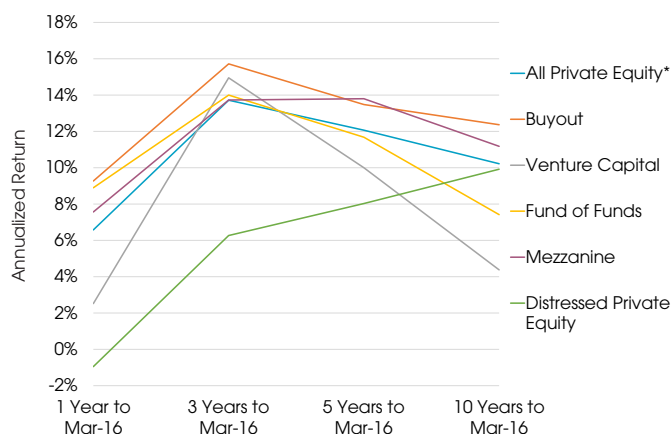


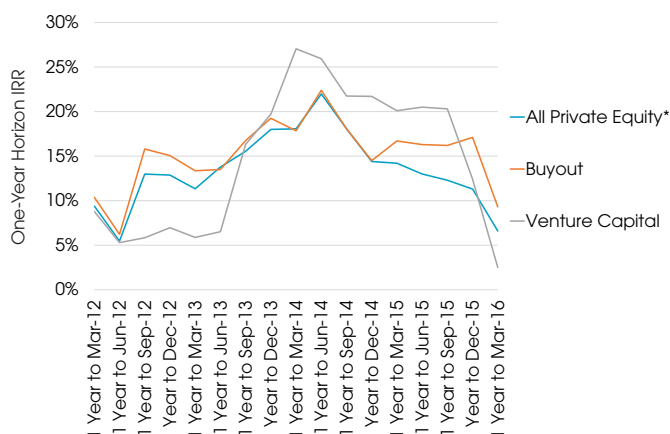
Q1 2016 Private Equity Performance Update

Fig. 1: All Private Equity* Horizon IRRs (As of 31 March 2016)



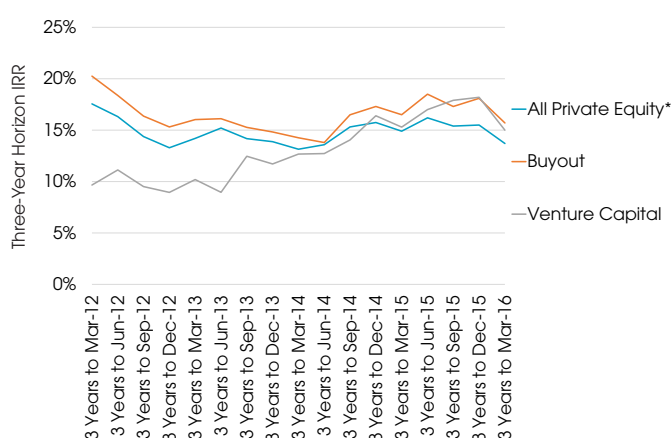
Source: Preqin Private Equity Online

Fig. 2: All Private Equity* Rolling One-Year Horizon IRRs



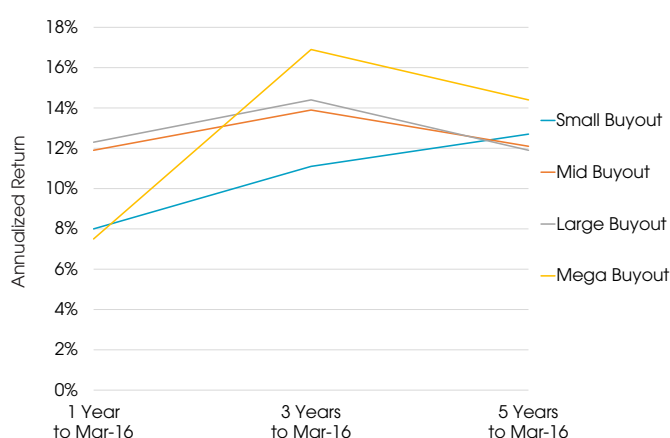
Source: Preqin Private Equity Online

Fig. 3: All Private Equity* Rolling Three-Year Horizon IRRs



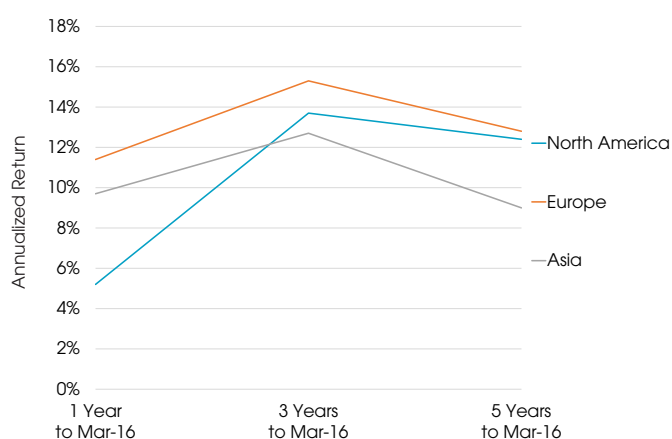
Source: Preqin Private Equity Online

Fig. 4: Buyout Fund Horizon IRRs by Size (As of 31 March 2016)**



Source: Preqin Private Equity Online

Fig. 5: All Private Equity* Horizon IRRs by Fund Primary Regional Focus (As of 31 March 2016)



