Content Includes:

The Importance of Benchmarking

Preqin now offers PME metrics that benchmark fund performance against public market indices while accounting for fund cash flow timings.

PME Index Comparison

Analysis of PME metrics across all private equity fund types and geographies, including Kaplan-Schoar, Long-Nickels and PME+ benchmarks.

Market Benchmarks

Preqin median benchmarks, PrEQIn Quarterly Index and median net IRRs and quartile boundaries for All Private Equity as at 31 December 2014.

Cash Flow

A look at what Preqin's private equity Cash Flow Data download offers.

Preqin Special Report: Public Market Equivalent (PME) Benchmarking

July 2015

Plus Special Guest Contributor:
Capital Dynamics

Capital Dynamics

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Contents

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 to undertake to inform portfolio construction decisions and to evaluate the performance of one asset class against 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 is delighted to announce the addition of PME benchmarks and individual fund-level PME comparisons to its **Performance Analyst** service, which already provides net-to-LP fund performance metrics for over 7,600 named vehicles globally. The new PME tool enables the comparison of private equity and venture capital returns against six public market indexes using a choice of three PME methodologies: Kaplan-Schoar PME, Long Nickels PME and Capital Dynamics PME+. All of the methodologies utilize the since inception cash flow data Preqin holds for almost 3,000 funds.

The table below provides an overview of the three PME methodologies Preqin now offers along with their specific strengths and weaknesses. 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.

Pages 6-13 of this report provide a number of PME benchmarks for these three methodologies across a range of private equity fund types and geographies, which are featured with a selection of public market indices.

Data Source

Preqin's **Private Equity Cash Flow Download** provides the ultimate source of private equity fund cash flow data, showing full cash flow information for:

- 884 buyout funds
- 693 venture capital funds
- 324 funds of funds
- 340 private equity real estate funds
- 120 distressed private equity funds
- 98 mezzanine funds

For more information, please visit:

www.preqin.com/cashflow

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.
Capital Dynamics PME+	Annualized Rate	Estimated PME IRR < PE Fund IRR	Uses a fixed scaling factor (lambda) to modify each distribution to ensure the PME final period remaining value is the same as the PE fund remaining value. IRR calculation uses modified 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.

Understanding the Shortness of LN PME

- Philippe Jost, Capital Dynamics
- Philipp Stoll, Evoco

Measuring the performance of private equity is challenging due to the irregular timing of the cash flow. Internal rates of return (IRR) and performance multiples are often-used methods, with the latter being simpler and relating the distributions to the investments. While performance multiples have the disadvantage of disregarding the time value of money, the IRR takes it into account by computing the equivalent rate at which the present value of the investments is equal to the present value of the distributions and the NAV of the investment. Monitoring both, the IRR and multiples, results in a good absolute performance overview of a private equity fund.

These performance measures are specific to private equity (or more generally any asset class that has irregular cash flows) and allow a comparison between different funds. Public benchmarking is the comparison of private equity funds to public benchmarks and is very important as it computes the opportunity cost of investing in private equity as compared to public equity.

Public Benchmarking of Private Equity

Public market returns are not directly comparable to private equity IRRs due to the timing of the investments. A natural way to achieve comparability is to mimic the private equity cash flows with a fictive public equity fund. This fund purchases and sells shares at the same time as the private equity vehicle calls and distributes cash. The NAV of the fictive fund, called the public NAV, depends on the number of shares and the share price. Table 1 illustrates how to derive the public NAV.

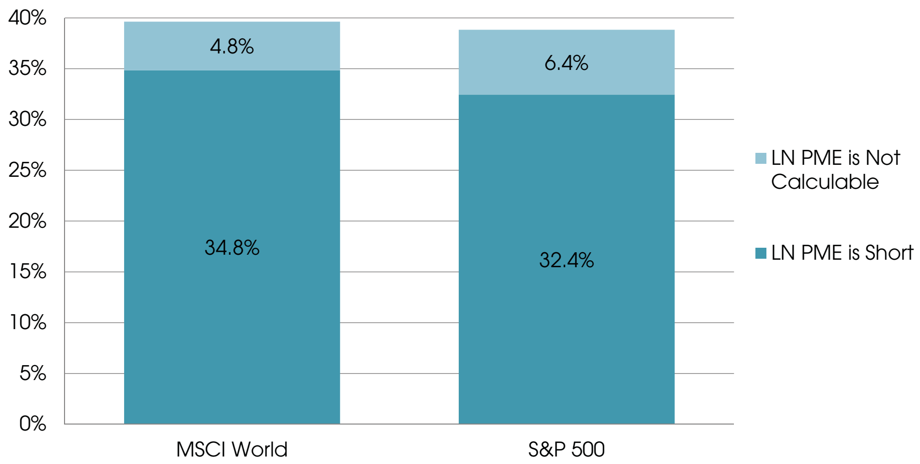
The above presented fund has an IRR of 11.7% and the LN PME performance can be computed by replacing the NAV with the public NAV; the so obtained performance is 7.9%, which corresponds to an outperformance of 3.8%. At this point, it is interesting to note that the private and public vehicles have the same cash flow but the final NAV (depending on the number of public shares) is different.

The number of public shares depends on the cash flows and the benchmark. In some situations, this value can become negative,

Table 1: LN PME Calculation Illustration

Year	Capital Calls	Dist.	NAV	Public Index	Public Shares Owned	Public NAV
0	-1,000	0	1,000	100	10	1,000
1	0	560	600	112	5	560
2	-60	0	700	120	5.5	660
3	0	280	370	140	3.5	490
4	0	240	300	120	1.5	180

Fig. 1: LN PME Performance of Public Indices



Source: Capital Dynamics

which typically happens if the distributions are large or if the public index faces losses. For a more complex cash flow, the fictive fund can go short and then recover to a positive end NAV. If the fictive vehicle holds short positions for a time, the validity of the LN PME calculation becomes questionable.

In order to cope with this issue, Capital Dynamics proposed an alternative method to benchmark private equity. PME+ scales the distributions by a factor λ such that the public NAV at the end is equivalent to the private NAV. The private equity fund and the fictive fund have the same capital calls and the same final NAV but different distributions.

LN PME accumulates the out- or underperformance in the final NAV whereas PME+ spreads it over time across all positive cash-flows. Additionally, PME+ ensures that the number of public shares remains positive and therefore avoids the shortness problem.

Quantifying the Shortness Issue

Although the problem of shortness is a well-known drawback of LN PME and has been noted by other practitioners, its magnitude has never been quantified. To fill this gap, we have computed PME values on a sample of approximately 750 buyout and venture capital funds with vintage years that range from 1976 to 2008. About 60% of the funds cover North America, 35% Europe and 5% Asia.

Fund and public equivalent performances have been computed for two different public indices that are often used: MSCI World and S&P 500, each as a total return index. These indices are well-diversified, well-known and have sufficiently long histories to overlap all private equity funds in the sample.

The severity of the shortness issue is generally underestimated. Within the sample set, more than 30% of the funds have this problem (Fig. 1). However, in many situations, this issue is not even highlighted, as it generally does not prevent the computation of PME. In more adverse situations, the IRR becomes incomputable; this generally happens when the final public NAV is highly negative. In about 5% of the cases, LN PME is not calculable.

There are three potential outcomes when benchmarking a private equity fund:

1. Outperformance (indicates that the private equity fund is performing better than the public index).
2. Underperformance (indicates that the public index is performing better than the private equity fund).
3. Not calculable (indicates that the benchmarking cannot be conducted for the reason described above during the respective period).

Both LN PME and PME+ have a good ability to detect out- or underperformance. In the example from Table 2, using the MSCI World index, LN PME and PME+ disagree in two cases. Only the private equity funds that have performed very well have an LN PME that is not calculable. However, for about 25% of the funds, LN PME is calculable but has a shortness issue.

