49	24.92%	20.85%	10.55%	7.55%	-2.39%	15.71%	62
2010	11.38%	10.50%	60	26.76%	19.01%	11.80%	6.98%	-1.54%	12.54%	63
2011	14.27%	14.54%	81	33.17%	20.88%	13.32%	8.30%	3.40%	17.77%	94
2012	14.54%	12.16%	108	28.95%	19.43%	13.44%	8.05%	0.27%	13.23%	110
2013	12.14%	12.81%	98	26.12%	18.26%	13.05%	8.43%	4.00%	11.44%	98
2014	16.97%	15.06%	101	29.52%	20.95%	13.81%	8.43%	3.96%	12.66%	99
2015	14.95%	13.45%	121	24.61%	17.81%	10.97%	7.59%	-0.71%	10.85%	118
2016	15.96%	15.16%	119	29.45%	23.16%	13.64%	8.11%	1.19%	13.73%	122
2017	13.50%	10.87%	126	28.37%	17.69%	8.76%	2.07%	-9.05%	22.54%	112
2018	4.76%	4.87%	131	35.88%	16.40%	4.64%	-12.68%	-34.50%	31.28%	116

Source: PitchBook. Geography: Global . Data as of June 30, 2020



Global PE

IRR by vintage





Global PE

PMEs by vintage

S&P 500 index

MSCI All Country World Index

Vintage year	Pooled IRR	Index return	KS-PME	Pooled IRR	Index return	KS-PME	Number of funds
1996	11.34%	8.54%	1.38	11.34%	6.50%	1.37	24
1997	9.78%	7.84%	1.38	9.78%	6.27%	1.34	25
1998	6.52%	6.85%	1.30	6.52%	5.60%	1.21	42
1999	9.88%	6.06%	1.37	9.88%	5.20%	1.26	40
2000	15.93%	5.68%	1.49	15.93%	4.49%	1.35	51
2001	24.26%	6.52%	1.69	24.26%	5.60%	1.54	35
2002	20.44%	7.50%	1.47	20.44%	6.77%	1.38	36
2003	18.08%	9.57%	1.47	18.08%	8.56%	1.42	24
2004	11.82%	8.23%	1.32	11.82%	6.80%	1.34	51
2005	9.33%	8.30%	1.17	9.33%	6.46%	1.27	78
2006	7.40%	8.21%	1.00	7.40%	5.75%	1.14	114
2007	9.02%	7.85%	0.95	9.02%	4.90%	1.10	116
2008	12.44%	8.82%	0.98	12.44%	5.17%	1.15	114
2009	13.51%	14.51%	0.98	13.51%	11.04%	1.14	49
2010	11.38%	12.10%	0.94	11.38%	7.85%	1.11	60
2011	14.27%	11.46%	1.06	14.27%	6.92%	1.24	81
2012	14.54%	12.17%	1.09	14.54%	8.04%	1.24	108
2013	12.14%	11.81%	1.04	12.14%	7.38%	1.17	98
2014	16.97%	10.01%	1.21	16.97%	5.95%	1.33	101
2015	14.95%	9.12%	1.11	14.95%	5.73%	1.21	121
2016	15.96%	12.30%	1.14	15.96%	9.29%	1.23	119
2017	13.50%	9.53%	1.10	13.50%	6.28%	1.16	126
2018	4.76%	5.24%	1.01	4.76%	0.06%	1.05	131

Source: PitchBook. Geography: Global . Data as of June 30, 2020



Multiples by vintage

Pooled multiples

Equal-weighted pooled multiples

Vintage year	TVPI	DPI	RVPI	TVPI	DPI	RVPI	Number of funds
Pre-1996	1.69x	1.67x	0.02x	1.47x	1.40x	0.07x	6
1996	1.56x	1.56x	0.00x	1.39x	1.39x	0.00x	24
1997	1.59x	1.59x	0.00x	1.39x	1.39x	0.00x	25
1998	1.39x	1.38x	0.00x	1.28x	1.28x	0.00x	42
1999	1.53x	1.52x	0.00x	1.65x	1.64x	0.01x	40
2000	1.82x	1.81x	0.01x	1.71x	1.69x	0.02x	51
2001	2.18x	2.16x	0.01x	2.00x	1.98x	0.02x	35
2002	1.98x	1.96x	0.02x	1.79x	1.77x	0.02x	36
2003	1.87x	1.85x	0.02x	1.78x	1.75x	0.04x	24
2004	1.71x	1.66x	0.05x	1.64x	1.58x	0.06x	51
2005	1.56x	1.52x	0.04x	1.54x	1.49x	0.05x	78
2006	1.48x	1.42x	0.06x	1.44x	1.36x	0.08x	114
2007	1.50x	1.37x	0.13x	1.53x	1.41x	0.12x	116
2008	1.64x	1.50x	0.13x	1.53x	1.37x	0.16x	114
2009	1.65x	1.50x	0.15x	1.68x	1.46x	0.22x	49
2010	1.59x	1.18x	0.42x	1.54x	1.14x	0.40x	60
2011	1.72x	1.17x	0.55x	1.75x	1.18x	0.57x	81
2012	1.61x	1.00x	0.62x	1.50x	0.92x	0.58x	108
2013	1.43x	0.77x	0.66x	1.49x	0.76x	0.73x	98
2014	1.61x	0.71x	0.90x	1.55x	0.62x	0.93x	101
2015	1.38x	0.44x	0.94x	1.36x	0.41x	0.95x	121
2016	1.33x	0.24x	1.09x	1.32x	0.28x	1.04x	119
2017	1.18x	0.14x	1.05x	1.16x	0.18x	0.99x	126
2018	1.04x	0.06x	0.98x	1.05x	0.09x	0.95x	131

Source: PitchBook. Geography: Global . Data as of June 30, 2020



Global PE

Multiples by vintage

TVPI						DPI					Number of funds
Vintage year	Top decile	Top quartile	Median TVPI	Bottom quartile	Bottom decile	Top decile	Top quartile	Median DPI	Bottom quartile	Bottom decile	
Pre-1996		1.82x	1.39x	0.96x			1.82x	1.20x	0.79x		6
1996	2.27x	1.83x	1.28x	0.95x	0.55x	2.27x	1.83x	1.28x	0.95x	0.55x	24
1997	2.02x	1.75x	1.46x	1.02x	0.76x	2.02x	1.75x	1.46x	1.02x	0.76x	25
1998	1.88x	1.57x	1.32x	0.93x	0.58x	1.88x	1.57x	1.30x	0.93x	0.58x	42
1999	2.38x	2.03x	1.61x	1.23x	0.99x	2.38x	1.97x	1.61x	1.22x	0.99x	40
2000	2.42x	2.09x	1.67x	1.31x	0.94x	2.42x	2.08x	1.66x	1.29x	0.83x	51
2001	2.93x	2.43x	2.01x	1.54x	1.28x	2.93x	2.43x	1.94x	1.54x	1.28x	35
2002	2.50x	2.16x	1.75x	1.34x	1.21x	2.48x	2.15x	1.75x	1.34x	1.21x	36
2003	3.04x	1.90x	1.67x	1.43x	0.80x	2.96x	1.90x	1.67x	1.39x	0.78x	24
2004	2.54x	1.99x	1.59x	1.28x	0.80x	2.54x	1.98x	1.57x	1.16x	0.80x	51
2005	2.29x	1.81x	1.47x	1.21x	0.91x	2.28x	1.74x	1.40x	1.14x	0.87x	78
2006	2.08x	1.65x	1.40x	1.17x	0.89x	2.01x	1.62x	1.36x	1.13x	0.64x	114
2007	2.21x	1.91x	1.48x	1.15x	0.90x	2.09x	1.81x	1.35x	0.99x	0.74x	116
2008	2.11x	1.85x	1.50x	1.23x	0.87x	2.00x	1.65x	1.36x	1.01x	0.68x	114
2009	2.44x	2.02x	1.56x	1.32x	0.91x	2.33x	1.86x	1.39x	1.15x	0.77x	49
2010	2.37x	1.89x	1.47x	1.17x	0.83x	1.86x	1.47x	1.17x	0.86x	0.44x	60
2011	2.89x	2.10x	1.56x	1.26x	1.03x	1.97x	1.49x	1.11x	0.63x	0.35x	81
2012	2.05x	1.80x	1.45x	1.21x	0.91x	1.52x	1.20x	0.89x	0.55x	0.32x	108
2013	1.94x	1.64x	1.47x	1.25x	1.02x	1.25x	1.05x	0.68x	0.42x	0.17x	98
2014	2.26x	1.71x	1.40x	1.18x	0.99x	1.28x	0.77x	0.53x	0.22x	0.04x	101
2015	1.89x	1.41x	1.30x	1.15x	0.93x	0.79x	0.58x	0.34x	0.14x	0.03x	121
2016	1.70x	1.51x	1.25x	1.10x	0.98x	0.66x	0.42x	0.19x	0.04x	0.00x	119
2017	1.41x	1.25x	1.13x	0.97x	0.86x	0.42x	0.19x	0.06x	0.00x	0.00x	126
2018	1.28x	1.13x	1.01x	0.89x	0.74x	0.26x	0.06x	0.01x	0.00x	0.00x	131

Source: PitchBook. Geography: Global . Data as of June 30, 2020



Global PE

Quarterly return

Quarter end	1-quarter return
Q1 2001	-6.40%
Q2 2001	0.44%
Q3 2001	-3.64%
Q4 2001	-3.96%
Q1 2002	-0.75%
Q2 2002	-2.87%
Q3 2002	-2.82%
Q4 2002	-0.28%
Q1 2003	0.15%
Q2 2003	5.94%
Q3 2003	4.02%
Q4 2003	9.59%
Q1 2004	9.18%
Q2 2004	0.26%
Q3 2004	2.73%
Q4 2004	13.60%
Q1 2005	2.08%
Q2 2005	8.41%
Q3 2005	7.70%
Q4 2005	10.31%
Q1 2006	4.17%
Q2 2006	5.66%
Q3 2006	4.41%
Q4 2006	12.66%

Quarter end	1-quarter return
Q1 2007	5.41%
Q2 2007	8.87%
Q3 2007	4.38%
Q4 2007	3.18%
Q1 2008	0.07%
Q2 2008	-1.27%
Q3 2008	-8.28%
Q4 2008	-11.88%
Q1 2009	-7.75%
Q2 2009	4.32%
Q3 2009	5.10%
Q4 2009	7.71%
Q1 2010	2.83%
Q2 2010	1.31%
Q3 2010	4.83%
Q4 2010	7.78%
Q1 2011	5.26%
Q2 2011	4.57%
Q3 2011	-2.88%
Q4 2011	1.13%
Q1 2012	5.94%
Q2 2012	0.72%
Q3 2012	3.76%
Q4 2012	3.13%

Quarter end	1-quarter return
Q1 2013	3.18%
Q2 2013	2.95%
Q3 2013	4.89%
Q4 2013	5.73%
Q1 2014	4.65%
Q2 2014	5.03%
Q3 2014	0.16%
Q4 2014	3.31%
Q1 2015	3.43%
Q2 2015	5.59%
Q3 2015	0.65%
Q4 2015	1.98%
Q1 2016	1.69%
Q2 2016	4.42%
Q3 2016	4.42%
Q4 2016	1.45%
Q1 2017	4.66%
Q2 2017	5.40%
Q3 2017	4.45%
Q4 2017	4.63%
Q1 2018	4.08%
Q2 2018	3.32%
Q3 2018	3.31%
Q4 2018	-0.81%

Quarter end	1-quarter return
Q1 2019	4.76%
Q2 2019	3.03%
Q3 2019	3.29%
Q4 2019	4.88%
Q1 2020	-8.32%
Q2 2020	9.30%

North America PE



North America PE

IRR by vintage

Pooled IRRs

IRR hurdle rates

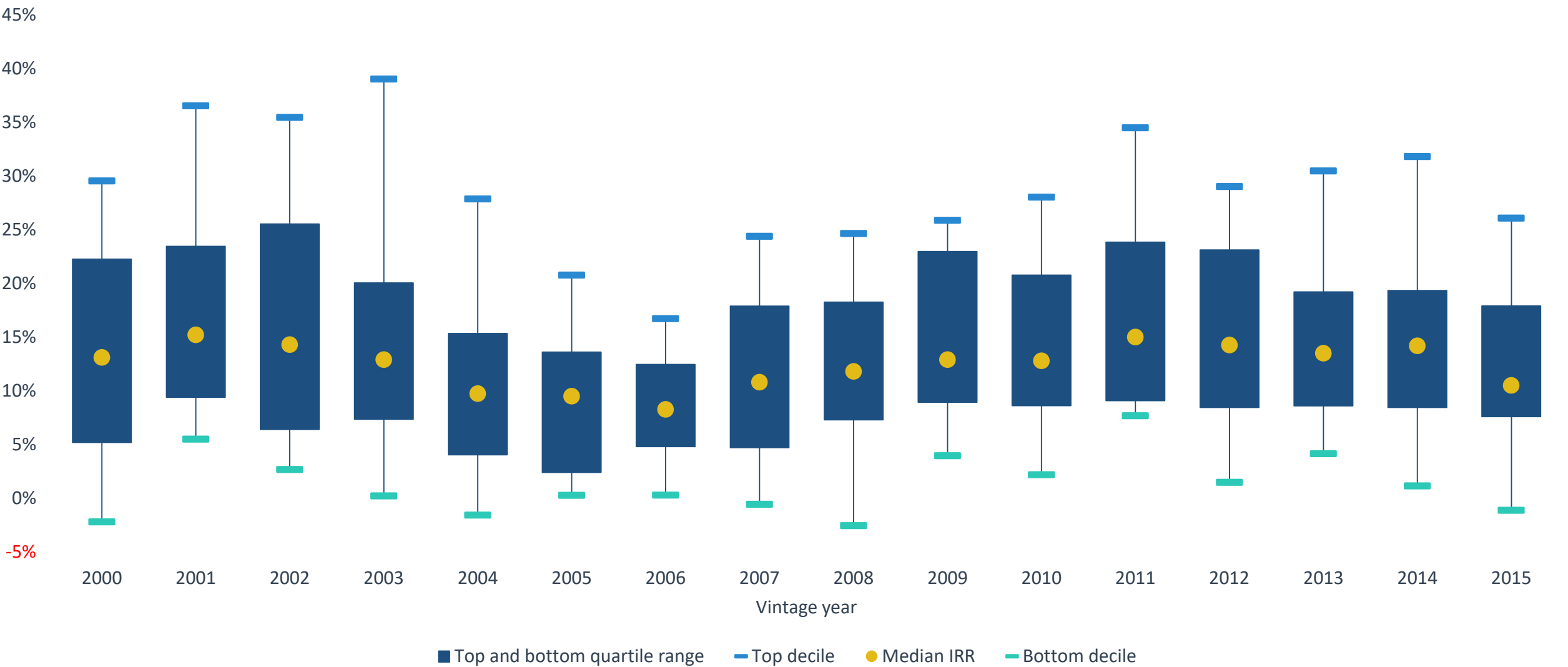
Vintage year	Pooled IRR	Equal-weighted pooled IRR	Number of funds	Top decile	Top quartile	Median IRR	Bottom quartile	Bottom decile	Standard deviation	Number of funds
Pre-1996	9.68%	8.09%	4	36.01%	28.38%	16.67%	9.91%	-2.24%	18.09%	85
1996	11.30%	6.57%	21	23.02%	15.57%	5.62%	0.30%	-6.63%	13.85%	33
1997	7.59%	5.63%	19	15.96%	12.44%	6.30%	-0.41%	-3.36%	15.85%	27
1998	5.25%	5.38%	36	16.88%	10.33%	7.13%	0.36%	-8.41%	10.13%	48
1999	9.33%	11.49%	34	25.62%	16.87%	11.79%	4.85%	-0.27%	11.93%	49
2000	14.94%	11.26%	43	29.52%	22.25%	13.10%	5.20%	-2.21%	12.24%	59
2001	19.14%	17.09%	24	36.52%	23.45%	15.20%	9.41%	5.49%	18.02%	30
2002	20.07%	15.79%	31	35.44%	25.52%	14.30%	6.40%	2.67%	22.29%	43
2003	15.93%	13.70%	19	39.01%	20.03%	12.90%	7.36%	0.22%	13.38%	25
2004	11.45%	10.22%	44	27.84%	15.34%	9.73%	4.05%	-1.57%	17.29%	51
2005	11.04%	10.17%	57	20.76%	13.60%	9.50%	2.40%	0.27%	9.82%	73
2006	7.98%	7.98%	90	16.72%	12.45%	8.26%	4.81%	0.30%	8.77%	106
2007	10.07%	10.93%	79	24.37%	17.88%	10.80%	4.72%	-0.57%	12.88%	103
2008	13.88%	12.15%	73	24.64%	18.25%	11.80%	7.30%	-2.56%	16.83%	83
2009	18.73%	17.38%	36	25.85%	22.96%	12.89%	8.94%	3.96%	12.19%	44
2010	15.55%	12.29%	36	28.02%	20.77%	12.78%	8.63%	2.19%	13.07%	44
2011	15.89%	15.88%	51	34.47%	23.84%	15.00%	9.08%	7.66%	20.41%	57
2012	15.59%	14.38%	72	29.00%	23.10%	14.26%	8.46%	1.47%	14.04%	80
2013	12.37%	13.39%	69	30.45%	19.20%	13.50%	8.60%	4.14%	12.47%	73
2014	17.58%	15.76%	74	31.80%	19.33%	14.18%	8.46%	1.15%	13.34%	76
2015	16.12%	15.15%	82	26.06%	17.90%	10.50%	7.60%	-1.12%	11.76%	92
2016	17.05%	16.95%	81	31.74%	23.85%	13.71%	8.14%	4.60%	13.69%	87
2017	13.44%	11.81%	95	27.88%	16.38%	8.28%	1.81%	-8.98%	16.89%	94
2018	3.63%	6.11%	89	40.46%	15.73%	7.82%	-8.44%	-17.80%	28.66%	84

Source: PitchBook. Geography: North America . Data as of June 30, 2020



North America PE

IRRs by vintage





North America PE

PMEs by vintage

S&P 500 index				Russell 3000 Index			
Vintage year	Pooled IRR	Index return	KS-PME	Pooled IRR	Index return	KS-PME	Number of funds
1996	11.30%	8.54%	1.38	11.30%	8.53%	1.35	21
1997	7.59%	7.84%	1.26	7.59%	7.91%	1.22	19
1998	5.25%	6.85%	1.23	5.25%	6.95%	1.18	36
1999	9.33%	6.06%	1.33	9.33%	6.36%	1.29	34
2000	14.94%	5.68%	1.45	14.94%	5.84%	1.41	43
2001	19.14%	6.52%	1.56	19.14%	6.72%	1.53	24
2002	20.07%	7.50%	1.49	20.07%	7.66%	1.46	31
2003	15.93%	9.57%	1.40	15.93%	9.71%	1.37	19
2004	11.45%	8.23%	1.31	11.45%	8.24%	1.29	44
2005	11.04%	8.30%	1.29	11.04%	8.28%	1.27	57
2006	7.98%	8.21%	1.04	7.98%	8.04%	1.03	90
2007	10.07%	7.85%	1.00	10.07%	7.67%	0.99	79
2008	13.88%	8.82%	1.04	13.88%	8.71%	1.03	73
2009	18.73%	14.51%	1.14	18.73%	14.40%	1.14	36
2010	15.55%	12.10%	1.09	15.55%	11.82%	1.10	36
2011	15.89%	11.46%	1.12	15.89%	10.99%	1.14	51
2012	15.59%	12.17%	1.12	15.59%	11.73%	1.14	72
2013	12.37%	11.81%	1.05	12.37%	11.28%	1.06	69
2014	17.58%	10.01%	1.23	17.58%	9.24%	1.25	74
2015	16.12%	9.12%	1.14	16.12%	8.42%	1.16	82
2016	17.05%	12.30%	1.16	17.05%	11.89%	1.18	81
2017	13.44%	9.53%	1.10	13.44%	8.63%	1.11	95
2018	3.63%	5.24%	1.00	3.63%	4.24%	1.01	89