Source: Preqin Private Equity Online

Data Source:

Preqin's **Private Equity Online** is the industry's most extensive source of net-to-LP private equity fund performance, with full metrics for over 8,390 named vehicles.

For more information, please visit:

www.preqin.com/peo

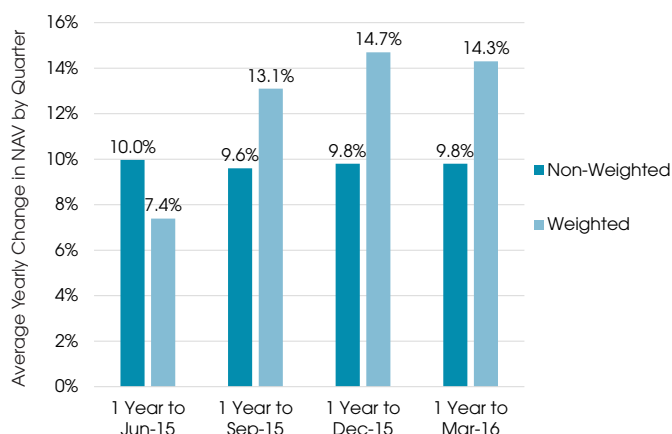
*All Private Equity encompasses all closed-end private capital strategies with the exception of Direct Lending.

**Size ranges:

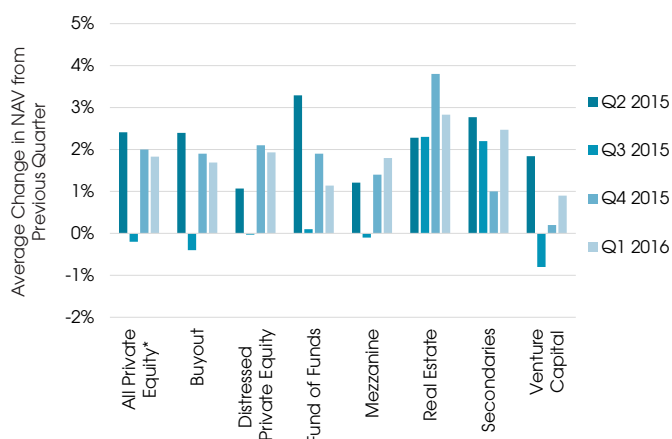
Vintage 1992-1996: Small Buyout ≤ \$200mn, Mid Buyout \$201mn-\$500mn, Large Buyout > \$500mn

Vintage 1997-2004: Small Buyout ≤ \$300mn, Mid Buyout \$301mn-\$750mn, Large Buyout \$751mn-\$2bn, Mega Buyout > \$2bn

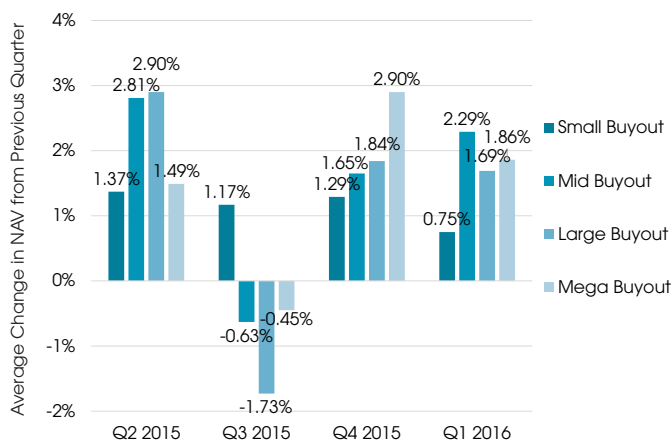
Vintage 2005-2016: Small Buyout ≤ \$500mn, Mid Buyout \$501mn-\$1,500mn, Large Buyout \$1,501mn-\$4.5bn, Mega Buyout > \$4.5bn