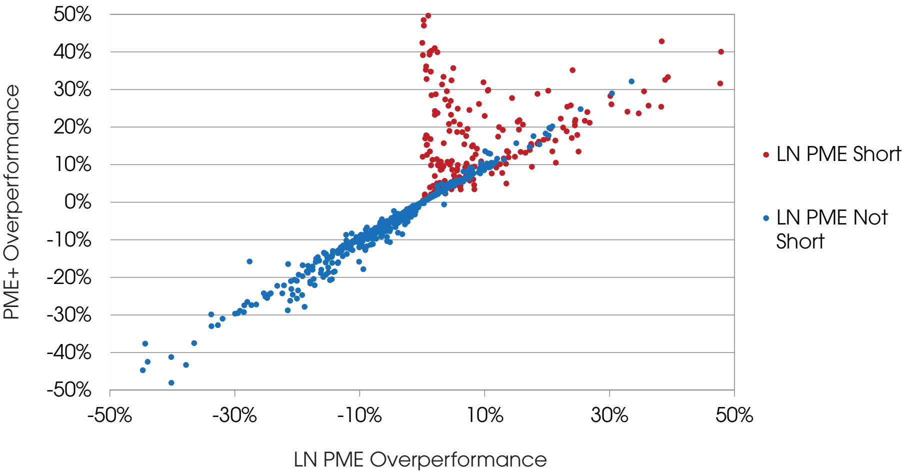
The private equity outperformance might be quantified by subtracting the LN PME or PME+ value from the IRR of the fund. Thus an LN PME or PME+ outperformance of 0 would mean that the private equity fund has performed just as good as the public index. The distributions of outperformances for LN PME and PME+ are depicted in Fig. 2. For the benchmarking results marked as not short, PME and PME+ seem to show a very good linear correlation. A regression analysis reveals a correlation coefficient of 99%.

The funds marked as short exhibit an abnormal concentration close to 0 on the LN PME axis which indicates that their outperformance measured with LN PME is very low. In fact, this is not always the case! PME+ shows that some of them have a significant outperformance (corroborated by another benchmarking measure) whilst the LN PME measured outperformance is low.

Table 2: PME Calculation Illustration

	LN PME			PME+		
Benchmark Index	Out-Performance	Under-Performance	Not Calculable	Out-Performance	Under-Performance	Not Calculable
MSCI World	366	350	36	400	352	0
S&P 500	303	401	48	352	400	0

Fig. 2: Outperformance of LN PME vs PME+



Source: Capital Dynamics

In these cases, the LN PME outperformance gets eaten up for two main reasons:

1. The number of public shares gets short and the index has a positive performance which induces a negative performance of the public portfolio.
2. A highly negative cash flow at the end due to the negative NAV might lead to multiple solutions for the IRR.

In order to have a global picture of the shortness-problematic of LN PME, we computed some statistics. The mean outperformance of private equity funds is 0% per annum with LN PME, and 2.8% with PME+. We see a higher mean for PME+ as the LN PME shortness issue only affects very well performing private equity funds. According to these results, the LN PME benchmarking implies the private equity sample performs just as well as the public market, while the PME+ benchmarking implies the private equity sample outperforms the public market by almost 3%. As a consequence, performance measurements with the LN PME method describe the performance of the private equity asset class as worse than it actually is, as it cannot calculate some outperformances or gives doubtful results for well performing funds.

Conclusion

Both LN PME and PME+ are intuitive and therefore good candidates for benchmarking private equity funds with public market indices. The LN PME method has a mathematical issue that shows up for well performing funds or in bad public market conditions. In real world application, this issue is underestimated as it is perceived as being an academic problem. We have shown that about 30% of the private equity funds are affected to different degrees. In 5% of the cases, LN PME is not calculable. However, a true adverse situation happens when LN PME is calculable but subject to the shortness problem. In this case it is highly likely that the outperformance measured by LN PME is very low compared to the real outperformance; outstanding funds might look mediocre.

PME Benchmarks

All Private Equity, All Geographies

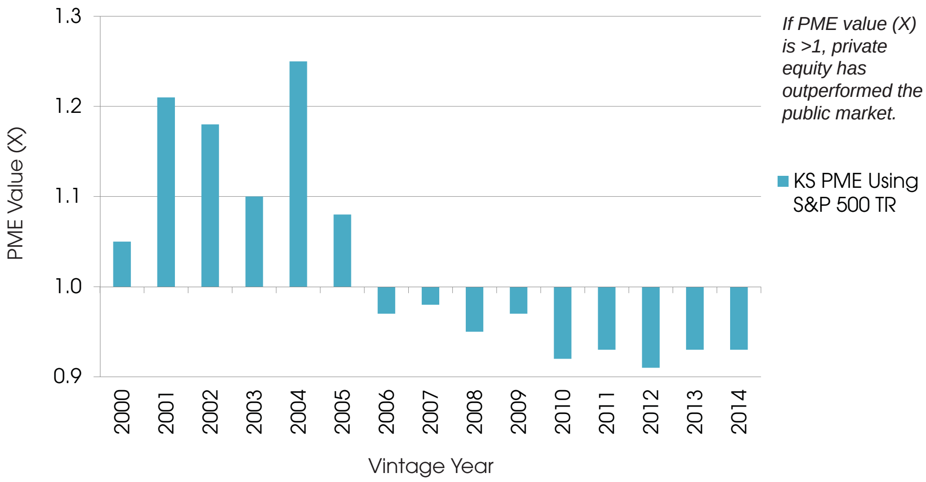
KS PME

- Compared to the S&P 500 Total Return index.
- Investors in private equity funds of vintage years 2000-2005 have earned more than if they had invested in S&P 500 shares over the same period to 31 December 2014, showing the long-term performance of the asset class.
- Investors in a typical 2004 vintage fund are 25% better off having invested in private equity than if they had the same cash flows in the public market over the same period.
- Funds with vintages 2006-2014 have underperformed the S&P 500 Total Return index over the same period to 31 December 2014, which is to be expected given the short-term performance of public markets compared to private equity.

PME+ and LN PME

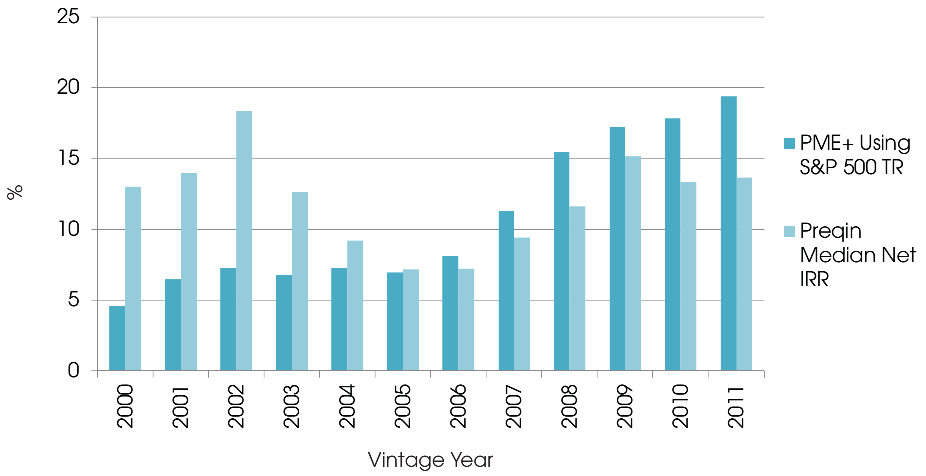
- Compared to the S&P 500 Total Return index.
- Gives a good indication of the long-term outperformance of private equity versus the public market, as the PME+ and LN PME values of early vintage years are smaller than Preqin's median net IRR by vintage.
- 2002 vintage funds stand out in particular, with the highest median net IRR of 18.4% calculated by Preqin, compared with a PME+ value of 7.3% and LN PME of 6.3%.
- For vintage years 2006-2011, PME+ and LN PME values are greater than the median net IRRs by vintage.

Fig. 3: KS PME: All Private Equity - All Regions (As of 31 December 2014)



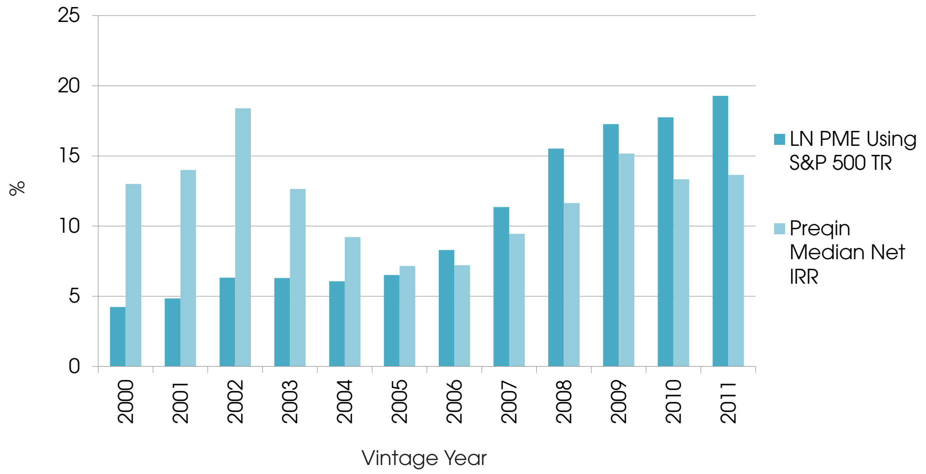
Source: Preqin Performance Analyst

Fig. 4: PME+: All Private Equity - All Regions (As of 31 December 2014)



Source: Preqin Performance Analyst

Fig. 5: LN PME: All Private Equity - All Regions (As of 31 December 2014)



Source: Preqin Performance Analyst

PME Benchmarks

All Private Equity, North America

KS PME

- Compared to the S&P 500 Total Return index.
- Unlike the all geographies benchmarks, 2007 and 2009 vintages are already outperforming public markets, while 2008 vintage funds have equal performance.
- Investors in 2001 vintage funds are 23% better off than if they had the same cash flows in the public market, on average.
- Investors in 2014 vintage North America-focused funds would have been 10% better off investing in the public market over the same time period to 31 December 2014.