Source: PitchBook. Geography: North America . Data as of June 30, 2020



North America PE

Multiples by vintage

Pooled multiplesEqual-weighted pooled multiples

Vintage year	TVPI	DPI	RVPI	TVPI	DPI	RVPI	Number of funds
Pre-1996	1.45x	1.42x	0.03x	1.43x	1.32x	0.11x	4
1996	1.57x	1.57x	0.00x	1.33x	1.33x	0.00x	21
1997	1.48x	1.48x	0.00x	1.31x	1.31x	0.00x	19
1998	1.32x	1.31x	0.00x	1.29x	1.28x	0.00x	36
1999	1.48x	1.48x	0.00x	1.64x	1.63x	0.01x	34
2000	1.79x	1.78x	0.01x	1.66x	1.64x	0.02x	43
2001	2.02x	2.01x	0.00x	1.86x	1.86x	0.00x	24
2002	2.00x	1.98x	0.02x	1.76x	1.74x	0.02x	31
2003	1.85x	1.81x	0.04x	1.71x	1.66x	0.05x	19
2004	1.72x	1.66x	0.06x	1.62x	1.55x	0.07x	44
2005	1.72x	1.68x	0.04x	1.64x	1.59x	0.05x	57
2006	1.53x	1.47x	0.07x	1.49x	1.41x	0.09x	90
2007	1.56x	1.40x	0.16x	1.64x	1.51x	0.13x	79
2008	1.69x	1.54x	0.15x	1.62x	1.46x	0.16x	73
2009	1.90x	1.73x	0.17x	1.86x	1.62x	0.23x	36
2010	1.86x	1.39x	0.47x	1.65x	1.25x	0.40x	36
2011	1.83x	1.26x	0.57x	1.83x	1.29x	0.54x	51
2012	1.66x	1.01x	0.65x	1.60x	0.99x	0.61x	72
2013	1.43x	0.79x	0.64x	1.50x	0.75x	0.75x	69
2014	1.62x	0.74x	0.88x	1.59x	0.68x	0.91x	74
2015	1.40x	0.44x	0.96x	1.40x	0.43x	0.97x	82
2016	1.35x	0.25x	1.11x	1.37x	0.31x	1.06x	81
2017	1.19x	0.14x	1.05x	1.18x	0.18x	0.99x	95
2018	1.03x	0.06x	0.97x	1.06x	0.10x	0.96x	89

Source: PitchBook. Geography: North America . Data as of June 30, 2020



North America PE

Multiples by vintage

DPI											
Vintage year	Top decile	Top quartile	Median TVPI	Bottom quartile	Bottom decile	Top decile	Top quartile	Median DPI	Bottom quartile	Bottom decile	Number of funds
Pre-1996		1.64x	1.39x	1.15x			1.64x	1.20x	0.80x		4
1996	2.14x	1.82x	1.23x	0.78x	0.51x	2.14x	1.82x	1.23x	0.78x	0.51x	21
1997	1.79x	1.68x	1.40x	0.97x	0.82x	1.79x	1.68x	1.40x	0.97x	0.82x	19
1998	1.86x	1.54x	1.29x	0.95x	0.63x	1.86x	1.54x	1.27x	0.95x	0.63x	36
1999	2.33x	2.01x	1.57x	1.23x	1.00x	2.33x	1.95x	1.57x	1.19x	1.00x	34
2000	2.37x	2.08x	1.66x	1.28x	0.87x	2.37x	2.07x	1.60x	1.28x	0.80x	43
2001	2.83x	2.28x	1.81x	1.52x	1.28x	2.83x	2.28x	1.81x	1.52x	1.28x	24
2002	2.51x	2.11x	1.69x	1.33x	1.21x	2.49x	2.10x	1.69x	1.33x	1.21x	31
2003	2.83x	1.88x	1.68x	1.43x	0.77x	2.80x	1.87x	1.68x	1.38x	0.68x	19
2004	2.54x	1.99x	1.59x	1.25x	0.67x	2.53x	1.98x	1.57x	1.14x	0.66x	44
2005	2.37x	1.86x	1.56x	1.27x	0.99x	2.34x	1.82x	1.50x	1.16x	0.97x	57
2006	2.12x	1.71x	1.42x	1.21x	0.95x	2.08x	1.64x	1.37x	1.17x	0.80x	90
2007	2.39x	2.04x	1.59x	1.28x	0.98x	2.31x	1.91x	1.45x	1.06x	0.87x	79
2008	2.20x	1.97x	1.59x	1.31x	0.91x	2.04x	1.85x	1.36x	1.14x	0.76x	73
2009	2.53x	2.17x	1.73x	1.50x	1.27x	2.37x	2.00x	1.43x	1.20x	1.09x	36
2010	2.42x	2.14x	1.52x	1.26x	0.84x	2.08x	1.64x	1.21x	0.98x	0.51x	36
2011	3.26x	2.11x	1.64x	1.31x	1.07x	2.11x	1.57x	1.20x	0.83x	0.56x	51
2012	2.13x	1.93x	1.54x	1.28x	1.01x	1.60x	1.26x	0.92x	0.58x	0.40x	72
2013	1.98x	1.64x	1.50x	1.29x	1.04x	1.26x	1.05x	0.67x	0.41x	0.13x	69
2014	2.25x	1.82x	1.49x	1.21x	0.97x	1.43x	0.84x	0.60x	0.25x	0.05x	74
2015	1.93x	1.46x	1.30x	1.17x	0.97x	0.81x	0.59x	0.35x	0.14x	0.02x	82
2016	1.83x	1.56x	1.25x	1.12x	1.01x	0.68x	0.47x	0.20x	0.05x	0.00x	81
2017	1.43x	1.24x	1.13x	0.99x	0.88x	0.42x	0.20x	0.08x	0.01x	0.00x	95
2018	1.28x	1.14x	1.01x	0.93x	0.82x	0.26x	0.07x	0.01x	0.00x	0.00x	89

Source: PitchBook. Geography: North America . Data as of June 30, 2020



North America PE

Quarterly return

Quarter end	1-quarter return
Q1 2001	-7.53%
Q2 2001	1.71%
Q3 2001	-5.64%
Q4 2001	-3.97%
Q1 2002	-1.41%
Q2 2002	-6.82%
Q3 2002	-3.81%
Q4 2002	0.65%
Q1 2003	-0.55%
Q2 2003	7.07%
Q3 2003	4.65%
Q4 2003	9.49%
Q1 2004	10.72%
Q2 2004	-3.58%
Q3 2004	2.92%
Q4 2004	12.82%
Q1 2005	3.55%
Q2 2005	7.87%
Q3 2005	8.26%
Q4 2005	10.06%
Q1 2006	4.79%
Q2 2006	3.66%
Q3 2006	4.65%
Q4 2006	10.58%

Quarter end	1-quarter return
Q1 2007	5.38%
Q2 2007	9.47%
Q3 2007	3.38%
Q4 2007	2.59%
Q1 2008	-0.97%
Q2 2008	-0.75%
Q3 2008	-6.75%
Q4 2008	-11.20%
Q1 2009	-5.59%
Q2 2009	3.79%
Q3 2009	4.00%
Q4 2009	6.81%
Q1 2010	4.97%
Q2 2010	2.16%
Q3 2010	3.06%
Q4 2010	7.75%
Q1 2011	5.52%
Q2 2011	4.78%
Q3 2011	-2.01%
Q4 2011	1.11%
Q1 2012	6.05%
Q2 2012	1.27%
Q3 2012	3.74%
Q4 2012	2.77%

Quarter end	1-quarter return
Q1 2013	4.08%
Q2 2013	3.84%
Q3 2013	5.19%
Q4 2013	5.31%
Q1 2014	5.11%
Q2 2014	4.79%
Q3 2014	1.59%
Q4 2014	4.05%
Q1 2015	4.55%
Q2 2015	5.93%
Q3 2015	0.34%
Q4 2015	1.57%
Q1 2016	1.47%
Q2 2016	5.58%
Q3 2016	4.47%
Q4 2016	1.34%
Q1 2017	4.36%
Q2 2017	5.50%
Q3 2017	3.39%
Q4 2017	4.82%
Q1 2018	4.65%
Q2 2018	3.70%
Q3 2018	3.56%
Q4 2018	-1.30%

Quarter end	1-quarter return
Q1 2019	5.27%
Q2 2019	2.43%
Q3 2019	3.78%
Q4 2019	4.46%
Q1 2020	-7.74%
Q2 2020	10.18%

Europe PE



Europe PE

IRRs by vintage

Pooled IRRs

IRR hurdle rates

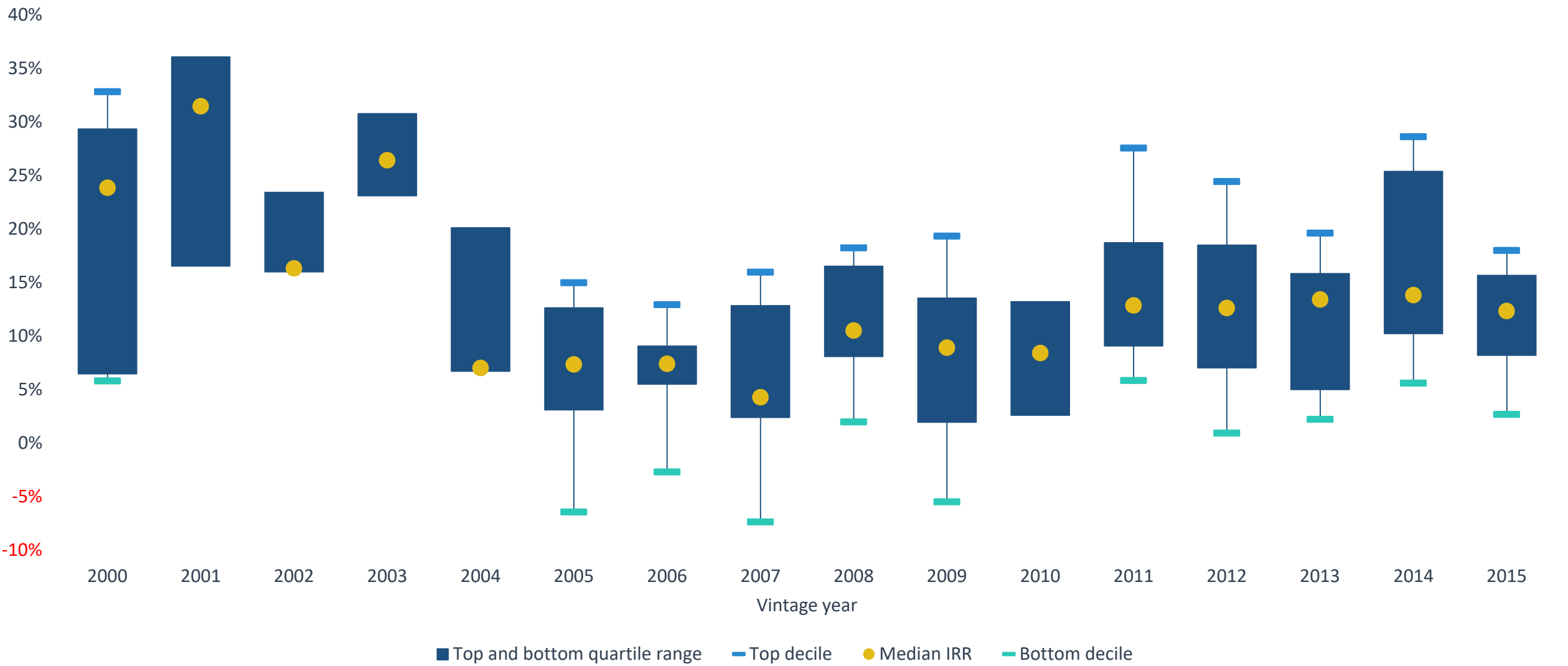
Vintage year	Pooled IRR	Equal-weighted pooled IRR	Number of funds	Top decile	Top quartile	Median IRR	Bottom quartile	Bottom decile	Standard deviation	Number of funds
Pre-1996	88.01%	88.01%	1			48.83%				1
1996	11.19%	17.70%	2			17.18%			10.26%	3
1997	20.03%	23.73%	5		30.30%	18.80%	13.54%		10.11%	5
1998	15.89%	14.62%	3		23.75%	18.65%	11.00%		7.51%	9
1999	11.42%	10.34%	4		19.29%	17.11%	11.13%		5.71%	5
2000	20.14%	17.94%	8	32.79%	29.33%	23.84%	6.47%	5.79%	12.67%	12
2001	34.58%	28.98%	8		36.05%	31.44%	16.53%		16.73%	9
2002	22.61%	23.05%	5		23.40%	16.30%	15.98%		8.83%	9
2003	21.14%	19.62%	5		30.75%	26.40%	23.09%		5.56%	8
2004	13.78%	16.27%	7		20.11%	7.00%	6.70%		13.19%	7
2005	6.37%	4.15%	16	14.97%	12.62%	7.34%	3.09%	-6.43%	17.00%	17
2006	5.76%	5.21%	19	12.92%	9.05%	7.39%	5.50%	-2.70%	7.07%	31
2007	6.01%	3.99%	22	15.94%	12.83%	4.27%	2.39%	-7.38%	8.12%	23
2008	11.33%	8.96%	26	18.22%	16.50%	10.50%	8.09%	1.97%	8.45%	29
2009	2.34%	3.11%	11	19.32%	13.54%	8.90%	1.95%	-5.50%	22.96%	15
2010	6.85%	8.33%	15		13.20%	8.40%	2.60%		8.47%	9
2011	12.72%	17.05%	16	27.53%	18.70%	12.85%	9.07%	5.83%	11.88%	19
2012	13.85%	9.81%	20	24.40%	18.48%	12.60%	7.03%	0.93%	11.28%	17
2013	12.14%	10.99%	17	19.60%	15.82%	13.40%	4.99%	2.20%	9.65%	12
2014	17.24%	13.10%	15	28.60%	25.35%	13.81%	10.23%	5.59%	11.28%	15
2015	13.52%	12.17%	23	17.99%	15.65%	12.32%	8.20%	2.68%	6.09%	16
2016	12.78%	14.15%	26	23.88%	22.08%	14.30%	8.54%	3.22%	10.49%	23
2017	11.27%	7.08%	27	44.00%	21.47%	14.65%	7.64%	-10.55%	41.77%	17
2018	3.13%	-1.21%	27	26.43%	18.65%	-3.70%	-34.50%	-50.93%	35.79%	19

Source: PitchBook. Geography: Europe . Data as of June 30, 2020



Europe PE

IRRs by vintage





Europe PE

PMEs by vintage

S&P 500 index

Morningstar Europe Index

Vintage year	Pooled IRR	Index return	KS-PME	Pooled IRR	Index return	KS-PME	Number of funds
1996	11.19%	8.54%	1.37	11.19%			2
1997	20.03%	7.84%	1.84	20.03%			5
1998	15.89%	6.85%	1.85	15.89%			3
1999	11.42%	6.06%	1.48	11.42%	4.55%	1.17	4
2000	20.14%	5.68%	1.65	20.14%	3.85%	1.35	8
2001	34.58%	6.52%	1.83	34.58%	4.66%	1.51	8
2002	22.61%	7.50%	1.39	22.61%	6.01%	1.13	5
2003	21.14%	9.57%	1.56	21.14%	7.58%	1.46	5
2004	13.78%	8.23%	1.37	13.78%	5.25%	1.43	7
2005	6.37%	8.30%	1.01	6.37%	4.44%	1.17	16
2006	5.76%	8.21%	0.90	5.76%	3.45%	1.15	19
2007	6.01%	7.85%	0.81	6.01%	1.72%	1.05	22
2008	11.33%	8.82%	0.93	11.33%	1.64%	1.25	26
2009	2.34%	14.51%	0.66	2.34%	8.02%	0.85	11
2010	6.85%	12.10%	0.80	6.85%	4.23%	1.06	15
2011	12.72%	11.46%	1.01	12.72%	3.11%	1.32	16
2012	13.85%	12.17%	1.06	13.85%	4.55%	1.37	20
2013	12.14%	11.81%	1.05	12.14%	3.07%	1.37	17
2014	17.24%	10.01%	1.22	17.24%	0.47%	1.58	15
2015	13.52%	9.12%	1.08	13.52%	1.49%	1.33	23
2016	12.78%	12.30%	1.08	12.78%	4.24%	1.30	26
2017	11.27%	9.53%	1.07	11.27%	2.08%	1.24	27
2018	3.13%	5.24%	1.00	3.13%	-6.44%	1.11	27

Source: PitchBook. Geography: Europe . Data as of June 30, 2020



Europe PE

Multiples by vintage

Pooled multiples

Equal-weighted pooled multiples

Vintage year	TVPI	DPI	RVPI	TVPI	DPI	RVPI	Number of funds
Pre-1996	2.22x	2.22x	0.00x	2.22x	2.22x	0.00x	1
1996	1.52x	1.52x	0.00x	1.85x	1.85x	0.00x	2
1997	1.98x	1.98x	0.00x	1.97x	1.97x	0.00x	5
1998	1.89x	1.89x	0.00x	1.82x	1.82x	0.00x	3
1999	1.66x	1.66x	0.00x	1.68x	1.67x	0.01x	4
2000	1.96x	1.95x	0.00x	1.93x	1.92x	0.01x	8
2001	2.36x	2.33x	0.02x	2.14x	2.08x	0.06x	8
2002	1.89x	1.89x	0.00x	1.94x	1.93x	0.01x	5
2003	1.90x	1.90x	0.00x	2.05x	2.05x	0.01x	5
2004	1.67x	1.66x	0.00x	1.76x	1.76x	0.00x	7
2005	1.34x	1.31x	0.03x	1.22x	1.18x	0.04x	16
2006	1.35x	1.32x	0.03x	1.31x	1.27x	0.04x	19
2007	1.33x	1.29x	0.04x	1.20x	1.15x	0.05x	22
2008	1.62x	1.54x	0.08x	1.49x	1.38x	0.12x	26
2009	1.11x	0.98x	0.13x	1.14x	0.95x	0.19x	11
2010	1.29x	1.03x	0.26x	1.38x	1.02x	0.36x	15
2011	1.57x	1.21x	0.35x	1.76x	1.32x	0.44x	16
2012	1.57x	1.11x	0.46x	1.39x	0.93x	0.46x	20
2013	1.45x	0.77x	0.69x	1.41x	0.85x	0.56x	17
2014	1.67x	0.69x	0.98x	1.50x	0.44x	1.06x	15
2015	1.35x	0.45x	0.90x	1.32x	0.42x	0.91x	23
2016	1.26x	0.22x	1.04x	1.28x	0.25x	1.03x	26
2017	1.13x	0.09x	1.04x	1.10x	0.14x	0.96x	27
2018	1.02x	0.05x	0.98x	0.99x	0.08x	0.91x	27

Source: PitchBook. Geography: Europe . Data as of June 30, 2020



Europe PE

Multiples by vintage

TVPI						DPI					Number of funds
Vintage year	Top decile	Top quartile	Median TVPI	Bottom quartile	Bottom decile	Top decile	Top quartile	Median DPI	Bottom quartile	Bottom decile	
Pre-1996			2.22x					2.22x			1
1996			1.85x					1.85x			2
1997		2.06x	1.92x	1.87x			2.06x	1.92x	1.87x		5
1998			1.73x					1.73x			3
1999		1.91x	1.74x	1.53x			1.89x	1.72x	1.53x		4
2000		2.37x	1.85x	1.35x			2.36x	1.84x	1.33x		8
2001		2.56x	2.14x	1.93x			2.55x	2.10x	1.75x		8
2002		2.31x	1.94x	1.62x			2.31x	1.94x	1.62x		5
2003		2.79x	1.66x	1.55x			2.78x	1.66x	1.54x		5
2004		2.03x	1.83x	1.44x			2.02x	1.83x	1.44x		7
2005	1.55x	1.42x	1.27x	1.13x	0.71x	1.52x	1.34x	1.26x	1.00x	0.69x	16
2006	1.68x	1.52x	1.41x	1.10x	0.79x	1.64x	1.51x	1.40x	1.05x	0.73x	19
2007	1.87x	1.54x	1.18x	1.01x	0.60x	1.84x	1.53x	1.18x	0.79x	0.60x	22
2008	1.99x	1.80x	1.50x	1.27x	0.97x	1.91x	1.59x	1.44x	1.15x	0.82x	26
2009	1.56x	1.51x	1.30x	0.89x	0.67x	1.47x	1.33x	0.98x	0.63x	0.26x	11
2010	1.80x	1.60x	1.38x	1.07x	0.86x	1.62x	1.32x	1.05x	0.71x	0.46x	15
2011	2.87x	2.16x	1.53x	1.40x	1.21x	2.44x	1.42x	1.13x	0.99x	0.66x	16
2012	1.80x	1.67x	1.42x	1.21x	0.96x	1.43x	1.25x	0.93x	0.68x	0.48x	20
2013	2.11x	1.47x	1.28x	1.09x	0.99x	1.23x	1.09x	0.74x	0.64x	0.22x	17
2014	2.11x	1.48x	1.35x	1.18x	1.03x	0.76x	0.53x	0.26x	0.18x	0.10x	15
2015	1.60x	1.43x	1.36x	1.14x	1.01x	0.68x	0.55x	0.38x	0.30x	0.10x	23
2016	1.54x	1.43x	1.32x	1.12x	0.97x	0.46x	0.28x	0.14x	0.04x	0.01x	26
2017	1.33x	1.25x	1.12x	0.95x	0.75x	0.41x	0.15x	0.02x	0.00x	0.00x	27
2018	1.25x	1.10x	0.87x	0.72x	0.63x	0.20x	0.02x	0.00x	0.00x	0.00x	27