Fig. 6: All Private Equity* Yearly Change in NAV

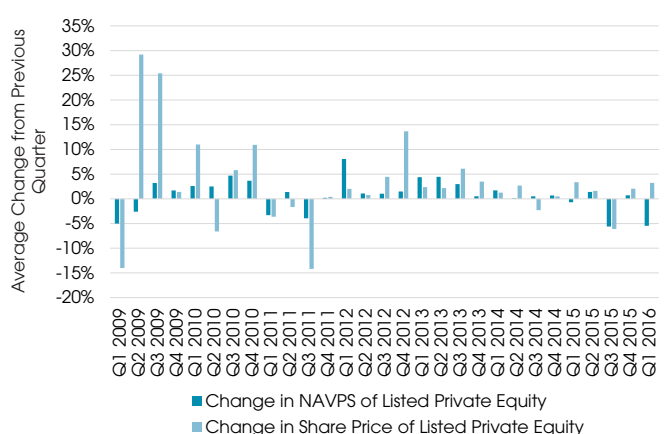
Source: Preqin Private Equity Online

Fig. 7: Quarterly Change in NAV by Fund Type (Non-Weighted)

Source: Preqin Private Equity Online

Fig. 8: Quarterly Change in NAV by Buyout Fund Size**

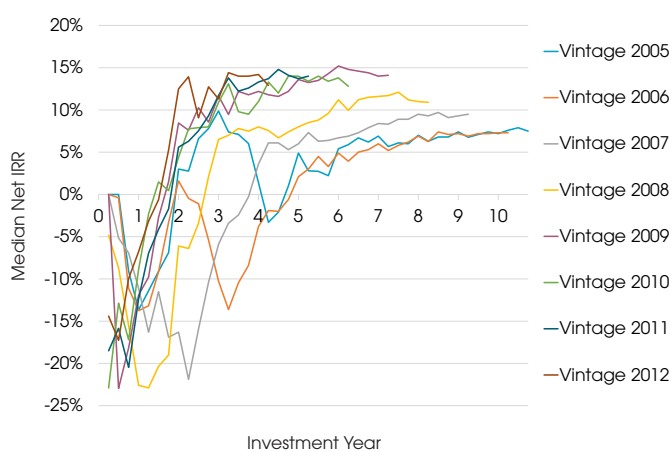
Source: Preqin Private Equity Online

Fig. 9: Change in NAVPS and Share Price of Listed Private Equity by Quarter

Source: Preqin Private Equity Online

Fig. 10: All Private Equity* Median Net IRRs by Fund Type (As of 31 March 2016)

Source: Preqin Private Equity Online

Fig. 11: All Private Equity* - J-Curve: Annual Median Net IRRs by Vintage Year

Source: Preqin Private Equity Online

*All Private Equity encompasses all closed-end private capital strategies with the exception of Direct Lending.

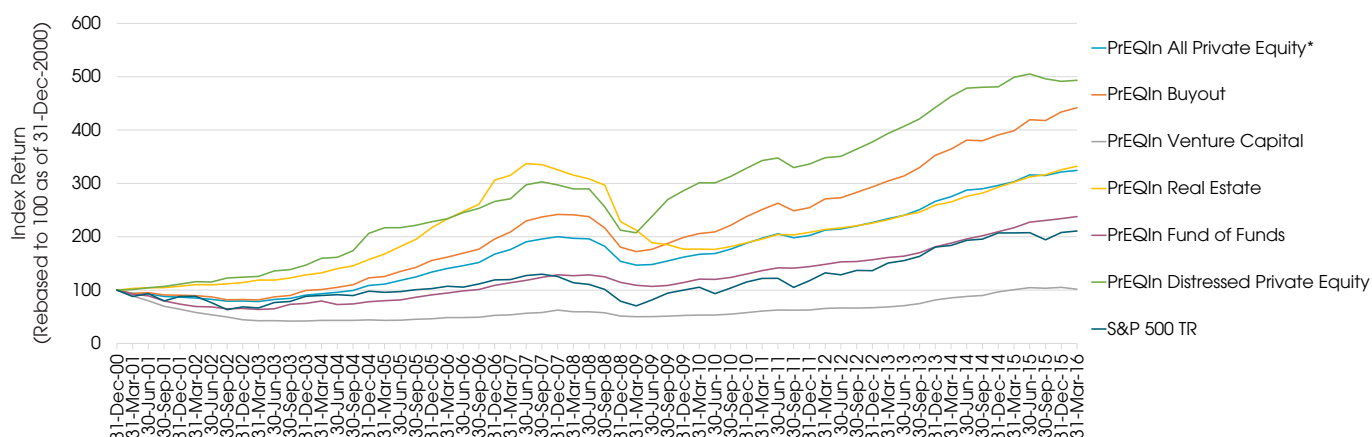
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Vintage 1992-1996: Small Buyout ≤ \$200mn, Mid Buyout \$201mn-\$500mn, Large Buyout > \$500mn

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Vintage 2005-2016: Small Buyout ≤ \$500mn, Mid Buyout \$501mn-\$1,500mn, Large Buyout \$1,501mn-\$4.5bn, Mega Buyout > \$4.5bn

Fig. 12: PrEQIn Quarterly Index: All Strategies



Source: Preqin Private Equity Online

*All Private Equity encompasses all closed-end private capital strategies with the exception of Direct Lending.