PME+ and LN PME

- Compared to the S&P 500 Total Return index.
- Outperformance of private equity over the longer term, i.e. North America-focused funds with vintages 2000-2004 have greater median net IRRs than PME+ and LN PME values.
- Over the shorter term, the difference is smaller, although on the whole, PME+ and LN PME values exceed the median net IRRs by vintage over the same time period.

Data Source

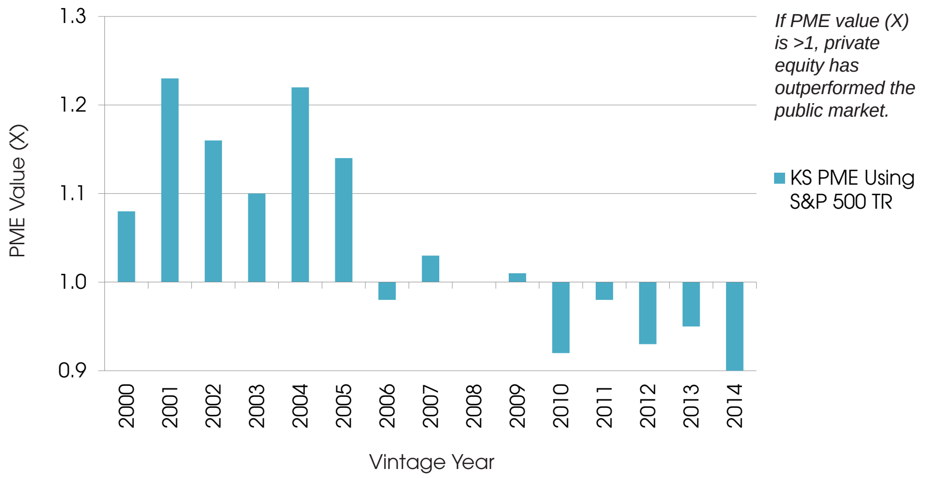
Preqin's **Funds in Market** database contains detailed information for over 1,100 North America-focused funds currently raising capital.

Fund profiles include information on strategy and geographic focus, interim close and target sizes, known investors and fund manager details.

For more information, or to register for a demonstration, please visit:

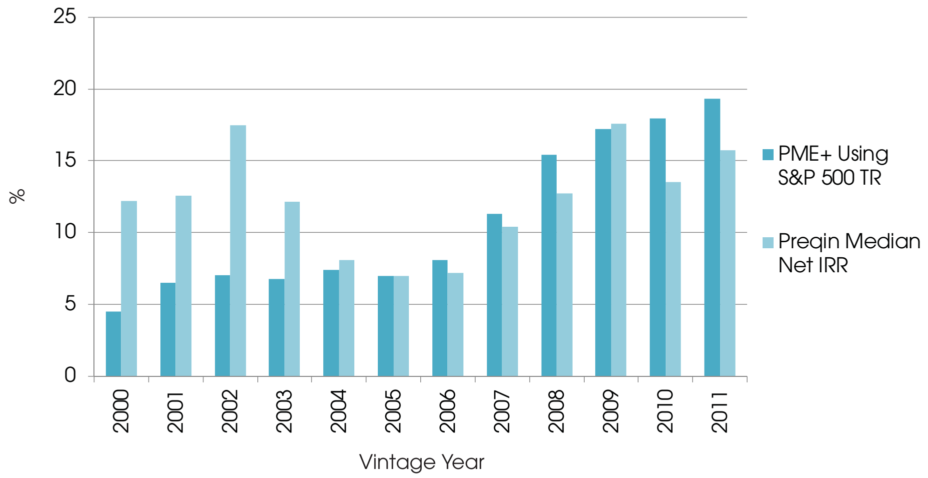
www.preqin.com/fim

Fig. 6: KS PME: All Private Equity - North America (As of 31 December 2014)



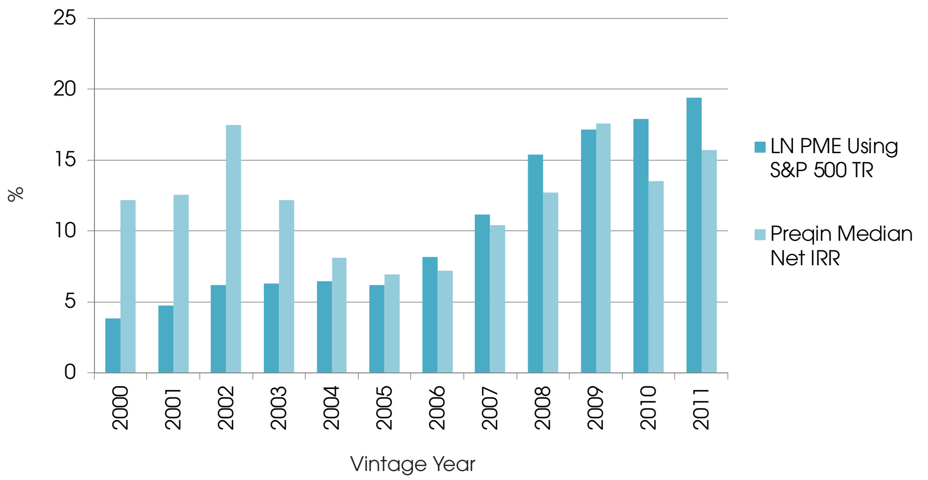
Source: Preqin Performance Analyst

Fig. 7: PME+: All Private Equity - North America (As of 31 December 2014)



Source: Preqin Performance Analyst

Fig. 8: LN PME: All Private Equity - North America (As of 31 December 2014)



Source: Preqin Performance Analyst

PME Benchmarks

All Private Equity, Europe

KS PME

- Compared to the MSCI Europe Total Return index.
- Outperformance of private equity compared to the public market is seen across all vintages, excluding 2000, 2005 and 2007.
- Investors in 2009 and 2010 vintage Europe-focused private equity funds are 27% and 18% better off respectively than if they had invested the same cash flows in the MSCI Europe TR index over the same time period.

**Data point for KS PME vintage 2001 is as of September 2014.*

PME+ and LN PME

- Compared to the MSCI Europe and S&P 500 Total Return indices.
- Shows median private equity IRRs outperform MSCI Europe TR across all vintages.

***Data point for PME+ vintage 2001 is as of September 2014.*

****LN PME is not computable for vintages 2001, and 2004 using S&P 500 TR.*

How Does Preqin Collect Data?

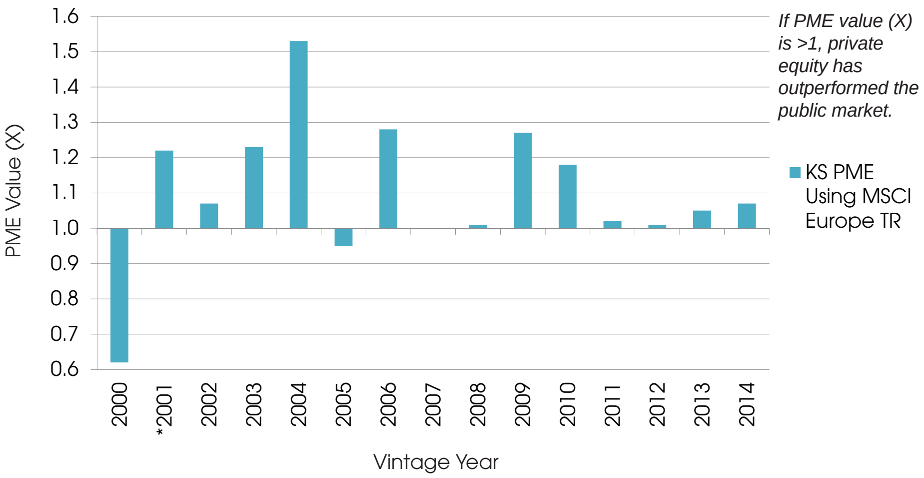
Preqin gathers private equity performance data primarily from two sources:

- **Directly from fund managers** – We always ensure that data from GPs is net-to-LP and reconcile the information against financial reports for confirmation.
- **Freedom of Information Act (FOIA) Requests to LPs** – For over half the fund manager data we also have FOIA data, providing an additional verification tool.