Source: PitchBook. Geography: Europe . Data as of June 30, 2020



Europe PE

Quarterly return

Quarter end	1-quarter return
Q1 2001	-1.51%
Q2 2001	-4.61%
Q3 2001	4.86%
Q4 2001	-3.35%
Q1 2002	2.00%
Q2 2002	12.71%
Q3 2002	1.41%
Q4 2002	-1.85%
Q1 2003	3.25%
Q2 2003	2.71%
Q3 2003	1.52%
Q4 2003	9.73%
Q1 2004	4.06%
Q2 2004	13.13%
Q3 2004	2.01%
Q4 2004	16.55%
Q1 2005	-2.26%
Q2 2005	10.50%
Q3 2005	5.34%
Q4 2005	11.07%
Q1 2006	1.57%
Q2 2006	13.01%
Q3 2006	3.99%
Q4 2006	19.49%

Quarter end	1-quarter return
Q1 2007	5.32%
Q2 2007	7.03%
Q3 2007	6.95%
Q4 2007	4.04%
Q1 2008	4.18%
Q2 2008	-2.24%
Q3 2008	-12.45%
Q4 2008	-13.28%
Q1 2009	-15.39%
Q2 2009	5.06%
Q3 2009	8.57%
Q4 2009	10.60%
Q1 2010	-5.30%
Q2 2010	-1.21%
Q3 2010	10.33%
Q4 2010	7.92%
Q1 2011	5.01%
Q2 2011	4.81%
Q3 2011	-4.87%
Q4 2011	1.09%
Q1 2012	5.73%
Q2 2012	-0.72%
Q3 2012	3.61%
Q4 2012	3.98%

Quarter end	1-quarter return
Q1 2013	0.24%
Q2 2013	1.60%
Q3 2013	4.57%
Q4 2013	6.95%
Q1 2014	4.55%
Q2 2014	5.43%
Q3 2014	-4.51%
Q4 2014	1.32%
Q1 2015	0.09%
Q2 2015	5.40%
Q3 2015	3.64%
Q4 2015	1.54%
Q1 2016	2.95%
Q2 2016	1.32%
Q3 2016	4.83%
Q4 2016	1.07%
Q1 2017	5.38%
Q2 2017	6.50%
Q3 2017	8.43%
Q4 2017	3.36%
Q1 2018	3.08%
Q2 2018	3.59%
Q3 2018	4.05%
Q4 2018	0.43%

Quarter end	1-quarter return
Q1 2019	3.44%
Q2 2019	5.95%
Q3 2019	2.17%
Q4 2019	7.19%
Q1 2020	-10.63%
Q2 2020	8.16%

Rest of world PE



Rest of world PE

IRR by vintage

Pooled IRRs

IRR hurdle rates

Vintage year	Pooled IRR	Equal-weighted pooled IRR	Number of funds	Top decile	Top quartile	Median IRR	Bottom quartile	Bottom decile	Standard deviation	Number of funds
Pre-1996	-4.96%	-4.96%	1			-4.50%				1
1996	19.87%	19.87%	1							0
1997	-19.41%	-19.41%	1			-5.48%			19.35%	2
1998	-10.54%	-7.34%	3			-9.80%				1
1999	16.80%	9.33%	2			0.90%			12.80%	3
2000										
2001	27.79%	25.56%	3		31.73%	23.50%	10.28%		18.85%	4
2002										
2003						23.90%				1
2004						47.05%			8.74%	2
2005	6.10%	10.56%	5		14.98%	8.50%	0.75%		21.32%	6
2006	0.19%	0.18%	5		11.66%	8.00%	-0.70%		8.29%	9
2007	8.55%	7.85%	15	16.34%	9.13%	7.89%	5.10%	-0.37%	7.89%	17
2008	6.43%	2.79%	15	14.27%	10.88%	5.74%	-0.53%	-7.82%	8.95%	24
2009	19.31%	10.39%	2			4.90%			8.46%	3
2010	4.23%	6.64%	9	13.94%	11.00%	5.16%	2.18%	-1.30%	10.84%	10
2011	6.33%	7.37%	14	20.32%	13.91%	9.14%	3.71%	-0.46%	12.78%	18
2012	7.60%	5.34%	16	17.18%	15.25%	8.32%	1.78%	-4.01%	8.65%	13
2013	11.23%	12.13%	12	16.04%	11.30%	9.67%	7.90%	6.56%	4.10%	13
2014	12.59%	11.88%	12		14.13%	9.11%	8.00%		7.33%	8
2015	10.22%	7.04%	16	13.92%	11.69%	10.95%	7.67%	-2.76%	7.19%	10
2016	15.89%	5.94%	12	23.42%	18.82%	10.67%	-7.91%	-16.28%	16.38%	12
2017	20.79%	9.96%	4			23.51%				1
2018	13.45%	7.42%	15	19.20%	7.99%	1.02%	-27.46%	-48.19%	34.57%	13

Source: PitchBook. Geography: Rest of world . Data as of June 30, 2020



Rest of world PE

IRR by vintage





Rest of world PE

PMEs by vintage

S&P 500 index				Morningstar Emerging Markets Index			
Vintage year	Pooled IRR	Index return	KS-PME	Pooled IRR	Index return	KS-PME	Number of funds
1996	19.87%	8.54%	1.50	19.87%			1
1997	-19.41%	7.84%	0.22	-19.41%			1
1998	-10.54%	6.85%	0.48	-10.54%			3
1999	16.80%	6.06%	2.16	16.80%	8.64%	1.16	2
2000							
2001	27.79%	6.52%	2.46	27.79%	8.70%	1.35	3
2002							
2003							
2004							
2005	6.10%	8.30%	1.05	6.10%	6.96%	1.02	5
2006	0.19%	8.21%	0.60	0.19%	4.73%	0.86	5
2007	8.55%	7.85%	0.93	8.55%	3.38%	1.27	15
2008	6.43%	8.82%	0.78	6.43%	1.67%	1.14	15
2009	19.31%	14.51%	1.16	19.31%	8.59%	1.79	2
2010	4.23%	12.10%	0.68	4.23%	2.80%	1.09	9
2011	6.33%	11.46%	0.79	6.33%	0.98%	1.20	14
2012	7.60%	12.17%	0.89	7.60%	1.95%	1.20	16
2013	11.23%	11.81%	1.02	11.23%	1.20%	1.29	12
2014	12.59%	10.01%	1.08	12.59%	2.51%	1.34	12
2015	10.22%	9.12%	1.01	10.22%	2.01%	1.20	16
2016	15.89%	12.30%	1.14	15.89%	7.58%	1.37	12
2017	20.79%	9.53%	1.19	20.79%	2.65%	1.37	4
2018	13.45%	5.24%	1.08	13.45%	-7.93%	1.19	15

Source: PitchBook. Geography: Rest of world . Data as of June 30, 2020



Rest of world PE

Multiples by vintage

Pooled multiples

Equal-weighted pooled multiples

Vintage year	TVPI	DPI	RVPI	TVPI	DPI	RVPI	Number of funds
Pre-1996	0.77x	0.77x	0.00x	0.77x	0.77x	0.00x	1
1996	1.64x	1.64x	0.00x	1.64x	1.64x	0.00x	1
1997	0.25x	0.25x	0.00x	0.25x	0.25x	0.00x	1
1998	0.58x	0.58x	0.00x	0.66x	0.66x	0.00x	3
1999	2.41x	2.41x	0.00x	1.70x	1.70x	0.00x	2
2000							
2001	2.94x	2.89x	0.05x	2.72x	2.67x	0.05x	3
2002							
2003							
2004							
2005	1.33x	1.20x	0.13x	1.50x	1.41x	0.09x	5
2006	1.01x	0.86x	0.16x	1.01x	0.74x	0.27x	5
2007	1.48x	1.37x	0.11x	1.44x	1.29x	0.15x	15
2008	1.33x	1.16x	0.17x	1.15x	0.93x	0.22x	15
2009	2.19x	2.14x	0.06x	1.57x	1.46x	0.11x	2
2010	1.23x	0.78x	0.45x	1.38x	0.91x	0.47x	9
2011	1.34x	0.50x	0.83x	1.41x	0.59x	0.82x	14
2012	1.31x	0.65x	0.66x	1.22x	0.61x	0.61x	16
2013	1.41x	0.68x	0.72x	1.48x	0.69x	0.79x	12
2014	1.42x	0.53x	0.89x	1.38x	0.50x	0.88x	12
2015	1.27x	0.43x	0.84x	1.20x	0.27x	0.93x	16
2016	1.35x	0.27x	1.08x	1.13x	0.18x	0.95x	12
2017	1.30x	0.22x	1.08x	1.18x	0.17x	1.01x	4
2018	1.10x	0.10x	1.00x	1.07x	0.07x	1.00x	15

Source: PitchBook. Geography: Rest of world . Data as of June 30, 2020



Rest of world PE

Multiples by vintage

TVPI						DPI					Number of funds
Vintage year	Top decile	Top quartile	Median TVPI	Bottom quartile	Bottom decile	Top decile	Top quartile	Median DPI	Bottom quartile	Bottom decile	
Pre-1996			0.77x					0.77x			1
1996			1.64x					1.64x			1
1997			0.25x					0.25x			1
1998			0.40x					0.40x			3
1999			1.66x					1.66x			2
2000											
2001			2.34x					2.34x			3
2002											
2003											
2004											
2005		2.10x	1.47x	0.92x			2.09x	1.35x	0.90x		5
2006		1.06x	0.93x	0.79x			1.05x	0.55x	0.30x		5
2007	2.00x	1.61x	1.46x	1.08x	0.95x	1.86x	1.54x	1.33x	0.87x	0.73x	15
2008	1.57x	1.44x	1.09x	0.91x	0.72x	1.38x	1.28x	0.83x	0.67x	0.51x	15
2009			1.59x					1.48x			2
2010		1.77x	1.43x	1.11x			1.50x	0.74x	0.58x		9
2011	1.98x	1.60x	1.28x	1.10x	0.90x	1.28x	0.70x	0.43x	0.28x	0.22x	14
2012	1.65x	1.53x	1.17x	1.01x	0.80x	1.17x	0.96x	0.49x	0.22x	0.11x	16
2013	1.90x	1.57x	1.48x	1.28x	1.22x	1.20x	0.92x	0.73x	0.40x	0.10x	12
2014	1.59x	1.45x	1.28x	1.17x	1.12x	1.23x	0.69x	0.36x	0.12x	0.02x	12
2015	1.38x	1.31x	1.19x	1.06x	0.89x	0.68x	0.34x	0.18x	0.11x	0.04x	16
2016	1.65x	1.35x	1.19x	0.84x	0.54x	0.39x	0.20x	0.14x	0.00x	0.00x	12
2017		1.40x	1.21x	0.99x			0.25x	0.19x	0.10x		4
2018	1.28x	1.09x	1.03x	0.92x	0.88x	0.18x	0.07x	0.04x	0.01x	0.00x	15

Source: PitchBook. Geography: Rest of world . Data as of June 30, 2020



Rest of world PE

Quarterly return

Quarter end	1-quarter return
Q1 2001	-7.14%
Q2 2001	-10.85%
Q3 2001	-2.37%
Q4 2001	-31.93%
Q1 2002	-0.58%
Q2 2002	-4.64%
Q3 2002	-11.67%
Q4 2002	-29.71%
Q1 2003	-19.89%
Q2 2003	-6.94%
Q3 2003	19.83%
Q4 2003	15.89%
Q1 2004	8.07%
Q2 2004	13.14%
Q3 2004	5.20%
Q4 2004	7.44%
Q1 2005	-3.46%
Q2 2005	-5.09%
Q3 2005	28.66%
Q4 2005	13.27%
Q1 2006	13.23%
Q2 2006	0.53%
Q3 2006	-3.96%
Q4 2006	17.71%

Quarter end	1-quarter return
Q1 2007	8.92%
Q2 2007	9.60%
Q3 2007	14.37%
Q4 2007	13.56%
Q1 2008	-8.32%
Q2 2008	-6.14%
Q3 2008	-9.74%
Q4 2008	-16.49%
Q1 2009	0.22%
Q2 2009	11.73%
Q3 2009	8.00%
Q4 2009	8.57%
Q1 2010	10.57%
Q2 2010	-0.62%
Q3 2010	7.46%
Q4 2010	7.66%
Q1 2011	2.44%
Q2 2011	0.20%
Q3 2011	-5.31%
Q4 2011	1.67%
Q1 2012	5.33%
Q2 2012	-0.36%
Q3 2012	4.80%
Q4 2012	4.09%

Quarter end	1-quarter return
Q1 2013	4.83%
Q2 2013	-1.95%
Q3 2013	2.75%
Q4 2013	5.64%
Q1 2014	0.31%
Q2 2014	6.07%
Q3 2014	2.44%
Q4 2014	2.58%
Q1 2015	3.20%
Q2 2015	3.16%
Q3 2015	-4.50%
Q4 2015	6.36%
Q1 2016	0.17%
Q2 2016	2.89%
Q3 2016	3.01%
Q4 2016	3.18%
Q1 2017	5.30%
Q2 2017	2.57%
Q3 2017	4.10%
Q4 2017	5.83%
Q1 2018	2.10%
Q2 2018	0.11%
Q3 2018	0.09%
Q4 2018	0.28%

Quarter end	1-quarter return
Q1 2019	3.85%
Q2 2019	1.84%
Q3 2019	2.09%
Q4 2019	3.68%
Q1 2020	-8.03%
Q2 2020	5.11%

PE < \$250M



PE < \$250M

IRR by vintage

Pooled IRRs

IRR hurdle rates

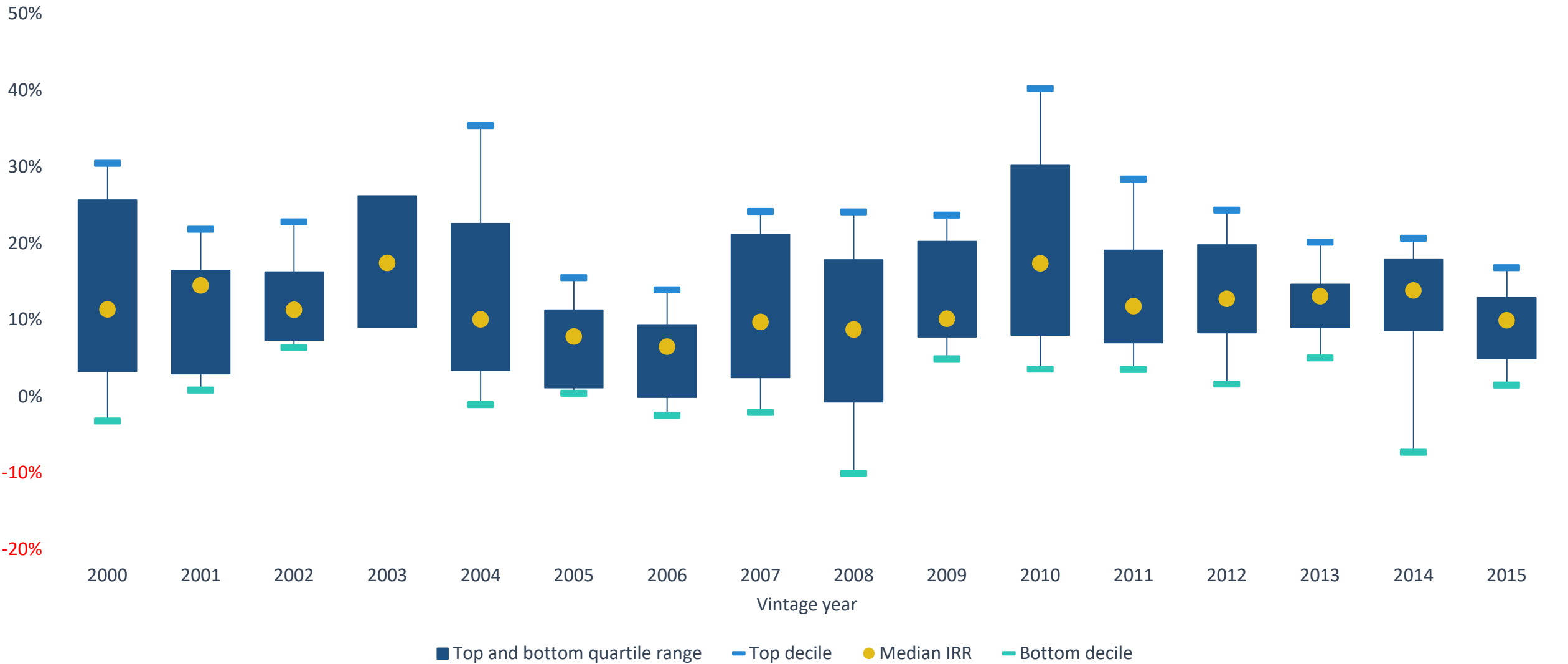
Vintage year	Pooled IRR	Equal-weighted pooled IRR	Number of funds	Top decile	Top quartile	Median IRR	Bottom quartile	Bottom decile	Standard deviation	Number of funds
Pre-1996	-0.19%	-0.44%	2	33.94%	29.03%	15.38%	7.86%	-7.06%	20.57%	48
1996	-2.98%	-3.93%	7		5.62%	-6.00%	-11.16%		15.23%	9
1997	-0.69%	0.06%	5	32.57%	25.69%	6.80%	-0.15%	-18.98%	22.53%	10
1998	3.88%	4.16%	9	18.53%	14.12%	7.20%	-1.73%	-9.02%	11.80%	15
1999	13.72%	12.91%	6	18.31%	16.28%	12.90%	5.88%	3.62%	8.45%	10
2000	13.51%	13.25%	6	30.42%	25.62%	11.32%	3.23%	-3.26%	15.56%	19
2001	12.00%	11.49%	7	21.80%	16.42%	14.45%	2.92%	0.79%	10.42%	10
2002	11.87%	11.87%	5	22.75%	16.22%	11.28%	7.31%	6.36%	31.05%	14
2003	13.70%	7.87%	5		26.18%	17.40%	9.00%		14.47%	8
2004	7.31%	6.62%	9	35.34%	22.55%	10.04%	3.36%	-1.11%	17.31%	16
2005	6.07%	7.66%	6	15.48%	11.26%	7.80%	1.10%	0.37%	9.86%	21
2006	2.70%	1.42%	18	13.89%	9.33%	6.45%	-0.15%	-2.50%	10.68%	30
2007	9.20%	9.43%	20	24.12%	21.10%	9.70%	2.43%	-2.12%	17.18%	37
2008	6.32%	6.42%	22	24.06%	17.80%	8.70%	-0.75%	-10.09%	13.70%	35
2009	10.08%	10.02%	10	23.64%	20.22%	10.11%	7.73%	4.87%	7.98%	18
2010	7.70%	7.84%	11	40.17%	30.15%	17.35%	7.98%	3.52%	16.60%	14
2011	14.47%	14.56%	14	28.36%	19.05%	11.75%	6.97%	3.48%	23.06%	23
2012	7.77%	6.40%	18	24.29%	19.76%	12.70%	8.29%	1.58%	17.07%	24
2013	10.07%	11.13%	21	20.10%	14.61%	13.05%	8.95%	4.97%	10.02%	24
2014	7.85%	7.09%	16	20.62%	17.83%	13.81%	8.58%	-7.34%	13.65%	17
2015	8.31%	7.28%	18	16.77%	12.87%	9.91%	4.92%	1.44%	6.67%	24
2016	11.63%	8.52%	18	29.00%	26.18%	20.70%	12.24%	2.35%	12.59%	20
2017	3.00%	2.71%	19	17.23%	13.00%	8.00%	4.40%	0.65%	18.09%	13
2018	5.40%	8.94%	25	88.80%	31.40%	12.58%	2.26%	-9.90%	35.14%	21