PrEQIn - Private Equity Quarterly Index

PrEQIn is the first quarterly index for the whole private equity industry, and a vital tool for investors seeking to compare the performance of private equity portfolios to those of other asset classes.

For free access to the Index, register for **Research Center Premium** by visiting:

www.preqin.com/rcp

Fig. 13: Consistent Top Performing Buyout Fund Managers

Firm	Headquarters	Total Funds Raised in Last 10 Years (\$mn)	No. of Funds in Top Quartile	No. of Funds in Second Quartile	Overall No. of Funds with Quartile Ranking	Average Quartile Rank
Inflexion	UK	3,601	4	4	0	1.00
Altor	Sweden	6,688	3	3	0	1.00
Auctus Management	Germany	613	3	3	0	1.00
Clearview Capital	US	575	3	3	0	1.00
Lone Star Investment Advisors	US	295	3	3	0	1.00
Odyssey Investment Partners	US	3500	3	3	0	1.00
FIMI	Israel	2,427	5	4	1	1.20
Pacific Equity Partners	Australia	6,138	5	4	1	1.20
Waterland	Netherlands	5,081	5	4	1	1.20
Seidler Equity Partners	US	879	4	3	1	1.25
Veritas Capital	US	3,629	4	3	1	1.25
Crescent Capital Partners	Australia	1,384	3	2	1	1.33
DFW Capital	US	577	3	2	1	1.33
Harwood Private Equity	UK	353	3	2	1	1.33
Industrial Growth Partners	US	1800	3	2	1	1.33
Montefiore Investment	France	964	3	2	1	1.33
Platinum Equity	US	6,500	3	2	1	1.33
Wynnchurch Capital Partners	US	1,840	3	2	1	1.33
Quadrant Private Equity	Australia	2,667	5	4	0	1.40
Vista Equity Partners	US	18,011	5	4	0	1.40

Source: Preqin Private Equity Online

Fig. 14: Consistent Top Performing Venture Capital Fund Managers

Firm	Headquarters	Total Funds Raised in Last 10 Years (\$mn)	No. of Funds in Top Quartile	No. of Funds in Second Quartile	Overall No. of Funds with Quartile Ranking	Average Quartile Rank
Pittsford Ventures Management	US	200	6	6	0	1.00
OrbiMed Advisors	US	5298	4	4	0	1.00
Benchmark Capital	US	1,497	3	3	0	1.00
Vickers Venture Partners	Singapore	240	4	3	1	1.25
Brentwood Venture Capital	US		6	4	2	1.33
Columbia Capital	US	1188	6	4	2	1.33
AJU IB Investment	South Korea	545	3	2	1	1.33
Alta Partners	US	500	3	2	1	1.33
Helmet Venture Managers	Finland	12	3	2	1	1.33
Partech Partners	France	1,244	3	2	1	1.33
Battery Ventures	US	3,575	10	7	2	1.40
Bain Capital Ventures	US	3,166	5	3	2	1.40
Matrix Partners	US	4017	5	3	2	1.40
Kleiner Perkins Caufield & Byers	US	7,940	6	3	3	1.50
Foundry Group	US	1,625	4	3	0	1.50
Lightspeed Venture Partners	US	5,044	4	3	0	1.50
TA Associates	US	16,300	7	4	2	1.57
CDH Investments	Hong Kong	9734	5	3	1	1.60
Baird Capital Partners	US	943	3	2	0	1.67
JK&B Capital	US	200	3	2	0	1.67

Source: Preqin Private Equity Online

Fig. 15: Consistent Top Performing Growth Fund Managers

Firm	Headquarters	Total Funds Raised in Last 10 Years (\$mn)	No. of Funds in Top Quartile	No. of Funds in Second Quartile	Overall No. of Funds with Quartile Ranking	Average Quartile Rank
Trustbridge Partners	China	3,140	3	2	1	1.33
Ampersand Capital Partners	US	657	5	3	2	1.40
CDH Investments	Hong Kong	9734	6	2	4	1.67
Tribeca Asset Management	Colombia	412	3	1	2	1.67
Clairvest Group	Canada	1,278	4	1	3	1.75
Technology Crossover Ventures	US	7,747	4	1	3	1.75
Excelsior Capital Asia	Hong Kong	290	2	1	4	1.75

Source: Preqin Private Equity Online

Target Top Performing Fund Managers

Preqin's **Private Equity Online** can be used to identify consistently top performing private equity fund managers, using Preqin's quartile ranking system.

Consistent performing firms can be broken down by geographical fund focus and strategy.