More and more fund managers are seeing the benefits of providing performance data to Preqin.

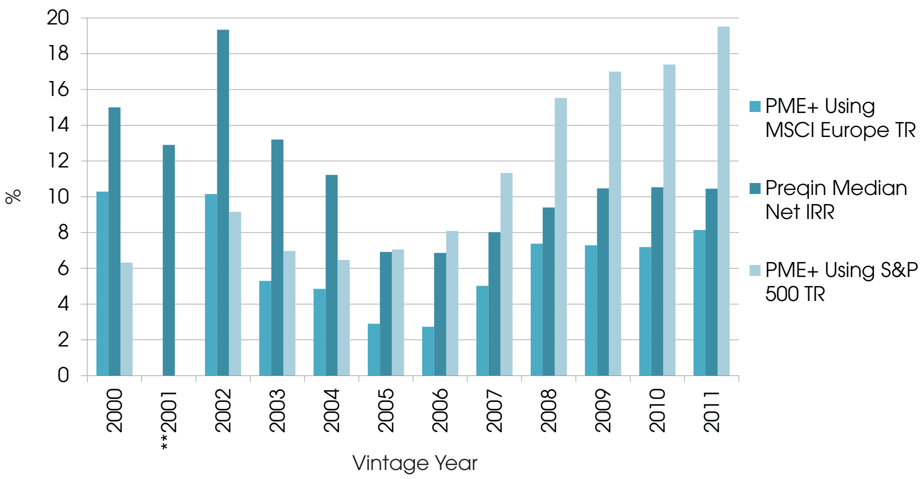
www.preqin.com/sharedata

Fig. 9: KS PME: All Private Equity - Europe (As of 31 December 2014)



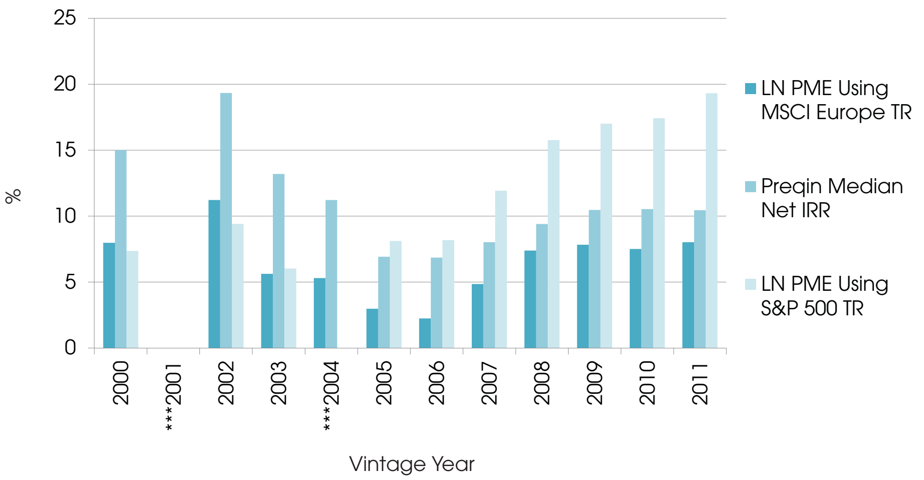
Source: Preqin Performance Analyst

Fig. 10: PME+: All Private Equity - Europe (As of 31 December 2014)



Source: Preqin Performance Analyst

Fig. 11: LN PME: All Private Equity - Europe (As of 31 December 2014)



Source: Preqin Performance Analyst

PME Benchmarks

All Private Equity, Asia & Rest of World

KS PME

- Compared to the S&P 500 Total Return index.
- All funds with vintages 2005-2014 have underperformed the S&P 500 Total Return index over the same period to 31 December 2014.
- 2006 vintage funds have so far fared the worst over the same time period compared to the public market, underperforming by 67%.
- Vintage years 2008 and 2009 were also weak, underperforming by 32% and 29% respectively.

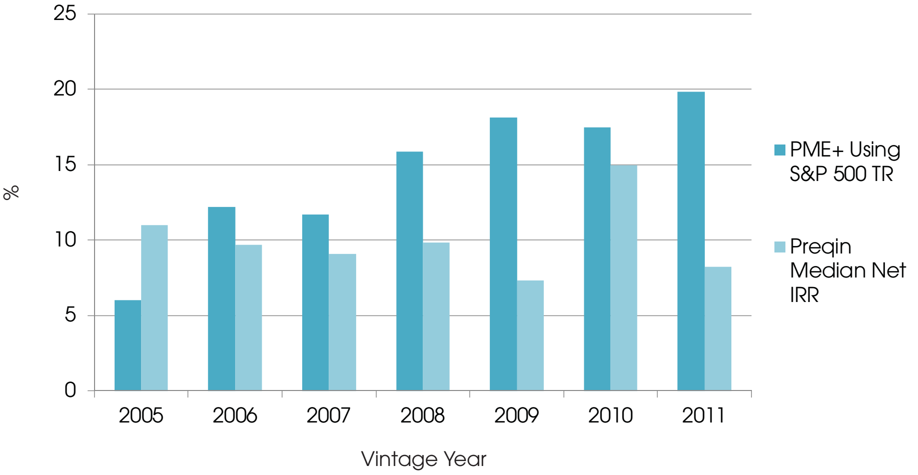
PME+ LN PME

- Compared to the S&P 500 Total Return index.
- For vintage years 2006 to 2011, PME+/LN PME values are greater than Preqin's median net IRRs, indicating that investing the same amount with the same timings in the public market would have produced greater returns for the investor.
- For example, a PME+ value of 19.9% and a LN PME value of 19.5% for vintage 2011 Asia & Rest of World-focused private equity funds, compared to a Preqin median net IRR of 8.3%.

Fig. 12: KS PME: All Private Equity - Asia & Rest of World (As of 31 December 2014)

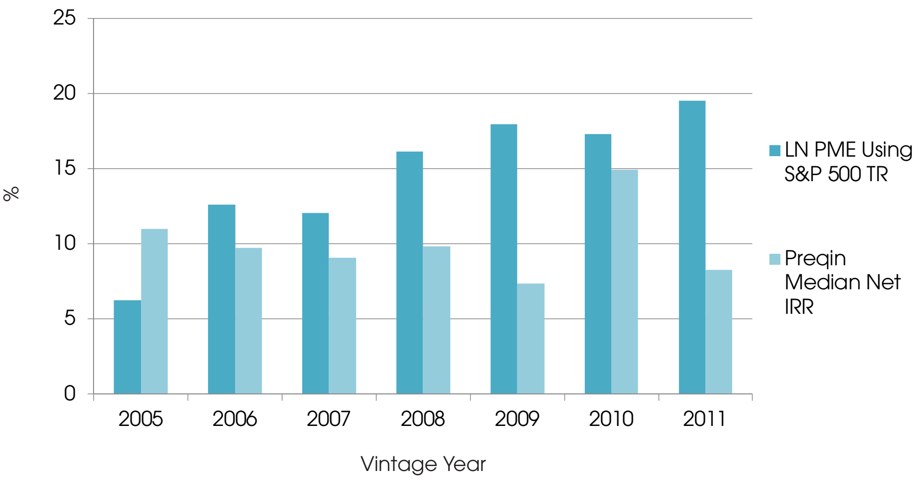
Source: Preqin Performance Analyst

Fig. 13: PME+: All Private Equity - Asia & Rest of World (As of 31 December 2014)



Source: Preqin Performance Analyst

Fig. 14: LN PME: All Private Equity - Asia & Rest of World (As of 31 December 2014)



Source: Preqin Performance Analyst

PME Benchmarks

Buyout, All Geographies

KS PME

- Compared to the Russell 3000 Total Return index.
- Buyout follows a similar pattern to All Private Equity, outperforming the public market over the longer term, but by a greater extent.
- 2000 vintage funds have returned 63% more than the public market over the same period to 31 December 2014, in comparison with All Private Equity.
- Since vintage year 2008, the KS PME value for buyout funds has been 1.0 or below, indicating underperformance compared to the Russell 3000 TR index.

PME+ and LN PME

- Compared to the Russell 3000 Total Return index.
- Shows that Preqin median net IRRs are significantly higher than PME+ values for vintages 2000-2007, and than LN PME values for vintages 2003 and 2005-2007.
- For vintages 2008-2011, the PME+ and LN PME values have exceeded the Preqin median net IRRs by at least 2.0 percentage points.