Source: PitchBook. Geography: Global . Data as of June 30, 2020



PE < \$250M

IRR by vintage





PE < \$250M

PMEs by vintage

S&P 500 index

MSCI All Country World Index

Vintage year	Pooled IRR	Index return	KS-PME	Pooled IRR	Index return	KS-PME	Number of funds
1996	-2.98%	8.54%	0.75	-2.98%	6.50%	0.74	7
1997	-0.69%	7.84%	0.82	-0.69%	6.27%	0.79	5
1998	3.88%	6.85%	1.14	3.88%	5.60%	1.08	9
1999	13.72%	6.06%	1.80	13.72%	5.20%	1.64	6
2000	13.51%	5.68%	1.51	13.51%	4.49%	1.31	6
2001	12.00%	6.52%	1.31	12.00%	5.60%	1.19	7
2002	11.87%	7.50%	1.31	11.87%	6.77%	1.20	5
2003	13.70%	9.57%	1.15	13.70%	8.56%	1.11	5
2004	7.31%	8.23%	1.06	7.31%	6.80%	1.05	9
2005	6.07%	8.30%	0.94	6.07%	6.46%	1.02	6
2006	2.70%	8.21%	0.77	2.70%	5.75%	0.89	18
2007	9.20%	7.85%	0.93	9.20%	4.90%	1.08	20
2008	6.32%	8.82%	0.79	6.32%	5.17%	0.91	22
2009	10.08%	14.51%	0.88	10.08%	11.04%	1.05	10
2010	7.70%	12.10%	0.78	7.70%	7.85%	0.95	11
2011	14.47%	11.46%	1.06	14.47%	6.92%	1.27	14
2012	7.77%	12.17%	0.88	7.77%	8.04%	1.01	18
2013	10.07%	11.81%	0.97	10.07%	7.38%	1.11	21
2014	7.85%	10.01%	0.94	7.85%	5.95%	1.06	16
2015	8.31%	9.12%	0.96	8.31%	5.73%	1.06	18
2016	11.63%	12.30%	1.04	11.63%	9.29%	1.12	18
2017	3.00%	9.53%	0.93	3.00%	6.28%	0.99	19
2018	5.40%	5.24%	1.00	5.40%	0.06%	1.06	25

Source: PitchBook. Geography: Global . Data as of June 30, 2020



PE < \$250M

Multiples by vintage

Pooled multiples

Equal-weighted pooled multiples

Vintage year	TVPI	DPI	RVPI	TVPI	DPI	RVPI	Number of funds
Pre-1996	0.98x	0.70x	0.28x	0.96x	0.71x	0.25x	2
1996	0.87x	0.87x	0.00x	0.82x	0.82x	0.00x	7
1997	0.96x	0.96x	0.01x	1.00x	1.00x	0.01x	5
1998	1.18x	1.17x	0.00x	1.20x	1.20x	0.01x	9
1999	2.20x	2.18x	0.01x	2.10x	2.09x	0.01x	6
2000	2.07x	2.05x	0.02x	2.04x	2.02x	0.02x	6
2001	1.81x	1.81x	0.01x	1.71x	1.69x	0.02x	7
2002	1.66x	1.66x	0.00x	1.65x	1.65x	0.00x	5
2003	1.57x	1.50x	0.07x	1.34x	1.26x	0.08x	5
2004	1.35x	1.29x	0.06x	1.32x	1.26x	0.07x	9
2005	1.35x	1.28x	0.07x	1.44x	1.36x	0.08x	6
2006	1.17x	0.96x	0.21x	1.09x	0.88x	0.20x	18
2007	1.54x	1.43x	0.11x	1.55x	1.44x	0.11x	20
2008	1.29x	1.18x	0.12x	1.31x	1.22x	0.09x	22
2009	1.55x	1.20x	0.35x	1.52x	1.18x	0.33x	10
2010	1.44x	1.09x	0.35x	1.43x	1.08x	0.35x	11
2011	1.87x	1.18x	0.69x	1.83x	1.23x	0.61x	14
2012	1.33x	0.78x	0.55x	1.26x	0.81x	0.45x	18
2013	1.40x	0.55x	0.85x	1.43x	0.72x	0.71x	21
2014	1.29x	0.33x	0.96x	1.26x	0.27x	0.99x	16
2015	1.23x	0.35x	0.89x	1.20x	0.32x	0.89x	18
2016	1.26x	0.28x	0.98x	1.20x	0.26x	0.94x	18
2017	1.05x	0.25x	0.79x	1.04x	0.29x	0.75x	19
2018	1.07x	0.15x	0.92x	1.10x	0.12x	0.98x	25

Source: PitchBook. Geography: Global . Data as of June 30, 2020



PE < \$250M

Multiples by vintage

TVPI						DPI					Number of funds
Vintage year	Top decile	Top quartile	Median TVPI	Bottom quartile	Bottom decile	Top decile	Top quartile	Median DPI	Bottom quartile	Bottom decile	
Pre-1996			1.01x					0.69x			2
1996		1.11x	0.69x	0.44x			1.11x	0.69x	0.44x		7
1997		1.22x	1.03x	0.93x			1.22x	1.03x	0.90x		5
1998		1.58x	1.30x	0.57x			1.58x	1.25x	0.57x		9
1999		2.77x	2.18x	1.44x			2.77x	2.18x	1.40x		6
2000		2.61x	1.99x	1.44x			2.61x	1.99x	1.44x		6
2001		2.35x	1.76x	1.12x			2.35x	1.76x	1.06x		7
2002		2.06x	1.87x	1.31x			2.06x	1.87x	1.31x		5
2003		1.71x	1.68x	0.65x			1.71x	1.68x	0.32x		5
2004		1.59x	1.33x	1.01x			1.59x	1.22x	0.85x		9
2005		1.56x	1.43x	1.26x			1.54x	1.40x	0.99x		6
2006	1.64x	1.33x	1.00x	0.80x	0.45x	1.51x	1.29x	0.86x	0.57x	0.21x	18
2007	2.46x	1.97x	1.59x	1.11x	0.78x	2.45x	1.82x	1.48x	0.97x	0.59x	20
2008	1.91x	1.73x	1.37x	0.95x	0.72x	1.89x	1.47x	1.27x	0.85x	0.59x	22
2009	2.06x	1.71x	1.57x	1.21x	0.90x	1.58x	1.53x	1.21x	0.87x	0.69x	10
2010	2.24x	1.95x	1.32x	1.05x	0.84x	1.78x	1.50x	1.19x	0.67x	0.36x	11
2011	3.25x	2.50x	1.47x	1.25x	0.73x	2.40x	1.74x	1.07x	0.45x	0.17x	14
2012	1.83x	1.62x	1.28x	1.06x	0.51x	1.36x	0.91x	0.73x	0.53x	0.17x	18
2013	1.93x	1.59x	1.47x	1.17x	0.94x	1.12x	0.94x	0.51x	0.21x	0.14x	21
2014	1.67x	1.59x	1.26x	0.91x	0.73x	0.74x	0.34x	0.12x	0.00x	0.00x	16
2015	1.54x	1.44x	1.16x	1.01x	0.80x	0.59x	0.41x	0.27x	0.12x	0.01x	18
2016	1.65x	1.54x	1.15x	0.94x	0.47x	0.60x	0.34x	0.14x	0.01x	0.00x	18
2017	1.27x	1.18x	1.04x	0.95x	0.81x	0.75x	0.34x	0.15x	0.00x	0.00x	19
2018	1.23x	1.17x	1.10x	0.90x	0.71x	0.31x	0.13x	0.01x	0.00x	0.00x	25

Source: PitchBook. Geography: Global . Data as of June 30, 2020



PE < \$250M

Quarterly return

Quarter end	1-quarter return
Q1 2001	-0.90%
Q2 2001	-6.38%
Q3 2001	-1.21%
Q4 2001	-9.70%
Q1 2002	-1.15%
Q2 2002	-4.52%
Q3 2002	-1.10%
Q4 2002	-0.35%
Q1 2003	-8.23%
Q2 2003	-5.67%
Q3 2003	0.58%
Q4 2003	0.29%
Q1 2004	3.03%
Q2 2004	1.16%
Q3 2004	4.02%
Q4 2004	9.09%
Q1 2005	15.93%
Q2 2005	-2.70%
Q3 2005	3.80%
Q4 2005	7.29%
Q1 2006	4.42%
Q2 2006	2.14%
Q3 2006	6.65%
Q4 2006	8.20%

Quarter end	1-quarter return
Q1 2007	8.36%
Q2 2007	4.52%
Q3 2007	1.88%
Q4 2007	4.23%
Q1 2008	-0.31%
Q2 2008	-1.12%
Q3 2008	-0.51%
Q4 2008	-11.48%
Q1 2009	-3.96%
Q2 2009	-0.36%
Q3 2009	5.06%
Q4 2009	8.00%
Q1 2010	3.03%
Q2 2010	4.56%
Q3 2010	7.17%
Q4 2010	6.39%
Q1 2011	3.61%
Q2 2011	3.87%
Q3 2011	0.86%
Q4 2011	1.97%
Q1 2012	4.20%
Q2 2012	3.96%
Q3 2012	4.89%
Q4 2012	2.93%

Quarter end	1-quarter return
Q1 2013	3.64%
Q2 2013	2.74%
Q3 2013	3.59%
Q4 2013	1.13%
Q1 2014	4.85%
Q2 2014	3.85%
Q3 2014	1.57%
Q4 2014	0.81%
Q1 2015	1.00%
Q2 2015	3.39%
Q3 2015	-0.47%
Q4 2015	0.98%
Q1 2016	1.44%
Q2 2016	1.57%
Q3 2016	1.40%
Q4 2016	3.61%
Q1 2017	2.62%
Q2 2017	3.14%
Q3 2017	1.69%
Q4 2017	4.35%
Q1 2018	3.63%
Q2 2018	5.10%
Q3 2018	0.58%
Q4 2018	1.32%

Quarter end	1-quarter return
Q1 2019	3.86%
Q2 2019	3.31%
Q3 2019	1.49%
Q4 2019	1.72%
Q1 2020	-3.68%
Q2 2020	2.89%

PE \$250M - \$500M



PE \$250M - \$500M

IRRs by vintage

Pooled IRRs

IRR hurdle rates

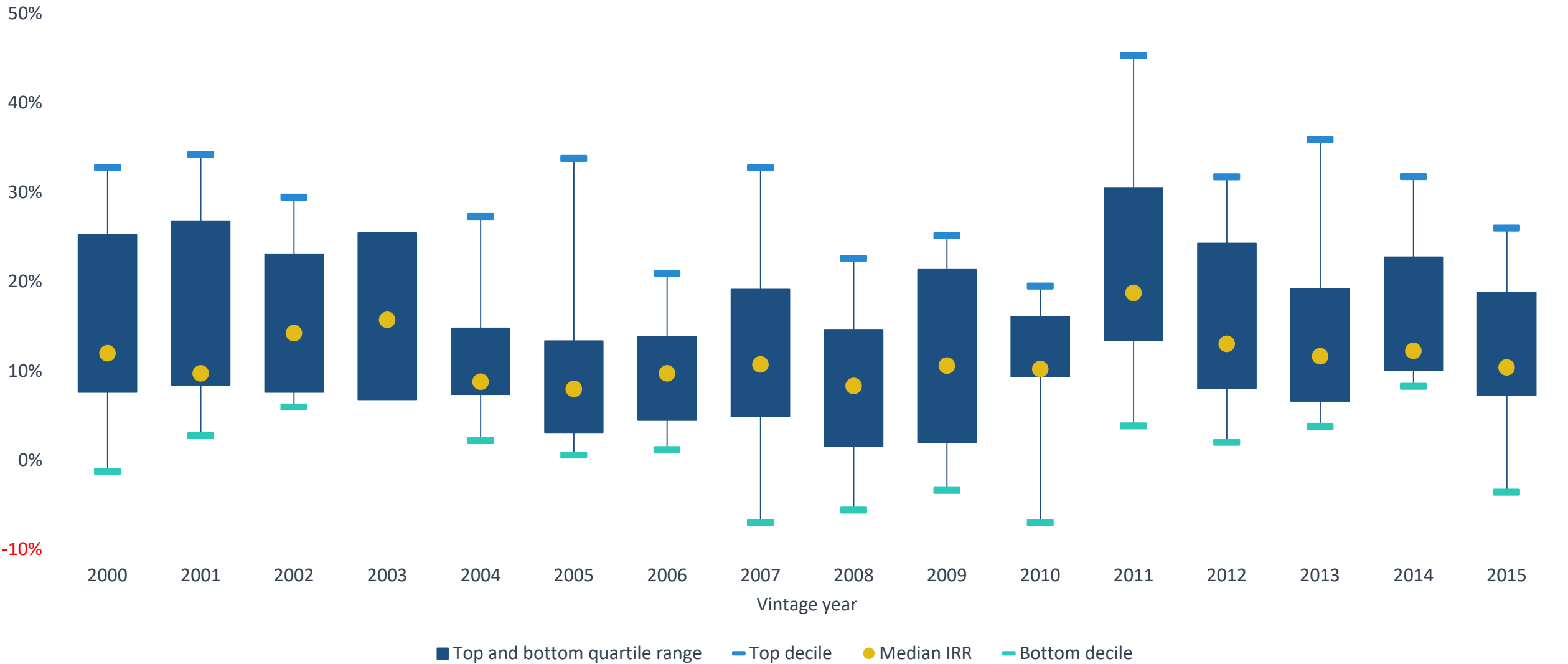
Vintage year	Pooled IRR	Equal-weighted pooled IRR	Number of funds	Top decile	Top quartile	Median IRR	Bottom quartile	Bottom decile	Standard deviation	Number of funds
Pre-1996	10.38%	10.51%	3	28.76%	22.61%	12.25%	9.14%	-1.00%	15.99%	20
1996	14.16%	13.43%	6	23.03%	17.49%	7.90%	4.29%	-2.58%	11.08%	13
1997	2.61%	3.09%	5		12.42%	8.31%	0.04%		20.36%	8
1998	4.80%	4.82%	8	20.48%	17.88%	9.95%	2.40%	-2.70%	12.29%	18
1999	11.36%	11.78%	10	33.16%	27.15%	11.07%	7.39%	3.69%	12.98%	19
2000	6.64%	7.93%	7	32.73%	25.22%	11.95%	7.60%	-1.28%	13.31%	12
2001	26.30%	24.73%	7	34.20%	26.76%	9.69%	8.39%	2.70%	27.09%	11
2002	14.56%	14.96%	13	29.41%	23.07%	14.20%	7.59%	5.92%	13.83%	14
2003	18.27%	17.92%	5		25.43%	15.69%	6.78%		14.99%	8
2004	11.33%	11.90%	17	27.24%	14.75%	8.76%	7.34%	2.14%	14.69%	18
2005	9.34%	9.54%	21	33.74%	13.33%	7.95%	3.09%	0.54%	17.41%	25
2006	8.90%	8.76%	20	20.85%	13.81%	9.70%	4.44%	1.14%	8.53%	35
2007	9.15%	10.19%	22	32.70%	19.10%	10.70%	4.87%	-7.03%	13.79%	30
2008	8.82%	7.99%	15	22.56%	14.60%	8.28%	1.54%	-5.62%	27.09%	19
2009	17.08%	17.03%	14	25.10%	21.32%	10.55%	1.98%	-3.40%	14.03%	20
2010	8.29%	8.51%	11	19.47%	16.07%	10.19%	9.32%	-7.03%	13.42%	10
2011	16.39%	16.50%	21	45.31%	30.42%	18.70%	13.39%	3.79%	22.65%	20
2012	13.87%	13.21%	22	31.69%	24.26%	12.99%	8.00%	1.98%	13.28%	24
2013	13.12%	12.72%	23	35.90%	19.20%	11.61%	6.59%	3.76%	17.87%	21
2014	12.70%	13.00%	17	31.71%	22.73%	12.22%	10.00%	8.24%	11.25%	19
2015	11.62%	11.44%	24	25.96%	18.79%	10.35%	7.25%	-3.62%	13.45%	24
2016	13.89%	14.63%	28	26.78%	19.71%	9.15%	6.70%	4.77%	17.02%	33
2017	12.62%	13.21%	23	26.29%	10.96%	8.26%	4.43%	-9.66%	13.96%	23
2018	0.58%	1.54%	12	37.73%	17.30%	3.78%	-3.10%	-20.35%	23.75%	17

Source: PitchBook. Geography: Global . Data as of June 30, 2020



PE \$250M - \$500M

IRR by vintage





PE \$250M - \$500M

PMEs by vintage

S&P 500 index

MSCI All Country World Index

Vintage year	Pooled IRR	Index return	KS-PME	Pooled IRR	Index return	KS-PME	Number of funds
1996	14.16%	8.54%	1.42	14.16%	6.50%	1.42	6
1997	2.61%	7.84%	1.08	2.61%	6.27%	1.06	5
1998	4.80%	6.85%	1.18	4.80%	5.60%	1.11	8
1999	11.36%	6.06%	1.41	11.36%	5.20%	1.31	10
2000	6.64%	5.68%	1.17	6.64%	4.49%	1.06	7
2001	26.30%	6.52%	1.64	26.30%	5.60%	1.52	7
2002	14.56%	7.50%	1.28	14.56%	6.77%	1.18	13
2003	18.27%	9.57%	1.44	18.27%	8.56%	1.38	5
2004	11.33%	8.23%	1.30	11.33%	6.80%	1.34	17
2005	9.34%	8.30%	1.11	9.34%	6.46%	1.20	21
2006	8.90%	8.21%	1.05	8.90%	5.75%	1.19	20
2007	9.15%	7.85%	0.94	9.15%	4.90%	1.07	22
2008	8.82%	8.82%	0.87	8.82%	5.17%	1.04	15
2009	17.08%	14.51%	1.10	17.08%	11.04%	1.29	14
2010	8.29%	12.10%	0.84	8.29%	7.85%	0.98	11
2011	16.39%	11.46%	1.13	16.39%	6.92%	1.31	21
2012	13.87%	12.17%	1.06	13.87%	8.04%	1.21	22
2013	13.12%	11.81%	1.08	13.12%	7.38%	1.23	23
2014	12.70%	10.01%	1.12	12.70%	5.95%	1.25	17
2015	11.62%	9.12%	1.04	11.62%	5.73%	1.14	24
2016	13.89%	12.30%	1.11	13.89%	9.29%	1.20	28
2017	12.62%	9.53%	1.08	12.62%	6.28%	1.16	23
2018	0.58%	5.24%	0.96	0.58%	0.06%	1.01	12