For more information, or to arrange a demonstration, please visit:

www.preqin.com/peo

Fig. 16: Consistent Top Performing Private Equity Fund of Funds Managers

Firm	Headquarters	Total Funds Raised in Last 10 Years (\$mn)	No. of Funds in Top Quartile	No. of Funds in Second Quartile	Overall No. of Funds with Quartile Ranking	Average Quartile Rank
Weathergag Capital	US	518	4	4	0	1.00
Nord Holding	Germany	703	3	3	0	1.00
Greenspring Associates	US	2549	5	4	1	1.20
Industry Ventures	US	3,010	5	4	1	1.20
ATP Private Equity Partners	Denmark	5,691	4	3	1	1.25
TrueBridge Capital Partners	US	1,460	4	3	1	1.25
Axiom Asia Private Capital	Singapore	2,931	3	2	1	1.33
Nordea Private Equity	Denmark	636	3	2	1	1.33
HQ Capital International	US	2,625	4	2	2	1.50
Akina	Switzerland	2,065	5	2	3	1.60
LGT Capital Partners	Switzerland	12,222	11	5	5	1.64
Asia Alternatives Management	Hong Kong	3924	15	9	3	1.67
Ke Nako Capital	South Africa	189	3	2	0	1.67
Gerber/Taylor Management	US	445	7	4	2	1.71
Spur Capital Partners	US	465	4	3	0	1.75
Knightsbridge Advisers	US	416	9	5	2	1.78
JPMorgan Asset Management - Private Equity Group	US	12897	13	7	2	1.85
North Sky Capital	US	436	7	4	1	1.86

Source: Preqin Private Equity Online

Source new investors for funds

Identify new investment opportunities

Conduct competitor and market analysis

Find potential deal opportunities

Develop new business



Find out how Preqin's [Private Equity Online](https://www.preqin.com/privateequity) can help your business:

www.preqin.com/privateequity

The Importance of PME Benchmarking

Investors and fund managers alike frequently benchmark private equity* returns against public markets in order to gauge the relative performance of their investments. For LPs, it is an important exercise undertaken to inform portfolio construction decisions and to evaluate the performance of one asset class against that of another. For fund managers, it forms a key aspect of fund marketing to help secure LP commitments.

Private equity returns, however, are not directly comparable with public market indices, due to the asset class's illiquid nature and irregular timing of cash flows. The industry has long used the analogy of 'comparing apples with oranges' when discussing the difficulties of evaluating the differences between private equity and public market performance.

The development of the **public market equivalent** (PME) measure of returns provides a more meaningful, like-for-like comparison. PME metrics benchmark the performance of a fund, or a group of funds, against an appropriate public market index while accounting for the timings of the fund cash flows. When PME values are generated for many funds, they can be used as an alternative measure of ranking fund performance, while controlling for broader market behaviour.

Preqin provides PME benchmarks and individual fund-level PME comparisons on its online databases, which already provide net-to-LP fund performance metrics for over 8,200 named private equity vehicles globally. The PME tool enables the comparison of private equity returns against six public market

indices using a choice of three PME methodologies: Kaplan-Schoar PME, Long-Nickels PME and PME+. All of the methodologies utilize the since-inception cash flow data Preqin holds for over 3,200 funds.

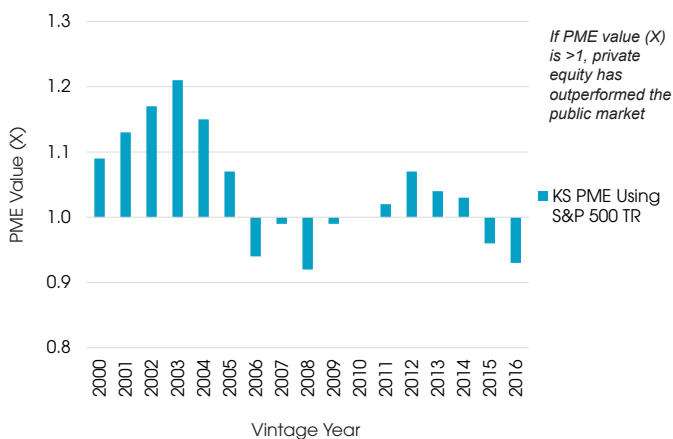
The table below provides an overview of the three PME methodologies Preqin now offers, along with their specific strengths and weaknesses. In this book, we also include the PERACS Alpha benchmark, a measure of the annualized rate of excess return/loss when comparing private equity returns to the MSCI World index. Having the ability to employ a number of different PME methodologies is highly desirable to an investor, but it is important to also maintain awareness that each is fundamentally an approximation until the funds are fully realized.