**LN PME is not computable for vintage 2004 funds.*

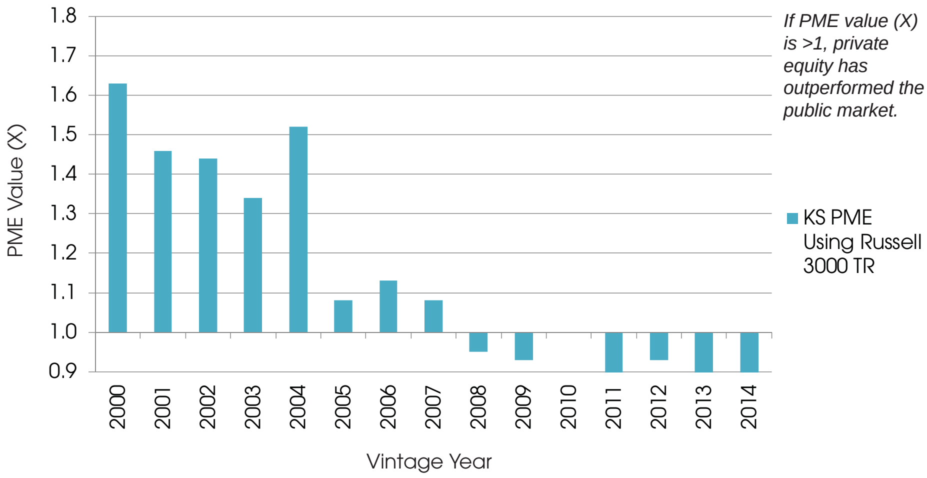
Data Source

Preqin's **Research Center Premium** is a free online service providing access to up-to-date charts and league tables, research reports and newsletters, fund performance benchmarking tools and slide decks from recent Preqin presentations at conferences.

Gaining free access to Preqin's **Research Center Premium** is quick and easy. For more information, please visit:

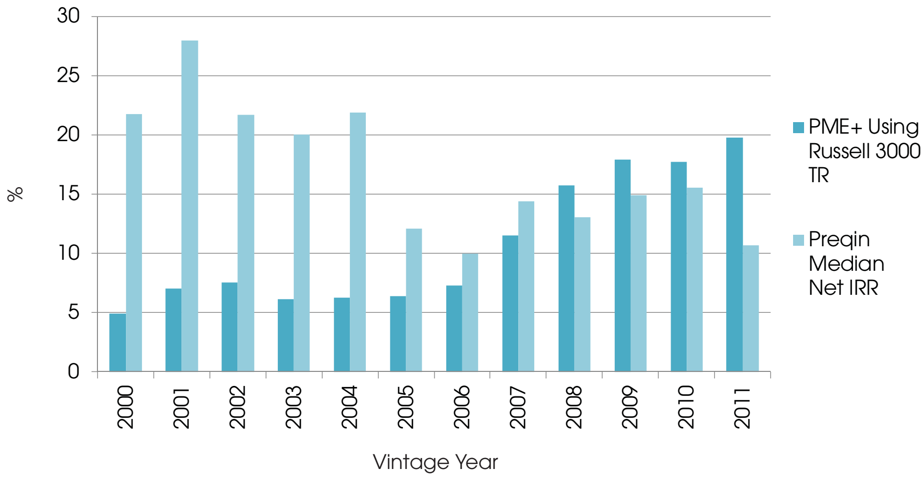
www.preqin.com/rcp

Fig. 15: KS PME: Buyout - All Regions (As of 31 December 2014)



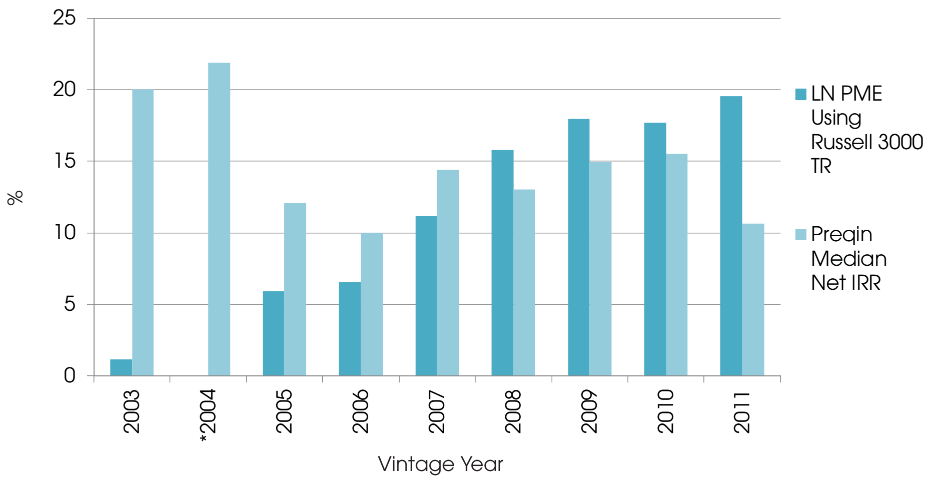
Source: Preqin Performance Analyst

Fig. 16: PME+: Buyout - All Regions (As of 31 December 2014)



Source: Preqin Performance Analyst

Fig: 17: LN PME: Buyout - All Regions (As of 31 December 2014)



Source: Preqin Performance Analyst

PME Benchmarks

Venture Capital, All Geographies

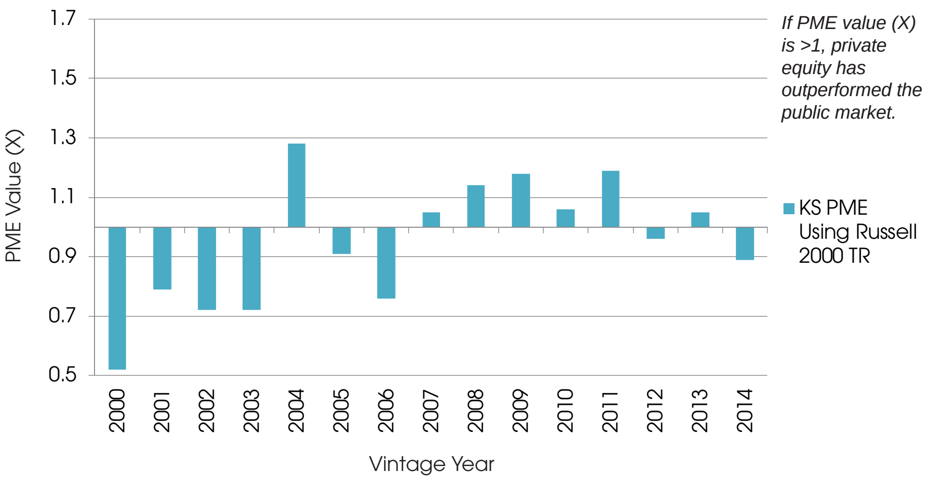
KS PME

- Compared to the Russell 2000 Total Return index.
- Shows the opposite story to other strategies; over the longer term, venture capital has underperformed the public markets.
- True for funds with vintages 2000-2003, as well as 2005-2006, 2012 and 2014. On average, venture capital funds of these vintages outperformed the public market over the same period.
- LPs in 2000 vintage venture capital funds would, on average, see underperformance by 48% compared to investment in the public market over the same time period.
- Funds with vintages 2007-2011 and 2013 have outperformed the Russell 2000 TR index over the same period, showing the short-term outperformance venture capital funds have experienced recently.
- Investors in 2004 vintage venture capital vehicles are, on average, 28% better off than if they had invested in the Russell 2000 TR index over the same time period.

PME+ and LN PME

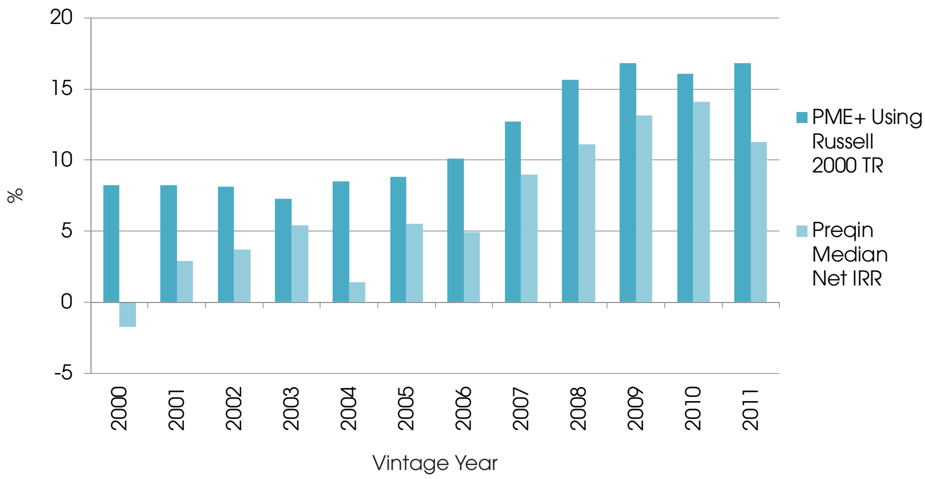
- Compared to the Russell 2000 Total Return index.
- Venture capital is the only strategy where across all vintages, PME+ and LN PME values are greater than Preqin's median net IRRs.
- The most significant difference in performance of venture capital funds and the public market is seen in vintage 2000, with a PME+ value of 8.3% and an LN PME value of 8.7% compared to a median net IRR of -1.8%.