Source: PitchBook. Geography: Global . Data as of June 30, 2020



PE \$250M - \$500M

Multiples by vintage

Pooled multiplesEqual-weighted pooled multiples

Vintage year	TVPI	DPI	RVPI	TVPI	DPI	RVPI	Number of funds
Pre-1996	1.46x	1.46x	0.00x	1.47x	1.47x	0.00x	3
1996	1.65x	1.65x	0.00x	1.61x	1.61x	0.00x	6
1997	1.13x	1.13x	0.00x	1.15x	1.15x	0.00x	5
1998	1.25x	1.24x	0.00x	1.25x	1.24x	0.00x	8
1999	1.58x	1.58x	0.00x	1.60x	1.60x	0.00x	10
2000	1.44x	1.40x	0.04x	1.53x	1.49x	0.04x	7
2001	2.06x	1.98x	0.08x	2.05x	1.99x	0.07x	7
2002	1.65x	1.64x	0.01x	1.69x	1.68x	0.01x	13
2003	2.06x	2.02x	0.04x	2.04x	2.00x	0.04x	5
2004	1.76x	1.67x	0.09x	1.80x	1.72x	0.08x	17
2005	1.55x	1.54x	0.02x	1.57x	1.55x	0.02x	21
2006	1.54x	1.42x	0.12x	1.52x	1.41x	0.12x	20
2007	1.51x	1.42x	0.08x	1.57x	1.48x	0.09x	22
2008	1.57x	1.29x	0.28x	1.51x	1.24x	0.27x	15
2009	1.90x	1.65x	0.24x	1.87x	1.63x	0.23x	14
2010	1.39x	0.95x	0.44x	1.40x	0.95x	0.44x	11
2011	1.81x	1.29x	0.52x	1.83x	1.30x	0.54x	21
2012	1.56x	1.00x	0.56x	1.55x	0.97x	0.58x	22
2013	1.56x	0.72x	0.83x	1.53x	0.73x	0.80x	23
2014	1.56x	0.72x	0.84x	1.57x	0.70x	0.87x	17
2015	1.32x	0.37x	0.95x	1.32x	0.37x	0.94x	24
2016	1.33x	0.23x	1.10x	1.35x	0.25x	1.10x	28
2017	1.23x	0.22x	1.01x	1.24x	0.19x	1.05x	23
2018	1.01x	0.12x	0.88x	1.02x	0.13x	0.88x	12

Source: PitchBook. Geography: Global . Data as of June 30, 2020



PE \$250M - \$500M

Multiples by vintage

TVPI						DPI					Number of funds
Vintage year	Top decile	Top quartile	Median TVPI	Bottom quartile	Bottom decile	Top decile	Top quartile	Median DPI	Bottom quartile	Bottom decile	
Pre-1996			1.54x					1.54x			3
1996		2.04x	1.53x	1.25x			2.04x	1.53x	1.25x		6
1997		1.46x	1.40x	1.02x			1.46x	1.40x	1.02x		5
1998		1.41x	1.18x	1.04x			1.41x	1.18x	1.04x		8
1999	2.03x	1.92x	1.60x	1.18x	1.08x	2.01x	1.92x	1.60x	1.18x	1.08x	10
2000		1.96x	1.51x	1.18x			1.84x	1.51x	1.15x		7
2001		2.41x	2.16x	1.48x			2.34x	1.88x	1.48x		7
2002	2.28x	1.96x	1.47x	1.33x	1.23x	2.28x	1.94x	1.45x	1.33x	1.23x	13
2003		1.89x	1.86x	1.42x			1.88x	1.86x	1.39x		5
2004	2.90x	1.98x	1.67x	1.51x	0.98x	2.88x	1.97x	1.59x	1.42x	0.89x	17
2005	2.34x	1.69x	1.43x	1.17x	0.82x	2.34x	1.68x	1.35x	1.16x	0.82x	21
2006	2.10x	1.80x	1.46x	1.19x	0.93x	2.09x	1.68x	1.42x	1.13x	0.76x	20
2007	2.23x	2.06x	1.53x	1.14x	0.61x	2.22x	1.96x	1.42x	0.86x	0.61x	22
2008	2.25x	2.09x	1.39x	1.11x	0.88x	2.09x	1.85x	1.23x	0.71x	0.62x	15
2009	2.40x	2.20x	1.77x	1.56x	1.08x	2.29x	2.16x	1.45x	1.10x	0.92x	14
2010	2.14x	1.55x	1.45x	1.12x	0.75x	1.55x	1.30x	1.00x	0.56x	0.44x	11
2011	2.47x	2.10x	1.65x	1.44x	1.12x	1.92x	1.44x	1.39x	1.04x	0.60x	21
2012	2.03x	1.78x	1.54x	1.27x	1.10x	1.51x	1.38x	1.05x	0.60x	0.41x	22
2013	1.91x	1.61x	1.46x	1.29x	1.17x	1.24x	1.17x	0.56x	0.19x	0.03x	23
2014	2.27x	1.71x	1.36x	1.20x	1.08x	1.38x	0.76x	0.63x	0.42x	0.07x	17
2015	1.85x	1.43x	1.23x	1.13x	0.92x	0.67x	0.47x	0.27x	0.09x	0.02x	24
2016	1.80x	1.45x	1.26x	1.13x	1.06x	0.57x	0.38x	0.09x	0.00x	0.00x	28
2017	1.47x	1.25x	1.13x	1.06x	0.95x	0.53x	0.18x	0.07x	0.00x	0.00x	23
2018	1.31x	1.21x	1.05x	0.96x	0.72x	0.22x	0.21x	0.04x	0.00x	0.00x	12

Source: PitchBook. Geography: Global . Data as of June 30, 2020



PE \$250M - \$500M

Quarterly return

Quarter end	1-quarter return
Q1 2001	-9.68%
Q2 2001	-5.69%
Q3 2001	-7.31%
Q4 2001	-1.84%
Q1 2002	-0.24%
Q2 2002	-1.87%
Q3 2002	-2.32%
Q4 2002	1.83%
Q1 2003	9.30%
Q2 2003	0.41%
Q3 2003	0.92%
Q4 2003	2.36%
Q1 2004	3.97%
Q2 2004	1.29%
Q3 2004	3.17%
Q4 2004	8.74%
Q1 2005	3.10%
Q2 2005	7.43%
Q3 2005	7.14%
Q4 2005	10.38%
Q1 2006	8.80%
Q2 2006	3.65%
Q3 2006	4.02%
Q4 2006	6.44%

Quarter end	1-quarter return
Q1 2007	8.62%
Q2 2007	3.53%
Q3 2007	4.63%
Q4 2007	6.28%
Q1 2008	0.85%
Q2 2008	2.70%
Q3 2008	-3.43%
Q4 2008	-6.56%
Q1 2009	-5.99%
Q2 2009	1.07%
Q3 2009	2.55%
Q4 2009	3.46%
Q1 2010	4.03%
Q2 2010	1.57%
Q3 2010	5.31%
Q4 2010	6.66%
Q1 2011	3.31%
Q2 2011	2.99%
Q3 2011	0.40%
Q4 2011	3.07%
Q1 2012	3.70%
Q2 2012	1.89%
Q3 2012	3.08%
Q4 2012	0.49%

Quarter end	1-quarter return
Q1 2013	3.98%
Q2 2013	2.15%
Q3 2013	2.59%
Q4 2013	4.43%
Q1 2014	4.40%
Q2 2014	4.57%
Q3 2014	1.12%
Q4 2014	3.98%
Q1 2015	1.16%
Q2 2015	4.87%
Q3 2015	1.33%
Q4 2015	1.44%
Q1 2016	2.75%
Q2 2016	4.50%
Q3 2016	4.07%
Q4 2016	4.62%
Q1 2017	2.05%
Q2 2017	5.04%
Q3 2017	2.36%
Q4 2017	5.03%
Q1 2018	6.99%
Q2 2018	6.52%
Q3 2018	0.46%
Q4 2018	2.30%

Quarter end	1-quarter return
Q1 2019	3.52%
Q2 2019	2.77%
Q3 2019	2.84%
Q4 2019	5.02%
Q1 2020	-5.47%
Q2 2020	7.85%

PE \$500M - \$1B



PE \$500M - \$1B

IRR by vintage

Pooled IRRs

IRR hurdle rates

Vintage year	Pooled IRR	Equal-weighted pooled IRR	Number of funds	Top decile	Top quartile	Median IRR	Bottom quartile	Bottom decile	Standard deviation	Number of funds
Pre-1996	88.01%	88.01%	1		30.50%	28.01%	16.30%		11.82%	9
1996	14.31%	11.88%	6		22.00%	2.80%	0.41%		11.19%	9
1997	7.71%	8.18%	7		8.20%	4.20%	1.30%		5.83%	9
1998	3.79%	3.75%	14	15.41%	9.94%	4.20%	-3.78%	-8.54%	10.38%	13
1999	10.08%	10.91%	10	17.48%	13.50%	11.13%	0.90%	-8.55%	12.08%	13
2000	10.39%	9.82%	11	24.22%	19.85%	13.40%	8.15%	-4.84%	12.02%	12
2001	20.89%	20.65%	8		24.70%	19.19%	11.16%		8.24%	9
2002	10.91%	10.41%	5	35.77%	27.70%	6.01%	1.75%	-1.20%	15.90%	11
2003	13.04%	11.86%	7		17.20%	10.00%	6.74%		14.38%	9
2004	8.77%	8.58%	8	49.64%	13.48%	6.70%	2.55%	-8.58%	25.67%	12
2005	9.14%	9.18%	15	21.68%	18.30%	10.60%	7.08%	-0.80%	8.64%	17
2006	8.87%	8.75%	28	19.70%	12.00%	8.70%	5.51%	3.08%	8.02%	30
2007	8.81%	8.90%	18	17.28%	13.70%	8.13%	1.97%	-1.40%	6.87%	21
2008	13.17%	12.96%	28	24.34%	18.09%	12.32%	7.26%	-2.04%	11.40%	28
2009	13.60%	13.17%	14	23.10%	19.64%	11.39%	9.25%	5.46%	10.75%	13
2010	13.03%	13.63%	22	24.69%	19.80%	12.50%	8.46%	7.42%	7.41%	23
2011	12.69%	12.78%	17	23.30%	18.00%	11.37%	8.24%	3.38%	10.48%	22
2012	13.13%	12.99%	30	29.89%	21.52%	10.00%	1.94%	-7.97%	14.69%	27
2013	17.56%	17.43%	18	28.46%	23.91%	17.85%	13.01%	6.66%	8.90%	19
2014	17.19%	18.53%	24	41.06%	27.03%	15.66%	8.33%	7.23%	16.79%	22
2015	15.08%	14.07%	24	21.17%	17.78%	14.24%	10.30%	4.19%	12.03%	18
2016	18.18%	17.67%	26	32.29%	24.38%	12.89%	3.36%	-3.96%	18.24%	22
2017	10.91%	10.49%	34	37.99%	21.25%	11.89%	-0.73%	-8.61%	32.79%	29
2018	0.33%	1.45%	27	17.33%	12.78%	0.02%	-14.32%	-33.81%	24.42%	23

Source: PitchBook. Geography: Global . Data as of June 30, 2020



PE \$500M - \$1B

IRRs by vintage





PE \$500M - \$1B

PMEs by vintage

S&P 500 index

MSCI All Country World Index

Vintage year	Pooled IRR	Index return	KS-PME	Pooled IRR	Index return	KS-PME	Number of funds
1996	14.31%	8.54%	1.55	14.31%	6.50%	1.54	6
1997	7.71%	7.84%	1.30	7.71%	6.27%	1.28	7
1998	3.79%	6.85%	1.11	3.79%	5.60%	1.03	14
1999	10.08%	6.06%	1.35	10.08%	5.20%	1.24	10
2000	10.39%	5.68%	1.21	10.39%	4.49%	1.11	11
2001	20.89%	6.52%	1.69	20.89%	5.60%	1.54	8
2002	10.91%	7.50%	1.11	10.91%	6.77%	1.04	5
2003	13.04%	9.57%	1.35	13.04%	8.56%	1.30	7
2004	8.77%	8.23%	1.14	8.77%	6.80%	1.15	8
2005	9.14%	8.30%	1.12	9.14%	6.46%	1.21	15
2006	8.87%	8.21%	1.01	8.87%	5.75%	1.15	28
2007	8.81%	7.85%	0.92	8.81%	4.90%	1.07	18
2008	13.17%	8.82%	0.99	13.17%	5.17%	1.15	28
2009	13.60%	14.51%	0.98	13.60%	11.04%	1.14	14
2010	13.03%	12.10%	1.00	13.03%	7.85%	1.18	22
2011	12.69%	11.46%	1.01	12.69%	6.92%	1.19	17
2012	13.13%	12.17%	1.04	13.13%	8.04%	1.19	30
2013	17.56%	11.81%	1.20	17.56%	7.38%	1.34	18
2014	17.19%	10.01%	1.19	17.19%	5.95%	1.32	24
2015	15.08%	9.12%	1.13	15.08%	5.73%	1.24	24
2016	18.18%	12.30%	1.16	18.18%	9.29%	1.25	26
2017	10.91%	9.53%	1.06	10.91%	6.28%	1.13	34
2018	0.33%	5.24%	0.96	0.33%	0.06%	1.01	27

Source: PitchBook. Geography: Global . Data as of June 30, 2020



PE \$500M - \$1B

Multiples by vintage

Pooled multiples

Equal-weighted pooled multiples

Vintage year	TVPI	DPI	RVPI	TVPI	DPI	RVPI	Number of funds
Pre-1996	2.22x	2.22x	0.00x	2.22x	2.22x	0.00x	1
1996	1.81x	1.81x	0.00x	1.71x	1.71x	0.00x	6
1997	1.37x	1.37x	0.00x	1.38x	1.38x	0.00x	7
1998	1.19x	1.19x	0.00x	1.19x	1.19x	0.00x	14
1999	1.60x	1.58x	0.02x	1.65x	1.63x	0.02x	10
2000	1.54x	1.51x	0.03x	1.51x	1.48x	0.03x	11
2001	2.07x	2.07x	0.00x	2.04x	2.04x	0.00x	8
2002	1.44x	1.41x	0.03x	1.42x	1.39x	0.03x	5
2003	1.73x	1.73x	0.01x	1.67x	1.66x	0.01x	7
2004	1.41x	1.40x	0.01x	1.41x	1.40x	0.01x	8
2005	1.54x	1.46x	0.08x	1.55x	1.47x	0.08x	15
2006	1.55x	1.50x	0.05x	1.55x	1.50x	0.05x	28
2007	1.48x	1.36x	0.12x	1.49x	1.37x	0.12x	18
2008	1.68x	1.50x	0.18x	1.67x	1.49x	0.18x	28
2009	1.64x	1.44x	0.20x	1.61x	1.41x	0.21x	14
2010	1.66x	1.28x	0.38x	1.70x	1.31x	0.39x	22
2011	1.66x	1.07x	0.59x	1.68x	1.04x	0.64x	17
2012	1.56x	0.91x	0.65x	1.55x	0.89x	0.66x	30
2013	1.63x	0.86x	0.77x	1.63x	0.86x	0.77x	18
2014	1.59x	0.69x	0.90x	1.64x	0.71x	0.93x	24
2015	1.43x	0.35x	1.07x	1.39x	0.33x	1.06x	24
2016	1.35x	0.33x	1.02x	1.34x	0.32x	1.02x	26
2017	1.15x	0.17x	0.99x	1.15x	0.15x	1.00x	34
2018	1.00x	0.07x	0.93x	1.01x	0.07x	0.94x	27

Source: PitchBook. Geography: Global . Data as of June 30, 2020



PE \$500M - \$1B

Multiples by vintage

TVPI						DPI					Number of funds
Vintage year	Top decile	Top quartile	Median TVPI	Bottom quartile	Bottom decile	Top decile	Top quartile	Median DPI	Bottom quartile	Bottom decile	
Pre-1996			2.22x					2.22x			1
1996		1.96x	1.72x	1.26x			1.96x	1.72x	1.25x		6
1997		1.68x	1.43x	1.03x			1.68x	1.43x	1.03x		7
1998	1.74x	1.49x	1.25x	0.78x	0.61x	1.74x	1.48x	1.25x	0.78x	0.61x	14
1999	2.10x	1.91x	1.72x	1.45x	1.06x	2.00x	1.90x	1.71x	1.45x	1.06x	10
2000	2.22x	1.62x	1.52x	1.32x	0.56x	2.06x	1.62x	1.52x	1.29x	0.56x	11
2001		2.32x	1.74x	1.58x			2.32x	1.74x	1.57x		8
2002		1.54x	1.31x	1.22x			1.54x	1.24x	1.22x		5
2003		1.78x	1.56x	1.15x			1.78x	1.56x	1.14x		7
2004		1.80x	1.41x	1.14x			1.77x	1.41x	1.14x		8
2005	2.33x	1.85x	1.43x	1.14x	0.97x	2.33x	1.63x	1.32x	1.09x	0.97x	15
2006	2.19x	1.66x	1.40x	1.25x	1.10x	2.19x	1.66x	1.37x	1.25x	1.10x	28
2007	2.31x	1.75x	1.38x	1.06x	0.91x	2.11x	1.68x	1.37x	0.92x	0.77x	18
2008	2.37x	1.95x	1.53x	1.28x	0.91x	2.14x	1.85x	1.37x	1.02x	0.52x	28
2009	2.38x	1.94x	1.51x	1.31x	1.08x	2.26x	1.75x	1.32x	1.12x	0.96x	14
2010	2.40x	1.96x	1.69x	1.36x	1.19x	2.07x	1.50x	1.18x	0.98x	0.79x	22
2011	2.47x	2.01x	1.55x	1.20x	1.02x	1.80x	1.29x	0.76x	0.56x	0.37x	17
2012	2.36x	1.76x	1.42x	1.07x	0.84x	1.85x	1.17x	0.73x	0.43x	0.24x	30
2013	2.12x	1.87x	1.55x	1.34x	1.27x	1.40x	1.12x	0.91x	0.67x	0.23x	18
2014	2.38x	1.77x	1.50x	1.27x	1.17x	1.69x	0.84x	0.48x	0.25x	0.14x	24
2015	1.83x	1.40x	1.27x	1.16x	1.05x	0.73x	0.57x	0.17x	0.07x	0.00x	24
2016	1.70x	1.54x	1.30x	1.12x	0.97x	0.65x	0.44x	0.20x	0.06x	0.00x	26
2017	1.45x	1.30x	1.11x	0.93x	0.82x	0.49x	0.16x	0.04x	0.00x	0.00x	34
2018	1.16x	1.07x	0.94x	0.89x	0.73x	0.09x	0.05x	0.00x	0.00x	0.00x	27

Source: PitchBook. Geography: Global . Data as of June 30, 2020



PE \$500M - \$1B

Quarterly return

Quarter end	1-quarter return
Q1 2001	-2.64%
Q2 2001	-4.95%
Q3 2001	-1.12%
Q4 2001	-4.80%
Q1 2002	-5.60%
Q2 2002	-0.49%
Q3 2002	-2.59%
Q4 2002	-1.73%
Q1 2003	-1.06%
Q2 2003	2.40%
Q3 2003	2.08%
Q4 2003	9.06%
Q1 2004	3.66%
Q2 2004	8.54%
Q3 2004	3.01%
Q4 2004	13.10%
Q1 2005	1.43%
Q2 2005	6.52%
Q3 2005	7.06%
Q4 2005	9.32%
Q1 2006	6.13%
Q2 2006	1.89%
Q3 2006	5.81%
Q4 2006	5.91%

Quarter end	1-quarter return
Q1 2007	3.94%
Q2 2007	6.66%
Q3 2007	4.41%
Q4 2007	5.05%
Q1 2008	0.36%
Q2 2008	1.79%
Q3 2008	-4.71%
Q4 2008	-6.84%
Q1 2009	-2.16%
Q2 2009	2.92%
Q3 2009	2.29%
Q4 2009	7.42%
Q1 2010	2.74%
Q2 2010	1.81%
Q3 2010	2.98%
Q4 2010	7.53%
Q1 2011	2.59%
Q2 2011	2.57%
Q3 2011	-0.88%
Q4 2011	1.72%
Q1 2012	2.63%
Q2 2012	0.06%
Q3 2012	3.15%
Q4 2012	2.42%

Quarter end	1-quarter return
Q1 2013	1.17%
Q2 2013	2.29%
Q3 2013	3.62%
Q4 2013	4.96%
Q1 2014	3.26%
Q2 2014	4.23%
Q3 2014	2.01%
Q4 2014	4.67%
Q1 2015	1.53%
Q2 2015	5.03%
Q3 2015	0.21%
Q4 2015	3.55%
Q1 2016	1.78%
Q2 2016	5.66%
Q3 2016	5.43%
Q4 2016	0.19%
Q1 2017	5.74%
Q2 2017	3.94%
Q3 2017	3.24%
Q4 2017	5.99%
Q1 2018	5.02%
Q2 2018	3.77%
Q3 2018	2.23%
Q4 2018	1.87%

Quarter end	1-quarter return
Q1 2019	2.72%
Q2 2019	3.99%
Q3 2019	3.51%
Q4 2019	3.24%
Q1 2020	-5.15%
Q2 2020	4.72%