Methodology	Metric	Private Equity Outperformance if:	Description of Calculation	Strengths	Weaknesses
KS PME (Kaplan-Schoar)	Ratio	Value > 1	Calculated by discounting the private equity fund cash flows by the public market index value. The discounted distributions plus the current remaining value are divided by the discounted contributions to obtain the ratio.	The calculation looks at the ratio of outflows versus inflows as opposed to generating an IRR, which is time-dependent and is easily manipulated. Easy to interpret.	Ignores the timings of cash flows.
LN PME (Long-Nickels)	Annualized Rate	Estimated PME IRR < PE Fund IRR	Contributions to PE fund are converted to an equal purchase of shares in the public index. Distributions represent liquidation of share in public index. IRR calculation uses same contributions and distributions as PE fund, but with a different final period remaining value.	LN PME IRR is directly comparable to the PE Fund IRR, allowing an apples-to-apples comparison.	IRR sensitive to early distributions. Large distributions could cause a negative PME final period remaining value, making PME IRR calculation computationally impossible.
PME+	Annualized Rate	Estimated PME IRR < PE Fund IRR	Uses a fixed scaling factor (lambda) to modify each distribution to ensure the PME final period remaining value is the same as the PE fund remaining value. IRR calculation uses modified contributions and distributions but same final period remaining value.	As for LN PME, with the added benefit of avoiding a final period negative remaining value, making PME IRR calculation possible in more cases.	PME+ does not match the cash flows perfectly.
PERACS Alpha (Gottschalg)	Annualized Rate of Excess Return	Value > 0	Calculated by discounting private equity fund cash flows by MSCI ACWI Index. Discounted distributions plus current remaining value are divided by discounted contributions, and the corresponding ratio is annualized based on the duration of cash flows, i.e. the time period between (a) capital-weighted average date of all takedowns and (b) capital weighted average date of all distributions and remaining NAV.	Considers time value of money using duration which avoids potential distortions due to high early redemptions.	No consideration of differences in risk.

*Defined as closed-end Private Capital excluding Direct Lending.

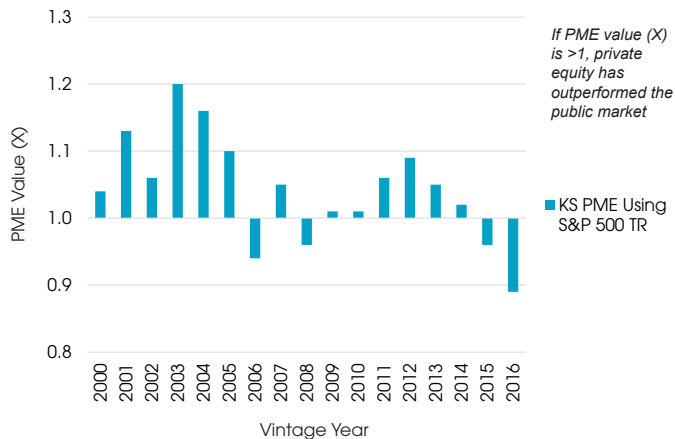
Public Market Equivalent

Fig. 17: KS PME: All Private Equity - All Regions (As of 31 March 2016)



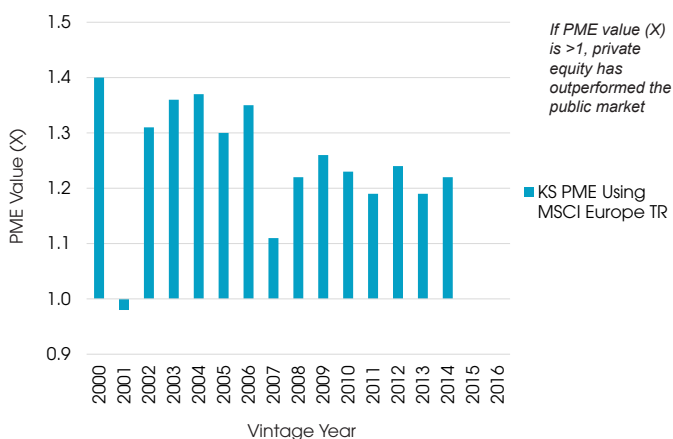
Source: Preqin Private Equity Online

Fig. 18: KS PME: All Private Equity* - North America (As of 31 March 2016)



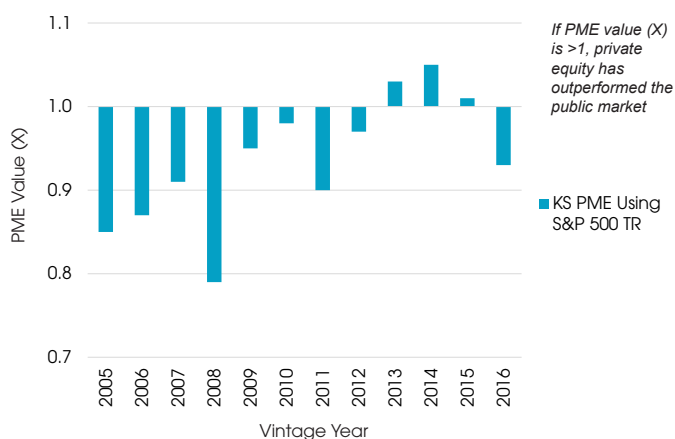
Source: Preqin Private Equity Online

Fig. 19: KS PME: All Private Equity* - Europe (As of 31 March 2016)