Fig. 18: KS PME: Venture Capital - All Regions (As of 31 December 2014)



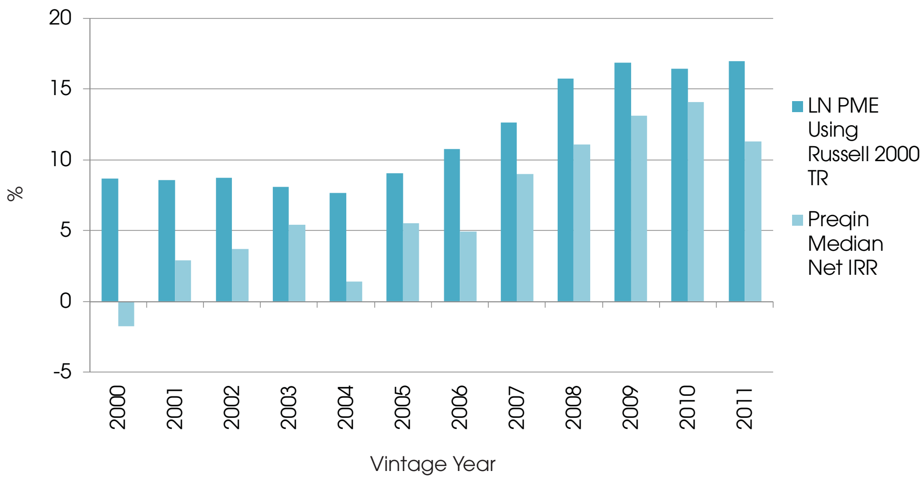
Source: Preqin Performance Analyst

Fig. 19: PME+: Venture Capital - All Regions (As of 31 December 2014)



Source: Preqin Performance Analyst

Fig. 20: LN PME: Venture Capital - All Regions (As of 31 December 2014)



Source: Preqin Performance Analyst

PME Benchmarks

Distressed Private Equity, All Geographies

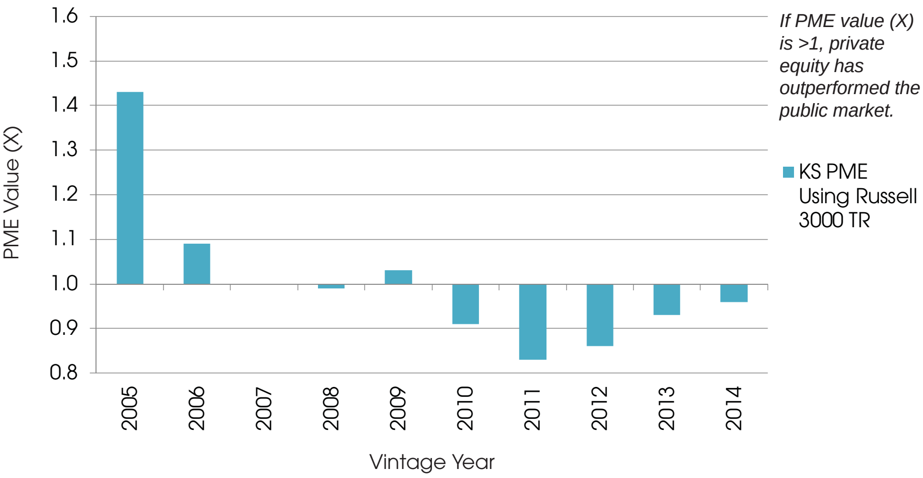
KS PME

- Compared to the Russell 3000 Total Return index.

- Despite the good performance of distressed private equity since 2008, as shown in the **PrEQIn - Private Equity Quarterly Index**, KS PME values suggest funds with vintages 2010-2014 have underperformed the public market over the same time period.

- Investors in vintage 2005 distressed private equity funds have, on average, earned 43% more than if they had instead invested capital in Russell 3000 shares.

Fig. 21: KS PME: Distressed Private Equity - All Regions (As of 31 December 2014)



Source: Preqin Performance Analyst

PME+ and LN PME

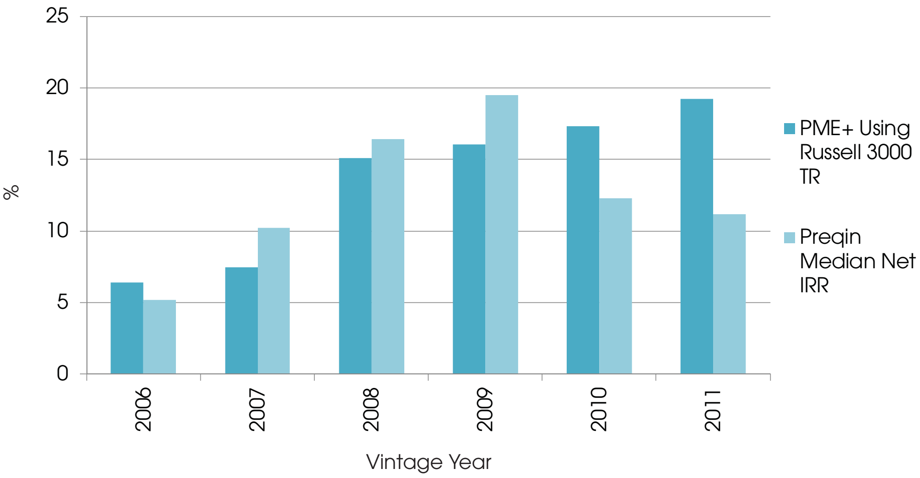
- Compared to the Russell 3000 Total Return index.

- Private equity median net IRRs are greater than PME+ and LN PME values for 2007-2009 vintage funds, displaying the long-term outperformance of distressed private equity.

- Over the shorter time period since 2010, both PME+ and LN PME values exceed median net IRRs; investing in public markets would have been a better investment over the shorter term.

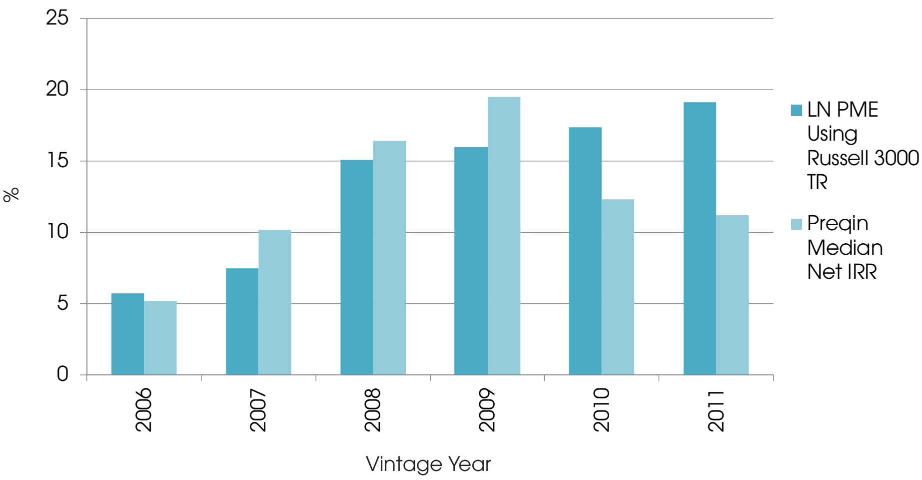
- Expect PME+ values for these vintages to fall as time progresses.

Fig. 22: PME+: Distressed Private Equity - All Regions (As of 31 December 2014)



Source: Preqin Performance Analyst

Fig. 23: LN PME: Distressed Private Equity - All Regions (As of 31 December 2014)



Source: Preqin Performance Analyst

Data Source

The **PrEQIn - Private Equity Quarterly Index** is calculated on a quarterly basis using data from Preqin's **Performance Analyst**.