PE \$1B+



PE \$1B+

IRR by vintage

Pooled IRRs

IRR hurdle rates

Vintage year	Pooled IRR	Equal-weighted pooled IRR	Number of funds	Top decile	Top quartile	Median IRR	Bottom quartile	Bottom decile	Standard deviation	Number of funds
Pre-1996				38.63%	33.17%	18.16%	11.38%	8.24%	14.22%	10
1996	10.68%	11.65%	5		20.10%	17.18%	6.01%		12.16%	5
1997	11.22%	13.95%	8		16.25%	13.54%	6.51%		8.53%	7
1998	7.55%	7.90%	11	18.13%	11.05%	9.32%	6.07%	0.63%	8.08%	12
1999	9.44%	10.09%	14	21.82%	18.08%	12.12%	5.89%	-0.56%	10.05%	15
2000	16.85%	14.49%	27	25.97%	23.23%	15.55%	7.25%	3.19%	10.40%	28
2001	24.96%	22.48%	13	40.49%	38.15%	31.90%	19.30%	12.40%	13.57%	13
2002	22.17%	22.50%	13	37.60%	34.10%	23.40%	16.39%	13.51%	11.64%	13
2003	19.91%	20.77%	7		25.80%	20.65%	19.85%		7.85%	9
2004	12.35%	12.74%	17	26.96%	15.37%	11.75%	7.33%	3.64%	15.17%	14
2005	9.37%	8.87%	36	16.74%	12.80%	8.40%	4.70%	-2.01%	10.00%	33
2006	7.29%	7.60%	48	13.04%	9.81%	7.70%	5.40%	2.60%	6.10%	51
2007	9.03%	9.11%	56	16.94%	13.70%	8.90%	4.72%	1.39%	7.07%	55
2008	12.57%	10.80%	49	19.29%	15.38%	11.10%	8.13%	3.78%	8.10%	54
2009	13.04%	14.91%	11	26.25%	21.47%	10.90%	9.20%	-16.80%	28.90%	11
2010	11.14%	9.41%	16	20.44%	12.87%	5.13%	-0.28%	-7.77%	11.46%	16
2011	14.31%	14.18%	29	26.14%	20.00%	12.80%	8.70%	7.01%	10.63%	29
2012	14.92%	13.38%	38	22.74%	17.57%	14.52%	8.43%	1.97%	8.17%	35
2013	11.51%	11.58%	36	18.98%	14.18%	9.94%	8.10%	4.01%	7.89%	34
2014	17.39%	17.06%	44	25.68%	21.10%	13.78%	7.50%	3.67%	9.63%	41
2015	15.23%	16.04%	55	25.57%	18.17%	10.48%	8.09%	-0.18%	10.63%	52
2016	15.93%	16.83%	47	23.76%	19.60%	13.30%	8.18%	6.31%	8.58%	47
2017	13.99%	13.43%	50	23.59%	18.20%	10.55%	1.43%	-8.88%	18.75%	47
2018	5.32%	4.97%	67	24.40%	15.48%	2.19%	-20.27%	-45.89%	32.10%	55

Source: PitchBook. Geography: Global . Data as of June 30, 2020



PE \$1B+

IRRs by vintage



Source: PitchBook. Geography: Global . Data as of June 30, 2020



PE \$1B+

PMEs by vintage

S&P 500 index

MSCI All Country World Index

Vintage year	Pooled IRR	Index return	KS-PME	Pooled IRR	Index return	KS-PME	Number of funds
1996	10.68%	8.54%	1.37	10.68%	6.50%	1.36	5
1997	11.22%	7.84%	1.46	11.22%	6.27%	1.40	8
1998	7.55%	6.85%	1.40	7.55%	5.60%	1.30	11
1999	9.44%	6.06%	1.35	9.44%	5.20%	1.25	14
2000	16.85%	5.68%	1.52	16.85%	4.49%	1.38	27
2001	24.96%	6.52%	1.71	24.96%	5.60%	1.55	13
2002	22.17%	7.50%	1.53	22.17%	6.77%	1.44	13
2003	19.91%	9.57%	1.51	19.91%	8.56%	1.47	7
2004	12.35%	8.23%	1.36	12.35%	6.80%	1.37	17
2005	9.37%	8.30%	1.19	9.37%	6.46%	1.28	36
2006	7.29%	8.21%	1.00	7.29%	5.75%	1.14	48
2007	9.03%	7.85%	0.95	9.03%	4.90%	1.10	56
2008	12.57%	8.82%	0.99	12.57%	5.17%	1.15	49
2009	13.04%	14.51%	0.96	13.04%	11.04%	1.13	11
2010	11.14%	12.10%	0.93	11.14%	7.85%	1.11	16
2011	14.31%	11.46%	1.06	14.31%	6.92%	1.24	29
2012	14.92%	12.17%	1.10	14.92%	8.04%	1.25	38
2013	11.51%	11.81%	1.02	11.51%	7.38%	1.14	36
2014	17.39%	10.01%	1.22	17.39%	5.95%	1.34	44
2015	15.23%	9.12%	1.12	15.23%	5.73%	1.21	55
2016	15.93%	12.30%	1.14	15.93%	9.29%	1.23	47
2017	13.99%	9.53%	1.10	13.99%	6.28%	1.17	50
2018	5.32%	5.24%	1.01	5.32%	0.06%	1.06	67

Source: PitchBook. Geography: Global . Data as of June 30, 2020



PE \$1B+

Multiples by vintage

Pooled multiples

Equal-weighted pooled multiples

Vintage year	TVPI	DPI	RVPI	TVPI	DPI	RVPI	Number of funds
Pre-1996							
1996	1.50x	1.50x	0.00x	1.56x	1.56x	0.00x	5
1997	1.71x	1.71x	0.00x	1.81x	1.81x	0.00x	8
1998	1.48x	1.48x	0.00x	1.48x	1.48x	0.00x	11
1999	1.48x	1.48x	0.00x	1.50x	1.50x	0.00x	14
2000	1.86x	1.85x	0.01x	1.76x	1.75x	0.01x	27
2001	2.21x	2.20x	0.01x	2.10x	2.09x	0.01x	13
2002	2.08x	2.06x	0.02x	2.07x	2.05x	0.02x	13
2003	1.91x	1.88x	0.02x	2.01x	1.97x	0.03x	7
2004	1.75x	1.71x	0.04x	1.74x	1.69x	0.05x	17
2005	1.57x	1.53x	0.04x	1.54x	1.49x	0.05x	36
2006	1.48x	1.42x	0.05x	1.47x	1.41x	0.05x	48
2007	1.51x	1.37x	0.13x	1.52x	1.39x	0.13x	56
2008	1.64x	1.51x	0.13x	1.55x	1.40x	0.14x	49
2009	1.62x	1.51x	0.11x	1.69x	1.58x	0.11x	11
2010	1.59x	1.16x	0.44x	1.49x	1.08x	0.41x	16
2011	1.72x	1.18x	0.54x	1.68x	1.15x	0.53x	29
2012	1.63x	1.01x	0.61x	1.55x	0.96x	0.59x	38
2013	1.40x	0.76x	0.64x	1.42x	0.75x	0.67x	36
2014	1.62x	0.71x	0.90x	1.58x	0.66x	0.92x	44
2015	1.38x	0.45x	0.92x	1.41x	0.48x	0.93x	55
2016	1.33x	0.23x	1.10x	1.34x	0.28x	1.06x	47
2017	1.19x	0.13x	1.06x	1.18x	0.14x	1.04x	50
2018	1.04x	0.06x	0.98x	1.04x	0.07x	0.97x	67

Source: PitchBook. Geography: Global . Data as of June 30, 2020



PE \$1B+

Multiples by vintage

TVPI						DPI					Number of funds
Vintage year	Top decile	Top quartile	Median TVPI	Bottom quartile	Bottom decile	Top decile	Top quartile	Median DPI	Bottom quartile	Bottom decile	
Pre-1996											
1996		1.83x	1.26x	1.21x			1.83x	1.26x	1.21x		5
1997		2.02x	1.83x	1.65x			2.02x	1.83x	1.65x		8
1998	1.73x	1.65x	1.39x	1.31x	1.02x	1.73x	1.65x	1.39x	1.30x	1.02x	11
1999	2.17x	1.95x	1.51x	1.24x	0.96x	2.17x	1.95x	1.51x	1.24x	0.96x	14
2000	2.40x	2.08x	1.83x	1.28x	1.20x	2.40x	2.08x	1.81x	1.28x	1.15x	27
2001	2.87x	2.50x	2.08x	1.86x	1.55x	2.85x	2.50x	2.07x	1.86x	1.55x	13
2002	2.50x	2.41x	2.03x	1.69x	1.56x	2.48x	2.41x	2.03x	1.69x	1.56x	13
2003		2.29x	1.75x	1.60x			2.28x	1.74x	1.60x		7
2004	2.41x	2.02x	1.83x	1.42x	1.09x	2.38x	2.02x	1.83x	1.26x	0.95x	17
2005	2.22x	1.86x	1.52x	1.28x	0.96x	2.18x	1.83x	1.47x	1.20x	0.91x	36
2006	1.86x	1.66x	1.50x	1.25x	1.04x	1.81x	1.62x	1.45x	1.24x	0.96x	48
2007	2.07x	1.84x	1.47x	1.25x	1.03x	1.90x	1.69x	1.34x	1.13x	0.90x	56
2008	2.01x	1.85x	1.54x	1.33x	0.99x	1.92x	1.58x	1.39x	1.22x	0.88x	49
2009	2.51x	2.19x	1.51x	1.39x	1.19x	2.36x	2.00x	1.46x	1.25x	1.18x	11
2010	2.57x	1.79x	1.45x	0.98x	0.68x	1.96x	1.39x	1.13x	0.55x	0.24x	16
2011	2.59x	1.93x	1.50x	1.31x	1.06x	1.67x	1.52x	1.13x	0.75x	0.43x	29
2012	2.05x	1.90x	1.57x	1.29x	1.05x	1.41x	1.19x	0.99x	0.75x	0.49x	38
2013	1.80x	1.55x	1.37x	1.20x	1.02x	1.08x	0.94x	0.70x	0.50x	0.37x	36
2014	2.28x	1.81x	1.44x	1.18x	1.10x	1.21x	0.87x	0.60x	0.26x	0.16x	44
2015	1.99x	1.40x	1.34x	1.20x	0.98x	0.84x	0.61x	0.42x	0.25x	0.13x	55
2016	1.71x	1.48x	1.25x	1.13x	1.02x	0.68x	0.42x	0.18x	0.08x	0.00x	47
2017	1.35x	1.26x	1.17x	1.03x	0.91x	0.34x	0.18x	0.05x	0.01x	0.00x	50
2018	1.30x	1.13x	1.00x	0.88x	0.77x	0.19x	0.06x	0.01x	0.00x	0.00x	67

Source: PitchBook. Geography: Global . Data as of June 30, 2020



PE \$1B+

Quarterly return

Quarter end	1-quarter return
Q1 2001	-6.97%
Q2 2001	2.41%
Q3 2001	-3.85%
Q4 2001	-3.76%
Q1 2002	0.29%
Q2 2002	-3.43%
Q3 2002	-2.96%
Q4 2002	-0.15%
Q1 2003	-0.06%
Q2 2003	7.27%
Q3 2003	4.67%
Q4 2003	10.42%
Q1 2004	10.57%
Q2 2004	-1.08%
Q3 2004	2.62%
Q4 2004	14.12%
Q1 2005	1.78%
Q2 2005	9.07%
Q3 2005	7.92%
Q4 2005	10.52%
Q1 2006	3.60%
Q2 2006	6.42%
Q3 2006	4.21%
Q4 2006	14.09%

Quarter end	1-quarter return
Q1 2007	5.33%
Q2 2007	9.47%
Q3 2007	4.40%
Q4 2007	2.80%
Q1 2008	0.00%
Q2 2008	-1.78%
Q3 2008	-9.01%
Q4 2008	-12.66%
Q1 2009	-8.52%
Q2 2009	4.76%
Q3 2009	5.52%
Q4 2009	7.94%
Q1 2010	2.78%
Q2 2010	1.21%
Q3 2010	4.96%
Q4 2010	7.89%
Q1 2011	5.65%
Q2 2011	4.86%
Q3 2011	-3.29%
Q4 2011	0.96%
Q1 2012	6.42%
Q2 2012	0.67%
Q3 2012	3.84%
Q4 2012	3.34%

Quarter end	1-quarter return
Q1 2013	3.35%
Q2 2013	3.06%
Q3 2013	5.16%
Q4 2013	5.95%
Q1 2014	4.82%
Q2 2014	5.17%
Q3 2014	-0.12%
Q4 2014	3.16%
Q1 2015	3.82%
Q2 2015	5.73%
Q3 2015	0.68%
Q4 2015	1.83%
Q1 2016	1.62%
Q2 2016	4.30%
Q3 2016	4.35%
Q4 2016	1.40%
Q1 2017	4.71%
Q2 2017	5.65%
Q3 2017	4.78%
Q4 2017	4.45%
Q1 2018	3.82%
Q2 2018	3.07%
Q3 2018	3.62%
Q4 2018	-1.28%

Quarter end	1-quarter return
Q1 2019	5.06%
Q2 2019	2.94%
Q3 2019	3.31%
Q4 2019	5.05%
Q1 2020	-8.67%
Q2 2020	9.71%

Buyout



Buyout

IRR by vintage

Pooled IRRs

IRR hurdle rates

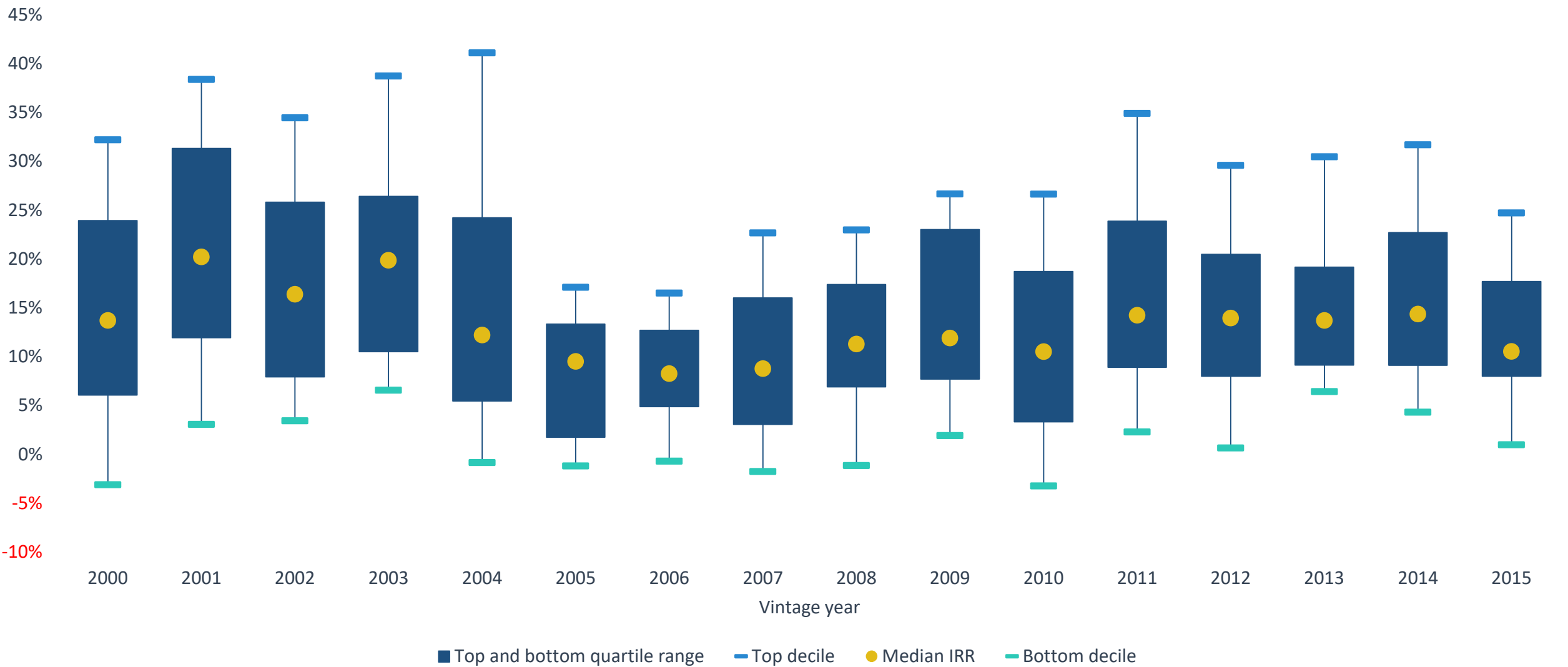
Vintage year	Pooled IRR	Equal-weighted pooled IRR	Number of funds	Top decile	Top quartile	Median IRR	Bottom quartile	Bottom decile	Standard deviation	Number of funds
Pre-1996	22.18%	10.11%	5	36.55%	28.63%	16.80%	10.74%	-1.84%	18.95%	71
1996	11.58%	8.80%	23	23.63%	18.80%	6.01%	0.41%	-6.00%	14.05%	31
1997	10.18%	8.43%	21	18.36%	13.54%	7.32%	0.57%	-2.17%	10.78%	25
1998	6.48%	5.10%	38	21.09%	14.30%	8.80%	0.77%	-8.04%	10.80%	50
1999	9.19%	10.79%	30	29.19%	21.10%	11.43%	5.21%	-0.78%	12.68%	42
2000	16.25%	13.29%	43	32.19%	23.92%	13.71%	6.07%	-3.12%	12.91%	61
2001	24.62%	21.40%	29	38.37%	31.31%	20.21%	11.94%	3.05%	18.63%	34
2002	20.81%	16.77%	26	34.43%	25.81%	16.39%	7.93%	3.43%	22.28%	39
2003	18.00%	16.77%	19	38.72%	26.40%	19.85%	10.51%	6.56%	12.08%	27
2004	12.90%	13.11%	41	41.09%	24.20%	12.20%	5.46%	-0.85%	18.91%	45
2005	9.00%	7.71%	62	17.09%	13.33%	9.50%	1.74%	-1.20%	11.63%	73
2006	7.38%	7.55%	88	16.50%	12.69%	8.25%	4.89%	-0.70%	9.04%	112
2007	8.93%	9.17%	91	22.66%	16.00%	8.76%	3.06%	-1.77%	11.62%	114
2008	12.93%	11.61%	86	22.97%	17.38%	11.29%	6.90%	-1.16%	15.07%	97
2009	14.30%	15.89%	33	26.64%	23.01%	11.90%	7.70%	1.92%	18.08%	43
2010	8.32%	9.31%	42	26.62%	18.70%	10.50%	3.32%	-3.24%	13.50%	45
2011	15.28%	16.33%	59	34.90%	23.87%	14.24%	8.91%	2.29%	19.88%	72
2012	14.92%	13.19%	89	29.56%	20.47%	13.95%	8.00%	0.64%	13.55%	84
2013	12.32%	13.31%	78	30.45%	19.16%	13.70%	9.13%	6.41%	10.14%	73
2014	17.64%	17.83%	78	31.68%	22.70%	14.36%	9.11%	4.31%	12.82%	79
2015	14.40%	13.63%	94	24.69%	17.68%	10.53%	7.99%	0.98%	9.69%	89
2016	15.63%	14.96%	96	27.74%	22.09%	13.51%	7.73%	0.50%	14.75%	94
2017	13.47%	10.67%	101	26.28%	16.96%	8.88%	2.25%	-8.65%	22.88%	94
2018	4.68%	4.03%	106	34.72%	14.13%	1.65%	-14.53%	-32.42%	32.21%	92