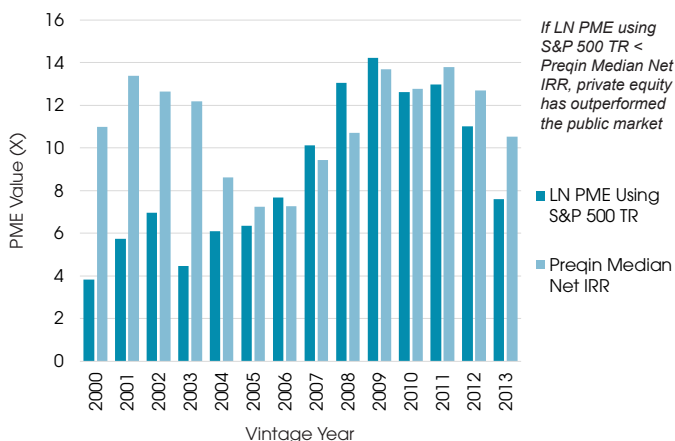
Source: Preqin Private Equity Online

Fig. 20: KS PME: All Private Equity* - Asia & Rest of World (As of 31 March 2016)



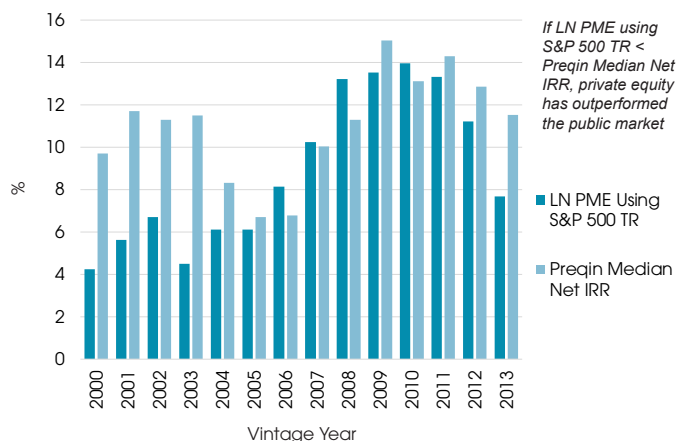
Source: Preqin Private Equity Online

Fig. 21: LN PME: All Private Equity* - All Regions (As of 31 March 2016)