The models use quarterly cash flow transactions and NAVs reported for 7,900 individual private equity partnerships which have raised aggregate capital worth over $4.3tn.

For more information, or to register for a demonstration, please visit:

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PME Benchmarks

Fund of Funds, All Geographies

KS PME

- Compared to the Russell 3000 Total Return index.
- Funds of funds with vintages 2000, 2002 and 2003 have outperformed the public market by at least 8% over the same time period, with as much as 33% outperformance by 2000 vintage funds. All other vintages shown in Fig. 24 have underperformed.
- 2007 vintage funds of funds have so far fared the worst of all vintages, compared with the public market, underperforming by 17%.

PME+ and LN PME

- Compared to the Russell 3000 Total Return index.
- Funds of funds with vintages 2004-2011 have smaller median net IRRs than PME+ and LN PME values.
- The outperformance of funds of funds over the longer term, illustrated by the higher median net IRR values over vintage years before 2004, is not as great as for other private equity strategies such as buyout (page 10).

**LN PME is not computable for vintage 2000 funds.*

Data Source

Constantly updated using data from both investors and fund managers, Preqin's **Performance Analyst** represents the most comprehensive and transparent source of performance data available.

The module features full performance metrics for over 7,600 private equity funds across multiple geographies, which can be filtered by geographic region, country or economic region.

For more information, or to register for a demonstration, please visit:

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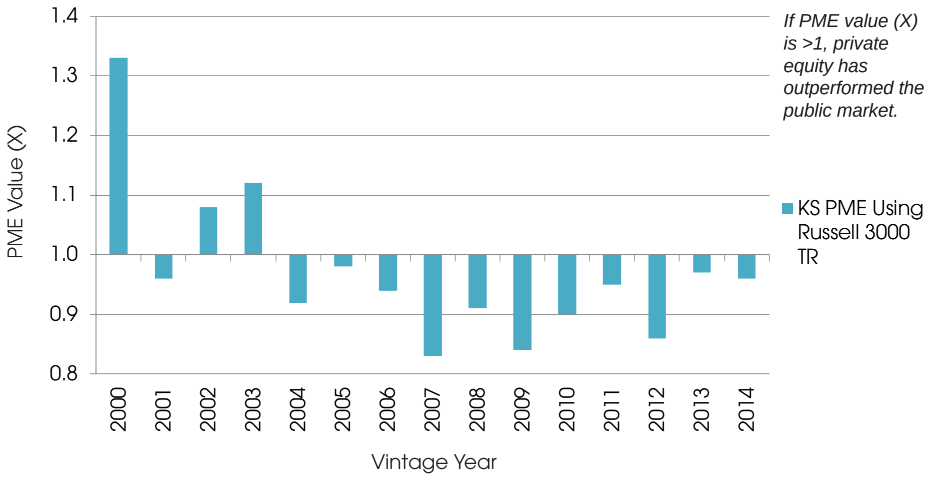
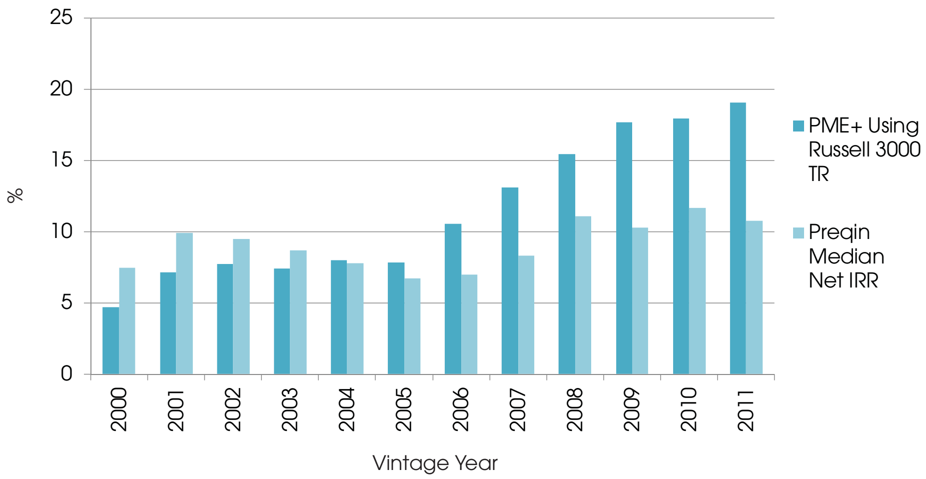
Fig. 24: KS PME: Fund of Funds - All Regions (As of 31 December 2014)



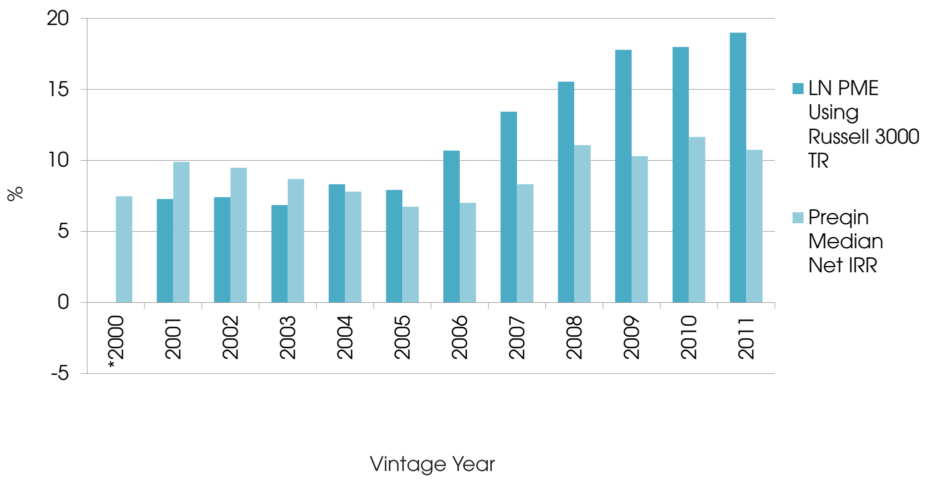
Source: Preqin Performance Analyst

Fig. 25: PME+: Fund of Funds - All Regions (As of 31 December 2014)



Source: Preqin Performance Analyst

Fig. 26: LN PME: Fund of Funds - All Regions (As of 31 December 2014)



Source: Preqin Performance Analyst

Download the data pack: www.preqin.com/PME15

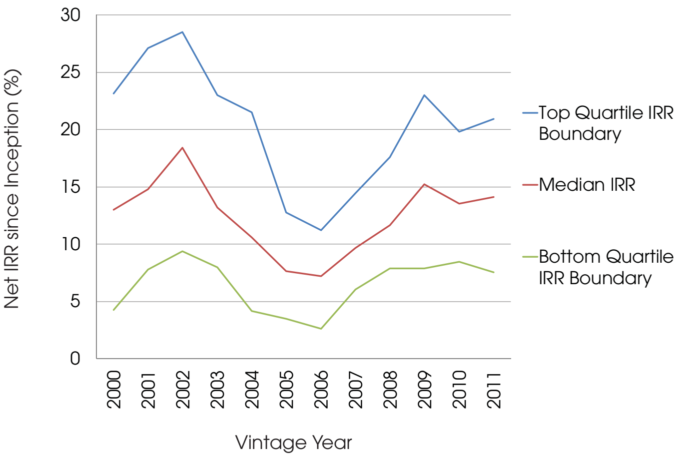
Market Benchmarks

Fig. 27: Preqin Median Benchmarks: All Private Equity - All Regions (As of 31 December 2014)