Source: PitchBook. Geography: Global . Data as of June 30, 2020



Buyout

IRRs by vintage





Buyout

PMEs by vintage

S&P 500 index

MSCI All Country World Index

Vintage year	Pooled IRR	Index return	KS-PME	Pooled IRR	Index return	KS-PME	Number of funds
1996	11.58%	8.54%	1.39	11.58%	6.50%	1.39	23
1997	10.18%	7.84%	1.40	10.18%	6.27%	1.35	21
1998	6.48%	6.85%	1.30	6.48%	5.60%	1.21	38
1999	9.19%	6.06%	1.33	9.19%	5.20%	1.23	30
2000	16.25%	5.68%	1.50	16.25%	4.49%	1.36	43
2001	24.62%	6.52%	1.71	24.62%	5.60%	1.55	29
2002	20.81%	7.50%	1.48	20.81%	6.77%	1.40	26
2003	18.00%	9.57%	1.45	18.00%	8.56%	1.41	19
2004	12.90%	8.23%	1.38	12.90%	6.80%	1.39	41
2005	9.00%	8.30%	1.16	9.00%	6.46%	1.25	62
2006	7.38%	8.21%	0.99	7.38%	5.75%	1.14	88
2007	8.93%	7.85%	0.94	8.93%	4.90%	1.10	91
2008	12.93%	8.82%	1.00	12.93%	5.17%	1.17	86
2009	14.30%	14.51%	1.00	14.30%	11.04%	1.18	33
2010	8.32%	12.10%	0.84	8.32%	7.85%	0.99	42
2011	15.28%	11.46%	1.10	15.28%	6.92%	1.28	59
2012	14.92%	12.17%	1.11	14.92%	8.04%	1.26	89
2013	12.32%	11.81%	1.05	12.32%	7.38%	1.17	78
2014	17.64%	10.01%	1.22	17.64%	5.95%	1.35	78
2015	14.40%	9.12%	1.10	14.40%	5.73%	1.20	94
2016	15.63%	12.30%	1.14	15.63%	9.29%	1.23	96
2017	13.47%	9.53%	1.10	13.47%	6.28%	1.17	101
2018	4.68%	5.24%	1.01	4.68%	0.06%	1.05	106

Source: PitchBook. Geography: Global . Data as of June 30, 2020



Buyout

Multiples by vintage

Pooled multiples

Equal-weighted pooled multiples

Vintage year	TVPI	DPI	RVPI	TVPI	DPI	RVPI	Number of funds
Pre-1996	1.72x	1.70x	0.02x	1.45x	1.37x	0.08x	5
1996	1.57x	1.57x	0.00x	1.43x	1.43x	0.00x	23
1997	1.61x	1.61x	0.00x	1.44x	1.44x	0.00x	21
1998	1.39x	1.38x	0.00x	1.27x	1.27x	0.00x	38
1999	1.49x	1.48x	0.00x	1.59x	1.58x	0.01x	30
2000	1.84x	1.83x	0.01x	1.75x	1.74x	0.02x	43
2001	2.20x	2.19x	0.01x	2.00x	1.98x	0.02x	29
2002	2.00x	1.98x	0.02x	1.78x	1.76x	0.02x	26
2003	1.85x	1.83x	0.02x	1.86x	1.84x	0.03x	19
2004	1.77x	1.72x	0.05x	1.74x	1.69x	0.05x	41
2005	1.54x	1.50x	0.04x	1.46x	1.41x	0.05x	62
2006	1.49x	1.43x	0.06x	1.47x	1.38x	0.09x	88
2007	1.52x	1.37x	0.14x	1.52x	1.40x	0.13x	91
2008	1.67x	1.53x	0.13x	1.61x	1.44x	0.17x	86
2009	1.72x	1.57x	0.15x	1.81x	1.60x	0.21x	33
2010	1.40x	1.04x	0.36x	1.47x	1.07x	0.40x	42
2011	1.78x	1.23x	0.55x	1.82x	1.26x	0.56x	59
2012	1.64x	0.99x	0.65x	1.55x	0.94x	0.61x	89
2013	1.43x	0.77x	0.66x	1.51x	0.76x	0.75x	78
2014	1.62x	0.74x	0.88x	1.61x	0.67x	0.94x	78
2015	1.36x	0.43x	0.94x	1.36x	0.42x	0.94x	94
2016	1.33x	0.22x	1.11x	1.32x	0.27x	1.05x	96
2017	1.18x	0.14x	1.05x	1.16x	0.19x	0.97x	101
2018	1.04x	0.06x	0.98x	1.04x	0.08x	0.96x	106

Source: PitchBook. Geography: Global . Data as of June 30, 2020



Buyout

Multiples by vintage

TVPI						DPI					Number of funds
Vintage year	Top decile	Top quartile	Median TVPI	Bottom quartile	Bottom decile	Top decile	Top quartile	Median DPI	Bottom quartile	Bottom decile	
Pre-1996		1.91x	1.24x	0.86x			1.91x	0.86x	0.77x		5
1996	2.29x	1.83x	1.30x	1.08x	0.67x	2.29x	1.83x	1.30x	1.06x	0.67x	23
1997	2.06x	1.87x	1.46x	1.03x	0.86x	2.06x	1.87x	1.46x	1.03x	0.86x	21
1998	1.95x	1.57x	1.36x	0.91x	0.57x	1.95x	1.57x	1.35x	0.91x	0.56x	38
1999	2.27x	2.03x	1.59x	1.23x	0.93x	2.27x	1.95x	1.59x	1.19x	0.92x	30
2000	2.42x	2.14x	1.81x	1.36x	1.04x	2.42x	2.09x	1.69x	1.36x	1.01x	43
2001	2.96x	2.35x	2.08x	1.52x	1.17x	2.95x	2.35x	1.94x	1.52x	1.16x	29
2002	2.45x	2.18x	1.87x	1.47x	1.21x	2.44x	2.16x	1.86x	1.46x	1.17x	26
2003	2.86x	1.92x	1.68x	1.47x	1.26x	2.83x	1.92x	1.68x	1.44x	1.24x	19
2004	2.54x	2.02x	1.75x	1.35x	1.05x	2.54x	2.02x	1.59x	1.29x	0.96x	41
2005	2.16x	1.76x	1.45x	1.17x	0.89x	2.09x	1.69x	1.37x	1.08x	0.83x	62
2006	2.03x	1.68x	1.48x	1.20x	0.94x	1.94x	1.64x	1.42x	1.15x	0.76x	88
2007	2.23x	1.94x	1.46x	1.13x	0.91x	2.11x	1.82x	1.35x	0.96x	0.74x	91
2008	2.17x	1.95x	1.57x	1.28x	0.96x	2.03x	1.85x	1.39x	1.15x	0.69x	86
2009	2.54x	2.27x	1.67x	1.49x	0.99x	2.38x	2.19x	1.46x	1.16x	0.92x	33
2010	2.17x	1.84x	1.47x	1.08x	0.79x	1.78x	1.37x	1.06x	0.61x	0.39x	42
2011	3.23x	2.11x	1.65x	1.37x	1.02x	2.12x	1.54x	1.16x	0.74x	0.33x	59
2012	2.05x	1.90x	1.53x	1.26x	0.94x	1.52x	1.23x	0.93x	0.55x	0.33x	89
2013	1.98x	1.65x	1.49x	1.30x	1.09x	1.25x	1.05x	0.70x	0.43x	0.19x	78
2014	2.26x	1.79x	1.46x	1.24x	1.12x	1.31x	0.84x	0.59x	0.25x	0.04x	78
2015	1.70x	1.40x	1.26x	1.17x	0.98x	0.80x	0.60x	0.35x	0.13x	0.04x	94
2016	1.74x	1.51x	1.25x	1.08x	0.92x	0.61x	0.37x	0.17x	0.04x	0.00x	96
2017	1.40x	1.23x	1.13x	0.98x	0.88x	0.46x	0.17x	0.07x	0.00x	0.00x	101
2018	1.31x	1.11x	0.99x	0.89x	0.73x	0.19x	0.06x	0.01x	0.00x	0.00x	106

Source: PitchBook. Geography: Global . Data as of June 30, 2020



Buyout

Quarterly return

Quarter end	1-quarter return
Q1 2001	-6.51%
Q2 2001	0.58%
Q3 2001	-3.69%
Q4 2001	-4.07%
Q1 2002	-0.63%
Q2 2002	-2.79%
Q3 2002	-2.87%
Q4 2002	-0.26%
Q1 2003	0.25%
Q2 2003	6.18%
Q3 2003	4.06%
Q4 2003	9.57%
Q1 2004	9.53%
Q2 2004	0.00%
Q3 2004	2.79%
Q4 2004	14.00%
Q1 2005	2.19%
Q2 2005	8.63%
Q3 2005	7.93%
Q4 2005	9.91%
Q1 2006	3.98%
Q2 2006	5.86%
Q3 2006	4.48%
Q4 2006	12.66%

Quarter end	1-quarter return
Q1 2007	5.38%
Q2 2007	9.27%
Q3 2007	4.44%
Q4 2007	3.13%
Q1 2008	0.08%
Q2 2008	-1.40%
Q3 2008	-8.51%
Q4 2008	-12.44%
Q1 2009	-8.03%
Q2 2009	4.55%
Q3 2009	4.94%
Q4 2009	7.90%
Q1 2010	2.52%
Q2 2010	1.25%
Q3 2010	4.84%
Q4 2010	7.91%
Q1 2011	5.24%
Q2 2011	4.58%
Q3 2011	-2.98%
Q4 2011	1.34%
Q1 2012	5.84%
Q2 2012	0.77%
Q3 2012	3.66%
Q4 2012	3.19%

Quarter end	1-quarter return
Q1 2013	3.30%
Q2 2013	2.98%
Q3 2013	4.91%
Q4 2013	5.91%
Q1 2014	4.55%
Q2 2014	5.05%
Q3 2014	-0.04%
Q4 2014	3.29%
Q1 2015	3.50%
Q2 2015	5.60%
Q3 2015	0.48%
Q4 2015	2.13%
Q1 2016	1.81%
Q2 2016	4.61%
Q3 2016	4.39%
Q4 2016	1.30%
Q1 2017	4.53%
Q2 2017	5.71%
Q3 2017	4.73%
Q4 2017	4.72%
Q1 2018	3.43%
Q2 2018	3.69%
Q3 2018	3.46%
Q4 2018	-0.73%

Quarter end	1-quarter return
Q1 2019	4.73%
Q2 2019	3.00%
Q3 2019	3.46%
Q4 2019	4.56%
Q1 2020	-8.52%
Q2 2020	9.24%

Growth/expansion



Growth/expansion

IRR by vintage

Pooled IRRs

IRR hurdle rates

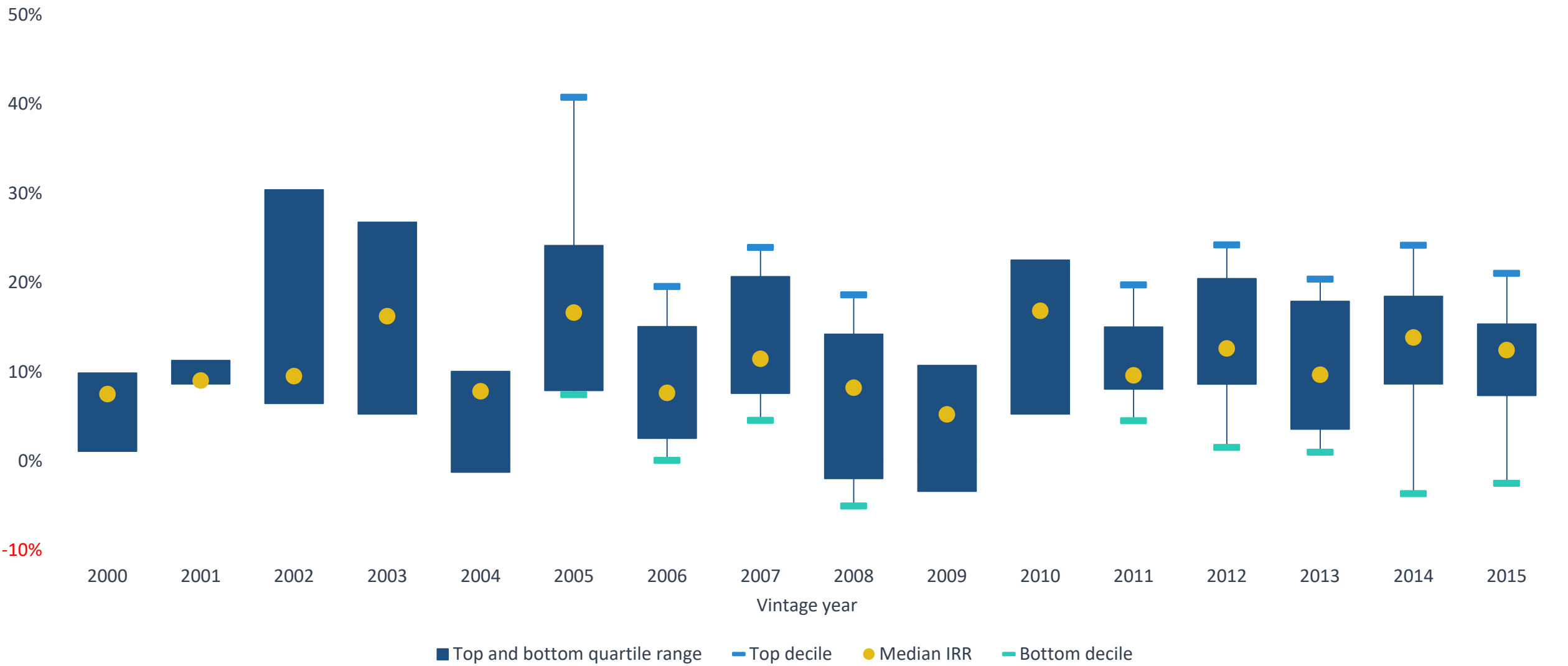
Vintage year	Pooled IRR	Equal-weighted pooled IRR	Number of funds	Top decile	Top quartile	Median IRR	Bottom quartile	Bottom decile	Standard deviation	Number of funds
Pre-1996					26.65%	19.13%	-0.82%		19.23%	7
1996						4.44%			15.75%	2
1997			1		19.40%	-3.45%	-16.07%		33.06%	4
1998	15.43%	15.43%	1		15.05%	7.50%	0.40%		15.36%	5
1999	13.42%	12.03%	6		15.80%	5.50%	0.90%		9.23%	9
2000	12.63%	6.57%	5		9.85%	7.47%	1.08%		8.15%	7
2001	12.43%	13.42%	2		11.25%	9.01%	8.61%		3.97%	4
2002	17.37%	18.10%	5		30.38%	9.50%	6.44%		19.55%	7
2003	21.22%	14.28%	3		26.75%	16.20%	5.25%		17.43%	4
2004	-2.79%	-2.00%	5		10.04%	7.80%	-1.28%		14.79%	7
2005	18.59%	19.12%	8	40.73%	24.14%	16.61%	7.89%	7.41%	15.52%	10
2006	9.00%	7.67%	10	19.54%	15.06%	7.61%	2.52%	0.05%	7.99%	14
2007	9.13%	10.20%	15	23.90%	20.65%	11.44%	7.58%	4.54%	15.49%	19
2008	6.12%	4.74%	17	18.60%	14.20%	8.20%	-1.98%	-5.05%	14.32%	21
2009	2.39%	6.21%	6		10.70%	5.20%	-3.40%		9.40%	9
2010	19.36%	16.22%	7		22.51%	16.80%	5.25%		12.45%	7
2011	11.40%	12.40%	14	19.72%	15.00%	9.59%	8.04%	4.50%	6.96%	17
2012	15.01%	8.28%	11	24.19%	20.43%	12.60%	8.60%	1.50%	12.82%	19
2013	11.95%	11.35%	13	20.35%	17.88%	9.65%	3.55%	0.98%	19.17%	14
2014	15.18%	8.94%	16	24.14%	18.43%	13.81%	8.62%	-3.67%	12.50%	15
2015	13.53%	11.73%	16	21.01%	15.34%	12.42%	7.33%	-2.53%	13.12%	16
2016	23.84%	20.08%	13	33.13%	29.86%	24.50%	17.07%	9.54%	9.25%	15
2017	18.03%	14.82%	19	47.06%	25.28%	19.66%	6.50%	-8.00%	23.19%	12
2018	1.78%	7.63%	16	42.90%	23.22%	12.83%	4.01%	-19.79%	24.04%	16

Source: PitchBook. Geography: Global . Data as of June 30, 2020



Growth/expansion

IRR by vintage





Growth/expansion

PMEs by vintage

S&P 500 index

MSCI All Country World Index

Vintage year	Pooled IRR	Index return	KS-PME	Pooled IRR	Index return	KS-PME	Number of funds
1996							
1997		7.84%	0.26		6.27%	0.25	1
1998	15.43%	6.85%	1.74	15.43%	5.60%	1.53	1
1999	13.42%	6.06%	1.71	13.42%	5.20%	1.56	6
2000	12.63%	5.68%	1.43	12.63%	4.49%	1.27	5
2001	12.43%	6.52%	1.52	12.43%	5.60%	1.41	2
2002	17.37%	7.50%	1.46	17.37%	6.77%	1.32	5
2003	21.22%	9.57%	1.80	21.22%	8.56%	1.73	3
2004	-2.79%	8.23%	0.57	-2.79%	6.80%	0.57	5
2005	18.59%	8.30%	1.66	18.59%	6.46%	1.78	8
2006	9.00%	8.21%	1.00	9.00%	5.75%	1.19	10
2007	9.13%	7.85%	0.95	9.13%	4.90%	1.11	15
2008	6.12%	8.82%	0.71	6.12%	5.17%	0.86	17
2009	2.39%	14.51%	0.63	2.39%	11.04%	0.75	6
2010	19.36%	12.10%	1.30	19.36%	7.85%	1.59	7
2011	11.40%	11.46%	0.96	11.40%	6.92%	1.16	14
2012	15.01%	12.17%	1.09	15.01%	8.04%	1.24	11
2013	11.95%	11.81%	1.05	11.95%	7.38%	1.19	13
2014	15.18%	10.01%	1.22	15.18%	5.95%	1.36	16
2015	13.53%	9.12%	1.08	13.53%	5.73%	1.17	16
2016	23.84%	12.30%	1.30	23.84%	9.29%	1.40	13
2017	18.03%	9.53%	1.15	18.03%	6.28%	1.22	19
2018	1.78%	5.24%	0.98	1.78%	0.06%	1.03	16

Source: PitchBook. Geography: Global . Data as of June 30, 2020



Growth/expansion

Multiples by vintage

Pooled multiples

Equal-weighted pooled multiples

Vintage year	TVPI	DPI	RVPI	TVPI	DPI	RVPI	Number of funds
Pre-1996							
1996							
1997	0.28x	0.27x	0.00x	0.28x	0.27x	0.00x	1
1998	1.84x	1.84x	0.00x	1.84x	1.84x	0.00x	1
1999	1.96x	1.95x	0.01x	2.03x	2.03x	0.01x	6
2000	1.75x	1.74x	0.01x	1.45x	1.41x	0.03x	5
2001	1.95x	1.95x	0.00x	2.08x	2.08x	0.00x	2
2002	2.02x	2.02x	0.00x	2.11x	2.11x	0.00x	5
2003	2.34x	2.34x	0.00x	1.73x	1.72x	0.00x	3
2004	0.82x	0.75x	0.06x	0.88x	0.80x	0.08x	5
2005	2.30x	2.25x	0.05x	2.34x	2.27x	0.06x	8
2006	1.77x	1.67x	0.10x	1.61x	1.47x	0.14x	10
2007	1.55x	1.49x	0.06x	1.63x	1.54x	0.09x	15
2008	1.36x	1.14x	0.23x	1.28x	1.13x	0.15x	17
2009	1.13x	0.69x	0.43x	1.35x	0.87x	0.48x	6
2010	2.45x	1.70x	0.75x	2.08x	1.47x	0.61x	7
2011	1.68x	0.94x	0.74x	1.79x	1.04x	0.75x	14
2012	1.66x	1.22x	0.44x	1.37x	0.86x	0.51x	11
2013	1.48x	0.63x	0.86x	1.44x	0.73x	0.71x	13
2014	1.65x	0.40x	1.25x	1.39x	0.41x	0.99x	16
2015	1.35x	0.32x	1.03x	1.31x	0.23x	1.08x	16
2016	1.53x	0.48x	1.05x	1.46x	0.35x	1.11x	13
2017	1.23x	0.05x	1.18x	1.22x	0.11x	1.10x	19
2018	1.02x	0.08x	0.94x	1.07x	0.10x	0.97x	16