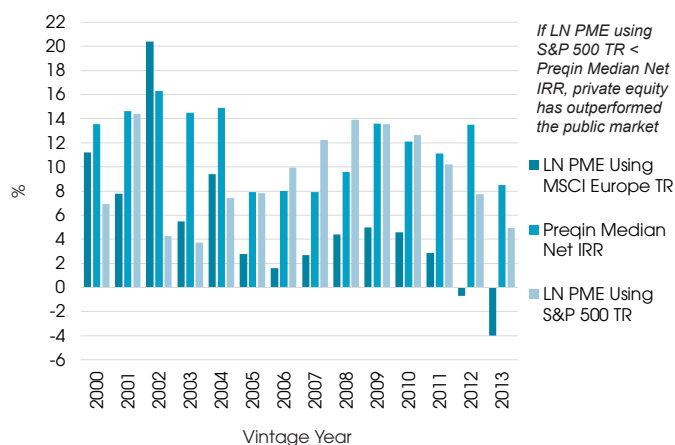
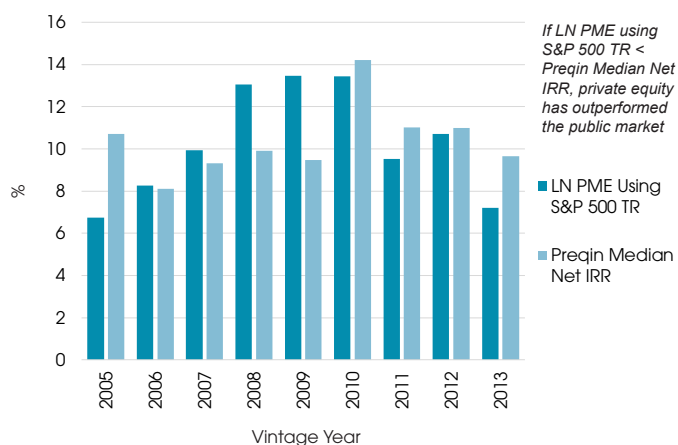
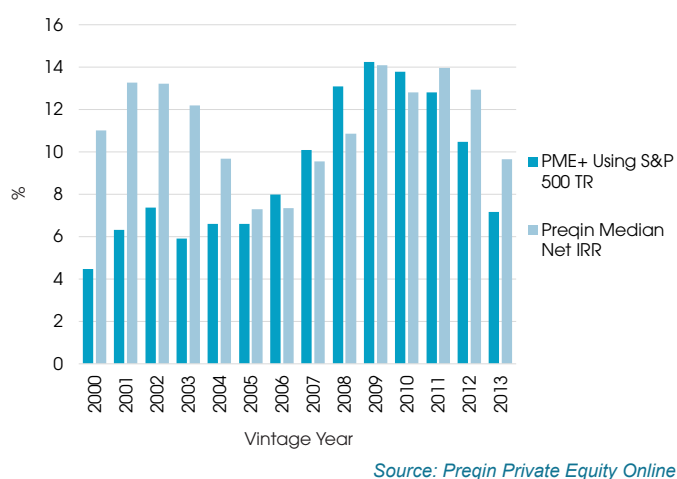
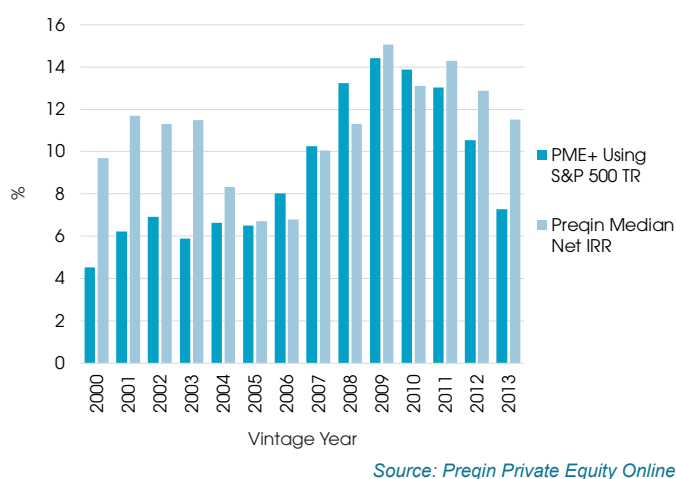
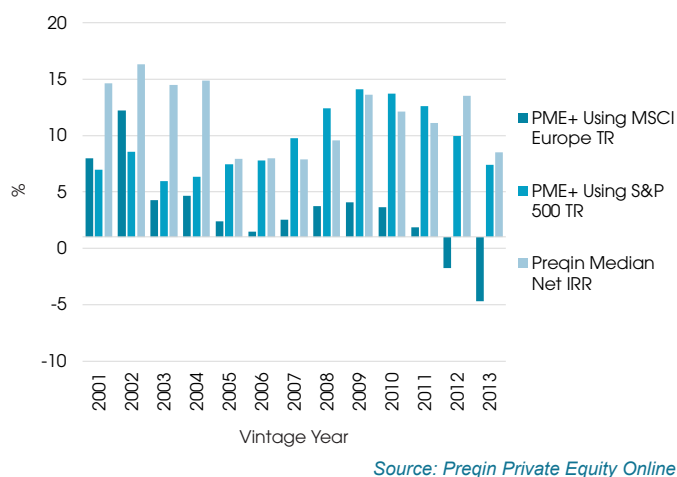
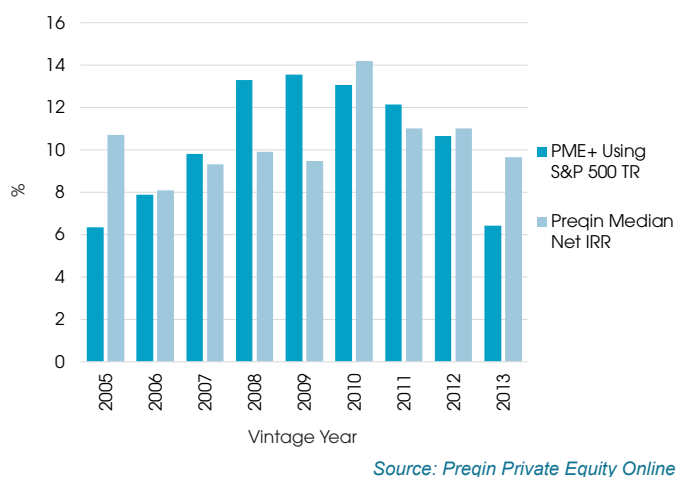
Source: Preqin Private Equity Online

Fig. 22: LN PME: All Private Equity* - North America (As of 31 March 2016)



Source: Preqin Private Equity Online

*Defined as closed-end Private Capital excluding Direct Lending.

Fig. 23: LN PME: All Private Equity* - Europe (As of 31 March 2016)**Fig. 24: LN PME: All Private Equity* - Asia & Rest of World (As of 31 March 2016)****Fig. 25: PME+ All Private Equity* - All Regions (As of 31 March 2016)****Fig. 26: PME+ All Private Equity* - North America (As of 31 March 2016)****Fig. 27: PME+ All Private Equity* - Europe (As of 31 March 2016)****Fig. 28: PME+ All Private Equity* - Asia & Rest of World (As of 31 March 2016)**

*Defined as closed-end Private Capital excluding Direct Lending.