Vintage	No. of Funds	Median Fund Called (%)	DPI Quartiles (%)			RVPI Quartiles (%)			Net Multiple Quartiles (X)			Net IRR Quartiles (%)			Net IRR Max/ Min (%)	
			Q1	Median	Q3	Q1	Median	Q3	Q1	Median	Q3	Q1	Median	Q3	Max	Min
2000	209	99.0	201.8	140.2	91.9	12.0	0.0	0.0	2.07	1.48	1.02	23.1	13.0	4.3	138.0	-96.0
2001	141	100.0	207.1	153.5	108.7	24.6	2.2	0.0	2.27	1.64	1.31	27.1	14.8	7.8	70.0	-23.9
2002	105	99.5	206.6	156.5	112.6	21.3	0.0	0.0	2.09	1.71	1.31	28.5	18.4	9.4	93.0	-47.2
2003	113	99.9	185.0	145.5	98.4	37.2	8.9	0.0	2.05	1.63	1.34	23.0	13.2	8.0	207.0	-49.9
2004	127	99.0	164.4	121.7	70.7	53.1	22.4	0.0	1.87	1.54	1.12	21.5	10.6	4.2	75.0	-26.0
2005	225	98.0	128.0	95.0	61.3	64.3	38.5	17.7	1.67	1.41	1.08	12.8	7.6	3.5	105.5	-100.0
2006	280	96.0	108.4	71.6	47.0	82.2	59.4	30.7	1.65	1.40	1.13	11.2	7.2	2.6	45.0	-100.0
2007	279	93.9	95.3	64.0	34.6	100.4	75.5	47.0	1.71	1.41	1.22	14.4	9.6	6.0	53.7	-44.2
2008	228	92.0	86.2	55.4	29.6	105.3	83.1	54.6	1.67	1.42	1.23	17.6	11.6	7.9	62.9	-39.2
2009	105	90.5	85.4	40.4	23.0	108.6	91.3	66.2	1.70	1.42	1.21	23.0	15.2	7.9	448.0	-18.0
2010	141	85.0	62.4	28.8	10.3	119.2	97.8	77.6	1.55	1.37	1.20	19.8	13.5	8.4	118.9	-7.8
2011	225	70.3	34.0	13.0	0.8	120.7	104.5	88.0	1.43	1.26	1.08	20.9	14.1	7.5	100.4	-36.8
2012	186	56.6	17.5	4.7	0.0	116.7	103.9	92.1	1.34	1.14	1.01	n/m	n/m	n/m	n/m	n/m
2013	198	34.6	5.3	0.0	0.0	112.0	100.0	90.9	1.17	1.04	0.95	n/m	n/m	n/m	n/m	n/m
2014	137	13.0	0.0	0.0	0.0	100.5	96.6	84.1	1.03	0.97	0.86	n/m	n/m	n/m	n/m	n/m

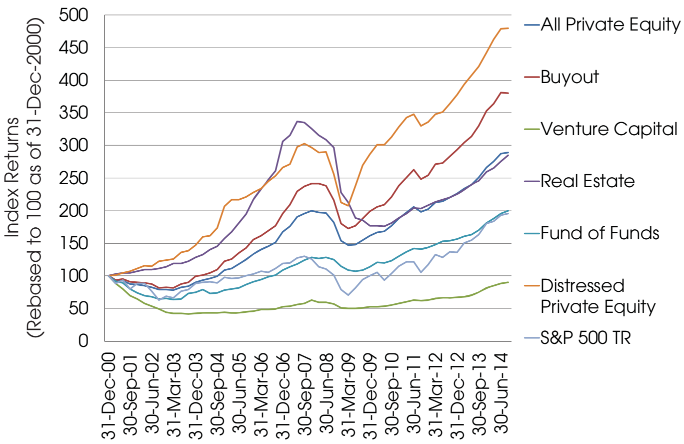
Source: Preqin Performance Analyst

Fig. 28: All Private Equity - All Regions: Median Net IRRs and Quartile Boundaries by Vintage Year (As of 31 December 2014)



Source: Preqin Performance Analyst

Fig. 29: PrEQIn All Private Equity - Quarterly Index (Rebased to 100 as of 31 December 2000)



Source: Preqin Performance Analyst

How Can Preqin's Private Equity Performance Data Help?

Preqin's **Performance Analyst** module, the industry's most extensive source of net-to-LP private equity fund performance, contains full metrics for over 7,600 named vehicles, across a range of fund types and geographies. Subscribers can use **Performance Analyst** to:

- Benchmark a fund's performance against its peers
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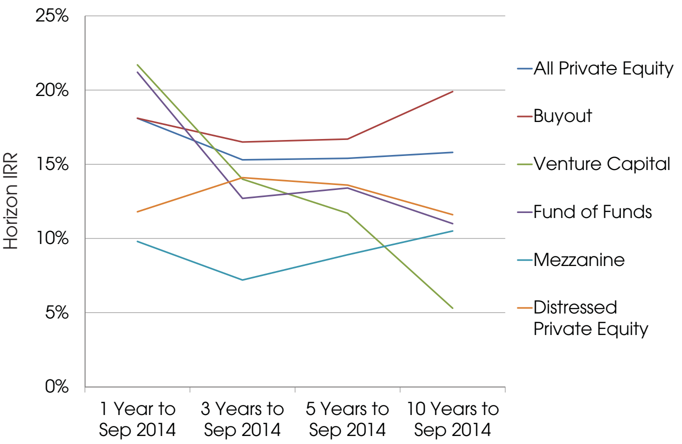
CASH FLOW

Preqin's **Private Equity Cash Flow** download is the industry's only source of reliable cash flow data, allowing users to undertake extensive financial modelling and gain a complete understanding of how private equity fund returns evolve over time. The download shows over **176,000** historical data points, including **90,456** cash flow transactions and **85,591** historical NAVs, for over **2,900** private equity funds of all types.

The download provides the ultimate source of private equity fund cash flow data, showing full cash flow information for:

884 buyout funds
693 venture capital funds
324 funds of funds
340 private equity real estate funds
120 distressed private equity funds
98 mezzanine funds

Fig. 30: Private Equity Horizon IRRs (As of 30 September 2014)

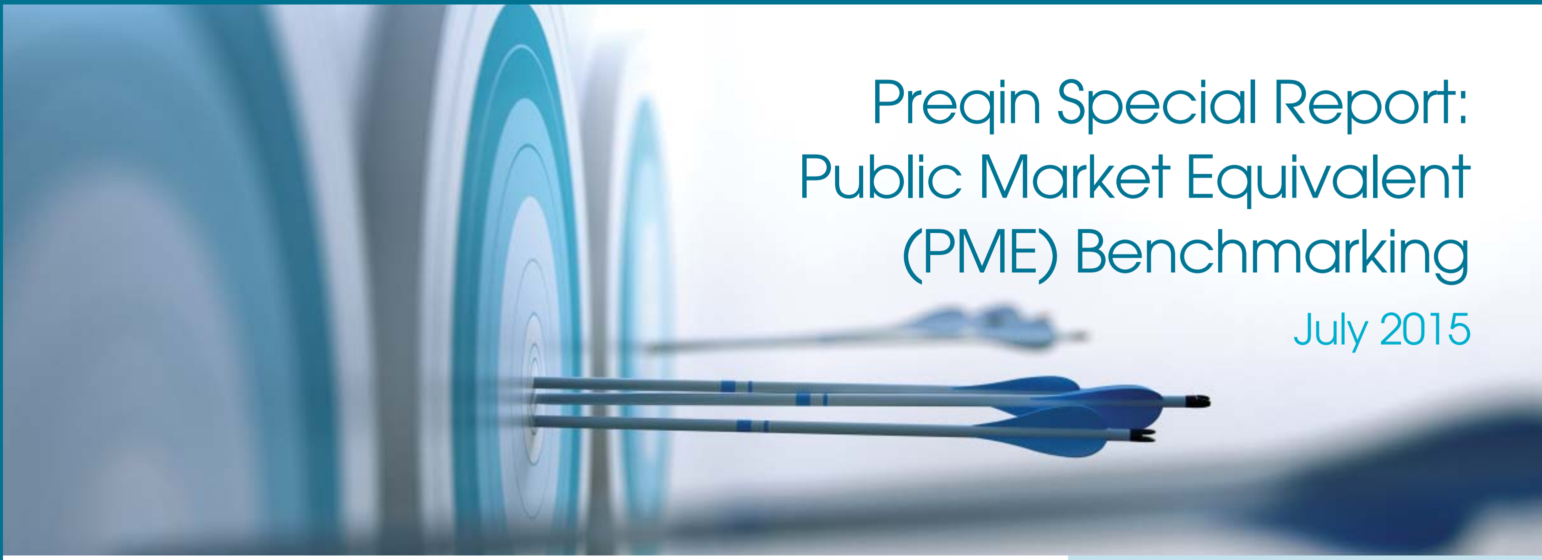


Source: Preqin Performance Analyst

Preqin's **Private Equity Cash Flow** download provides the raw data required for a more detailed understanding of private equity performance evolution, and is a vital component in portfolio modelling and future cash flow predictions.

Private Equity Cash Flow data is available as a one-off download featuring data accurate to the latest quarterly period, or as a subscription where the initial download features the most recent data and you are then provided with an updated spreadsheet on a quarterly basis. Subscriptions run for a 12-month period.

This data can be used to calculate and compare **Horizon IRRs** for a range of fund types (Fig. 30). Here, we use the fund's NAV as a negative outflow at the beginning of the period, any cash paid or received during the period and the fund's residual value as a positive inflow at the end of the period.



Preqin Special Report: Public Market Equivalent (PME) Benchmarking

July 2015

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