Source: PitchBook. Geography: Global . Data as of June 30, 2020



Growth/expansion

Multiples by vintage

TVPI						DPI					Number of funds
Vintage year	Top decile	Top quartile	Median TVPI	Bottom quartile	Bottom decile	Top decile	Top quartile	Median DPI	Bottom quartile	Bottom decile	
Pre-1996											
1996											
1997			0.28x					0.27x			1
1998			1.84x					1.84x			1
1999		2.71x	1.93x	1.28x			2.71x	1.92x	1.27x		6
2000		1.71x	1.33x	0.94x			1.71x	1.33x	0.83x		5
2001			2.10x					2.10x			2
2002		3.05x	1.87x	1.31x			3.05x	1.87x	1.31x		5
2003			1.56x					1.56x			3
2004		1.44x	0.61x	0.52x			1.15x	0.60x	0.50x		5
2005		2.51x	1.95x	1.50x			2.50x	1.95x	1.46x		8
2006	2.87x	2.28x	1.40x	1.17x	0.36x	2.28x	2.15x	1.35x	1.01x	0.35x	10
2007	2.42x	1.95x	1.64x	1.30x	0.67x	2.31x	1.81x	1.64x	1.13x	0.47x	15
2008	1.94x	1.77x	1.41x	0.89x	0.71x	1.74x	1.54x	1.21x	0.83x	0.52x	17
2009		1.70x	1.42x	0.96x			1.20x	0.98x	0.46x		6
2010		2.74x	2.40x	1.35x			1.96x	1.78x	1.19x		7
2011	2.75x	2.04x	1.54x	1.40x	1.20x	1.76x	1.44x	0.90x	0.56x	0.39x	14
2012	1.79x	1.66x	1.33x	1.07x	0.92x	1.53x	1.13x	0.76x	0.46x	0.19x	11
2013	1.86x	1.50x	1.28x	1.15x	1.02x	1.37x	1.12x	0.67x	0.29x	0.03x	13
2014	2.10x	1.55x	1.31x	0.89x	0.64x	0.76x	0.57x	0.26x	0.15x	0.06x	16
2015	1.88x	1.41x	1.32x	1.03x	0.85x	0.44x	0.28x	0.18x	0.12x	0.01x	16
2016	1.63x	1.59x	1.48x	1.26x	1.20x	0.68x	0.64x	0.28x	0.01x	0.00x	13
2017	1.62x	1.36x	1.24x	0.98x	0.80x	0.34x	0.13x	0.01x	0.00x	0.00x	19
2018	1.22x	1.16x	1.00x	0.88x	0.80x	0.24x	0.03x	0.00x	0.00x	0.00x	16

Source: PitchBook. Geography: Global . Data as of June 30, 2020



Growth/expansion

Quarterly return

Quarter end	1-quarter return
Q1 2001	-10.99%
Q2 2001	-5.55%
Q3 2001	-5.24%
Q4 2001	3.59%
Q1 2002	-7.03%
Q2 2002	-7.46%
Q3 2002	-6.76%
Q4 2002	4.60%
Q1 2003	-2.82%
Q2 2003	1.01%
Q3 2003	2.45%
Q4 2003	15.63%
Q1 2004	3.77%
Q2 2004	3.53%
Q3 2004	2.20%
Q4 2004	10.67%
Q1 2005	-1.18%
Q2 2005	4.16%
Q3 2005	4.20%
Q4 2005	22.82%
Q1 2006	7.71%
Q2 2006	3.61%
Q3 2006	3.49%
Q4 2006	17.55%

Quarter end	1-quarter return
Q1 2007	5.91%
Q2 2007	7.14%
Q3 2007	4.23%
Q4 2007	1.65%
Q1 2008	0.23%
Q2 2008	-1.07%
Q3 2008	-7.09%
Q4 2008	-9.64%
Q1 2009	-5.39%
Q2 2009	2.07%
Q3 2009	7.24%
Q4 2009	5.37%
Q1 2010	4.39%
Q2 2010	1.05%
Q3 2010	7.05%
Q4 2010	7.82%
Q1 2011	3.98%
Q2 2011	3.08%
Q3 2011	-3.36%
Q4 2011	3.38%
Q1 2012	5.70%
Q2 2012	0.04%
Q3 2012	2.79%
Q4 2012	3.66%

Quarter end	1-quarter return
Q1 2013	-0.07%
Q2 2013	2.62%
Q3 2013	4.37%
Q4 2013	6.30%
Q1 2014	4.27%
Q2 2014	5.53%
Q3 2014	1.34%
Q4 2014	1.41%
Q1 2015	3.70%
Q2 2015	7.23%
Q3 2015	1.15%
Q4 2015	0.58%
Q1 2016	-0.53%
Q2 2016	6.06%
Q3 2016	3.21%
Q4 2016	2.20%
Q1 2017	7.32%
Q2 2017	3.71%
Q3 2017	2.03%
Q4 2017	4.32%
Q1 2018	7.73%
Q2 2018	7.76%
Q3 2018	4.29%
Q4 2018	-1.51%

Quarter end	1-quarter return
Q1 2019	5.62%
Q2 2019	4.35%
Q3 2019	2.39%
Q4 2019	9.59%
Q1 2020	-5.43%
Q2 2020	12.10%

Other PE



Other PE

IRR by vintage

Pooled IRRs

IRR hurdle rates

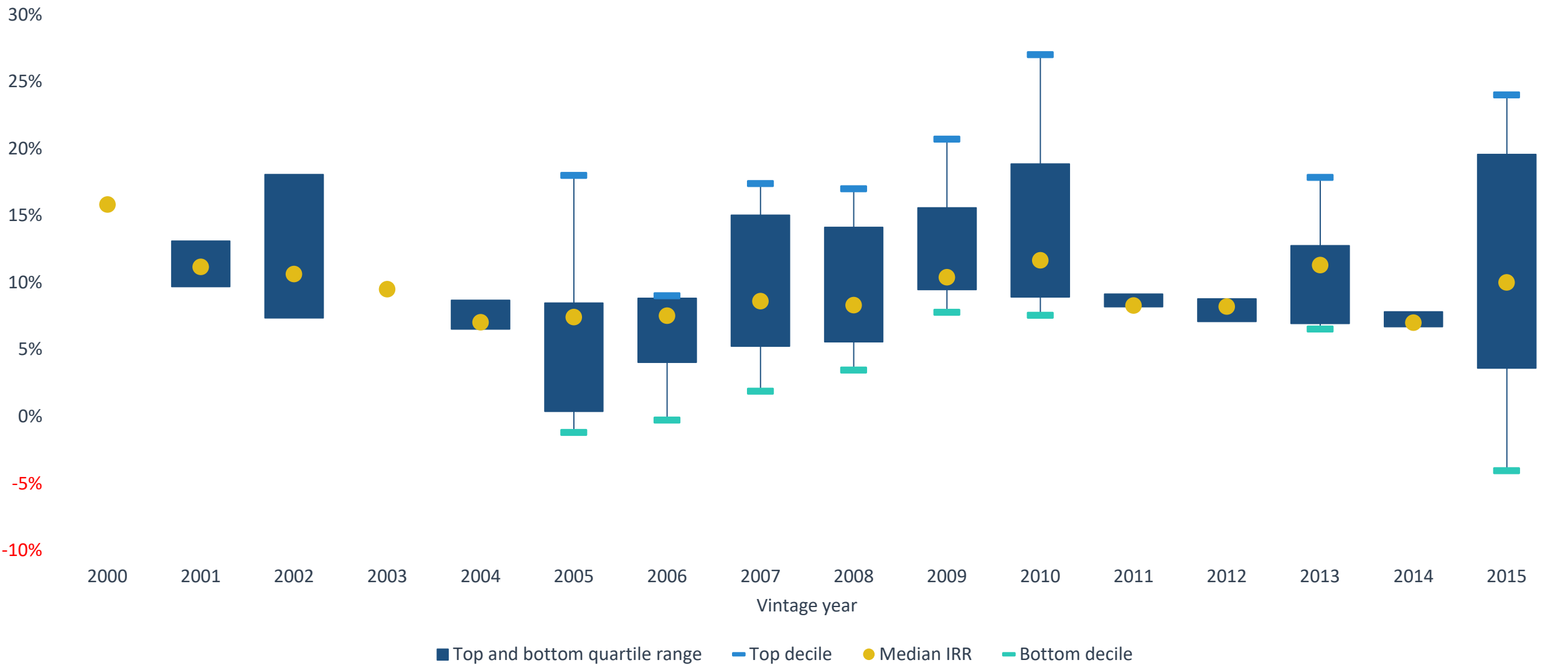
Vintage year	Pooled IRR	Equal-weighted pooled IRR	Number of funds	Top decile	Top quartile	Median IRR	Bottom quartile	Bottom decile	Standard deviation	Number of funds
Pre-1996	11.81%	11.81%	1		28.80%	10.11%	5.71%		13.41%	9
1996	-13.00%	-13.00%	1			4.29%			11.17%	3
1997	9.33%	8.24%	3		13.02%	11.84%	7.30%		21.85%	5
1998	3.41%	4.11%	3			3.46%			1.85%	3
1999	12.62%	13.27%	4		15.03%	13.55%	12.38%		2.12%	6
2000	9.42%	9.53%	3			15.81%			6.82%	3
2001	22.50%	16.30%	4		13.10%	11.16%	9.69%		13.02%	5
2002	12.98%	14.39%	5		18.07%	10.62%	7.35%		8.09%	6
2003	-0.85%	-0.23%	2			9.50%			10.25%	3
2004	7.63%	8.08%	5		8.68%	7.03%	6.52%		2.89%	8
2005	9.30%	7.44%	8	18.00%	8.47%	7.41%	0.37%	-1.21%	8.28%	13
2006	6.31%	4.32%	16	9.01%	8.83%	7.52%	4.04%	-0.29%	3.50%	20
2007	9.97%	9.20%	10	17.38%	15.03%	8.60%	5.23%	1.87%	6.33%	10
2008	5.60%	6.09%	11	17.00%	14.12%	8.31%	5.57%	3.46%	9.74%	18
2009	10.36%	12.67%	10	20.69%	15.58%	10.38%	9.47%	7.77%	5.76%	10
2010	10.79%	10.76%	11	27.00%	18.86%	11.65%	8.92%	7.55%	8.20%	11
2011	1.39%	2.45%	8		9.13%	8.28%	8.19%		1.42%	5
2012	6.68%	5.16%	8		8.78%	8.20%	7.08%		8.48%	7
2013	10.08%	8.63%	7	17.85%	12.75%	11.30%	6.94%	6.52%	5.86%	11
2014	5.13%	6.04%	7		7.82%	7.00%	6.70%		4.94%	5
2015	24.38%	14.24%	11	24.00%	19.57%	10.00%	3.60%	-4.06%	15.57%	13
2016	8.58%	9.22%	10	13.83%	11.60%	9.00%	8.15%	8.03%	3.01%	13
2017	6.50%	3.06%	6		8.00%	7.52%	-3.87%		8.81%	6
2018	10.90%	8.85%	9		14.41%	10.21%	8.03%		32.89%	8

Source: PitchBook. Geography: Global . Data as of June 30, 2020



Other PE

IRRs by vintage





Other PE

PMEs by vintage

S&P 500 index

MSCI All Country World Index

Vintage year	Pooled IRR	Index return	KS-PME	Pooled IRR	Index return	KS-PME	Number of funds
1996	-13.00%	8.54%	0.43	-13.00%	6.50%	0.44	1
1997	9.33%	7.84%	1.49	9.33%	6.27%	1.43	3
1998	3.41%	6.85%	1.11	3.41%	5.60%	1.05	3
1999	12.62%	6.06%	1.35	12.62%	5.20%	1.28	4
2000	9.42%	5.68%	1.14	9.42%	4.49%	1.02	3
2001	22.50%	6.52%	1.47	22.50%	5.60%	1.37	4
2002	12.98%	7.50%	1.19	12.98%	6.77%	1.09	5
2003	-0.85%	9.57%	0.59	-0.85%	8.56%	0.61	2
2004	7.63%	8.23%	1.05	7.63%	6.80%	1.10	5
2005	9.30%	8.30%	1.23	9.30%	6.46%	1.28	8
2006	6.31%	8.21%	1.10	6.31%	5.75%	1.16	16
2007	9.97%	7.85%	1.04	9.97%	4.90%	1.15	10
2008	5.60%	8.82%	0.82	5.60%	5.17%	0.91	11
2009	10.36%	14.51%	0.88	10.36%	11.04%	1.00	10
2010	10.79%	12.10%	0.91	10.79%	7.85%	1.07	11
2011	1.39%	11.46%	0.71	1.39%	6.92%	0.80	8
2012	6.68%	12.17%	0.87	6.68%	8.04%	0.96	8
2013	10.08%	11.81%	0.97	10.08%	7.38%	1.07	7
2014	5.13%	10.01%	0.83	5.13%	5.95%	0.94	7
2015	24.38%	9.12%	1.30	24.38%	5.73%	1.39	11
2016	8.58%	12.30%	1.01	8.58%	9.29%	1.08	10
2017	6.50%	9.53%	0.95	6.50%	6.28%	1.01	6
2018	10.90%	5.24%	1.05	10.90%	0.06%	1.10	9

Source: PitchBook. Geography: Global . Data as of June 30, 2020



Other PE

Multiples by vintage

Pooled multiples

Equal-weighted pooled multiples

Vintage year	TVPI	DPI	RVPI	TVPI	DPI	RVPI	Number of funds
Pre-1996	1.54x	1.54x	0.00x	1.54x	1.54x	0.00x	1
1996	0.51x	0.51x	0.00x	0.51x	0.51x	0.00x	1
1997	1.54x	1.54x	0.00x	1.47x	1.47x	0.00x	3
1998	1.19x	1.18x	0.01x	1.22x	1.20x	0.02x	3
1999	1.44x	1.44x	0.00x	1.54x	1.54x	0.00x	4
2000	1.42x	1.40x	0.02x	1.44x	1.42x	0.02x	3
2001	1.86x	1.86x	0.00x	1.96x	1.96x	0.00x	4
2002	1.45x	1.45x	0.00x	1.51x	1.51x	0.00x	5
2003	0.94x	0.70x	0.24x	0.98x	0.76x	0.22x	2
2004	1.49x	1.44x	0.05x	1.56x	1.45x	0.11x	5
2005	1.45x	1.41x	0.03x	1.40x	1.36x	0.04x	8
2006	1.23x	1.22x	0.01x	1.19x	1.17x	0.03x	16
2007	1.37x	1.33x	0.04x	1.41x	1.36x	0.04x	10
2008	1.20x	1.15x	0.05x	1.22x	1.17x	0.05x	11
2009	1.37x	1.28x	0.09x	1.46x	1.37x	0.09x	10
2010	1.49x	1.22x	0.27x	1.49x	1.22x	0.27x	11
2011	1.05x	0.79x	0.26x	1.08x	0.81x	0.27x	8
2012	1.20x	0.91x	0.29x	1.17x	0.80x	0.38x	8
2013	1.32x	0.89x	0.43x	1.26x	0.74x	0.52x	7
2014	1.18x	0.54x	0.63x	1.21x	0.60x	0.61x	7
2015	1.58x	0.75x	0.83x	1.41x	0.59x	0.82x	11
2016	1.16x	0.26x	0.90x	1.19x	0.30x	0.88x	10
2017	1.12x	0.33x	0.79x	1.06x	0.26x	0.80x	6
2018	1.10x	0.12x	0.98x	1.10x	0.21x	0.88x	9

Source: PitchBook. Geography: Global . Data as of June 30, 2020



Other PE

Multiples by vintage

TVPI						DPI					Number of funds
Vintage year	Top decile	Top quartile	Median TVPI	Bottom quartile	Bottom decile	Top decile	Top quartile	Median DPI	Bottom quartile	Bottom decile	
Pre-1996			1.54x					1.54x			1
1996			0.51x					0.51x			1
1997			1.69x					1.69x			3
1998			1.25x					1.24x			3
1999		1.67x	1.49x	1.36x			1.67x	1.49x	1.36x		4
2000			1.51x					1.51x			3
2001		2.24x	1.79x	1.54x			2.24x	1.79x	1.53x		4
2002		1.51x	1.35x	1.33x			1.51x	1.35x	1.33x		5
2003			1.18x					1.02x			2
2004		1.66x	1.60x	1.33x			1.59x	1.57x	1.26x		5
2005		1.49x	1.38x	1.26x			1.47x	1.35x	1.25x		8
2006	1.43x	1.35x	1.27x	1.15x	0.77x	1.41x	1.33x	1.27x	1.15x	0.66x	16
2007	1.89x	1.54x	1.30x	1.19x	1.02x	1.88x	1.53x	1.27x	1.07x	1.01x	10
2008	1.37x	1.35x	1.32x	1.15x	1.00x	1.37x	1.34x	1.18x	1.06x	1.00x	11
2009	1.82x	1.53x	1.47x	1.22x	1.17x	1.59x	1.45x	1.36x	1.19x	1.10x	10
2010	1.68x	1.50x	1.45x	1.36x	1.32x	1.47x	1.31x	1.19x	1.09x	0.96x	11
2011		1.31x	1.18x	1.00x			1.06x	0.86x	0.64x		8
2012		1.28x	1.20x	1.17x			0.89x	0.76x	0.70x		8
2013		1.34x	1.26x	1.10x			0.92x	0.67x	0.57x		7
2014		1.31x	1.20x	1.07x			0.67x	0.55x	0.29x		7
2015	1.94x	1.69x	1.25x	1.03x	0.89x	0.91x	0.62x	0.57x	0.28x	0.14x	11
2016	1.32x	1.25x	1.18x	1.13x	1.11x	0.54x	0.44x	0.39x	0.07x	0.00x	10
2017		1.16x	1.10x	0.93x			0.33x	0.28x	0.22x		6
2018		1.15x	1.10x	1.09x			0.27x	0.22x	0.02x		9

Source: PitchBook. Geography: Global . Data as of June 30, 2020



Other PE

Quarterly return

Quarter end	1-quarter return
Q1 2001	-0.48%
Q2 2001	-1.71%
Q3 2001	-1.18%
Q4 2001	-5.05%
Q1 2002	-0.80%
Q2 2002	-2.27%
Q3 2002	0.42%
Q4 2002	-2.72%
Q1 2003	-0.96%
Q2 2003	1.81%
Q3 2003	3.75%
Q4 2003	6.23%
Q1 2004	3.35%
Q2 2004	4.94%
Q3 2004	1.53%
Q4 2004	5.81%
Q1 2005	4.09%
Q2 2005	8.18%
Q3 2005	4.70%
Q4 2005	5.88%
Q1 2006	4.46%
Q2 2006	3.49%
Q3 2006	3.96%
Q4 2006	4.45%

Quarter end	1-quarter return
Q1 2007	5.56%
Q2 2007	0.19%
Q3 2007	2.89%
Q4 2007	7.06%
Q1 2008	-0.56%
Q2 2008	2.18%
Q3 2008	-3.79%
Q4 2008	-0.85%
Q1 2009	-4.52%
Q2 2009	2.32%
Q3 2009	6.17%
Q4 2009	6.46%
Q1 2010	6.65%
Q2 2010	2.41%
Q3 2010	2.98%
Q4 2010	5.72%
Q1 2011	6.48%
Q2 2011	5.71%
Q3 2011	-0.73%
Q4 2011	-4.10%
Q1 2012	7.82%
Q2 2012	0.34%
Q3 2012	6.46%
Q4 2012	1.78%

Quarter end	1-quarter return
Q1 2013	4.27%
Q2 2013	2.84%
Q3 2013	5.11%
Q4 2013	2.05%
Q1 2014	6.91%
Q2 2014	4.06%
Q3 2014	2.60%
Q4 2014	6.16%
Q1 2015	1.72%
Q2 2015	2.93%
Q3 2015	3.32%
Q4 2015	0.92%
Q1 2016	2.45%
Q2 2016	-1.41%
Q3 2016	6.76%
Q4 2016	3.05%
Q1 2017	2.53%
Q2 2017	2.15%
Q3 2017	3.27%
Q4 2017	3.31%
Q1 2018	10.68%
Q2 2018	-9.46%
Q3 2018	-1.03%
Q4 2018	-1.23%

Quarter end	1-quarter return
Q1 2019	3.83%
Q2 2019	0.96%
Q3 2019	1.55%
Q4 2019	2.36%
Q1 2020	-9.99%
Q2 2020	4.23%



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