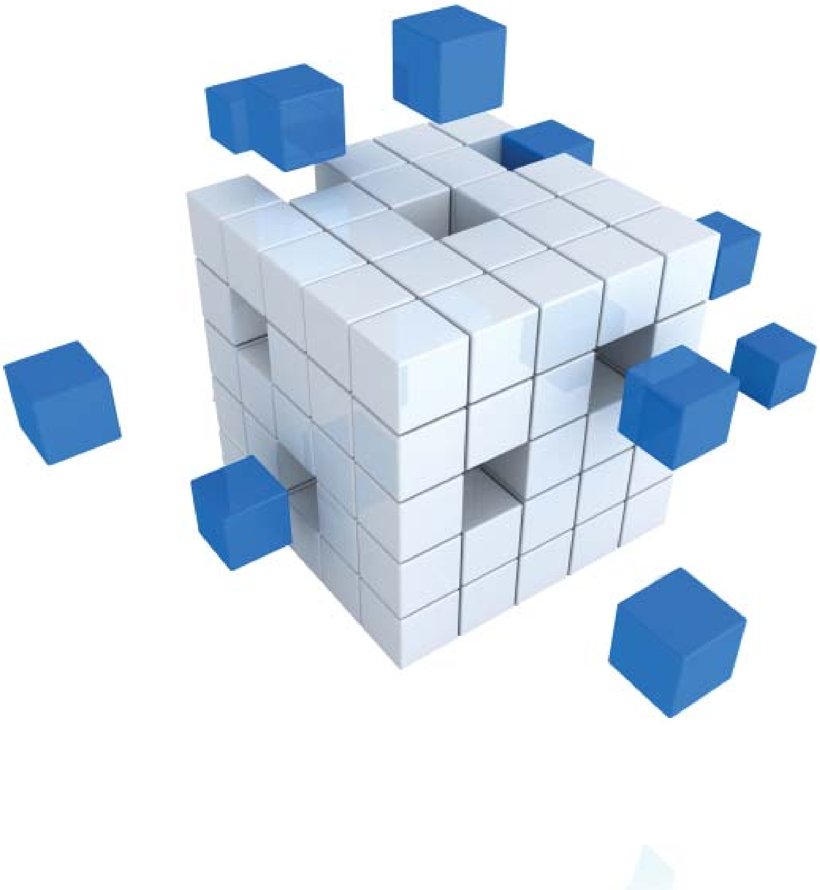
# Preqin / LPX Special Report:
# Listed Private Equity - Opportunities for Institutional Investors



LPX® GROUP
Listed Alternative Investments

preqin
alternative assets. intelligent data.

# About LPX

LPX Group was founded in 2004 in Basel, Switzerland and is the first provider of listed private equity indices. With a strong academic background the index series was designed to fulfill both the needs of the financial industry and academic standards to serve as an effective research tool.

LPX Group offers investment professionals a wide array of services:

- Investment solutions for a transparent and liquid access to listed alternative asset classes based on our in-depth research & investment advisory
- Index sponsor for listed alternative asset classes; the Listed Private Equity (LPX) and Infrastructure (NMX) index series serve the financial community as performance benchmarks, effective research tools and as the basis for a variety of tailored financial products
- Promotion of listed alternatives; LPX Group regularly organizes road shows and conferences and makes expert contributions in journals, newspapers and books

With a great depth of experience, our team of highly experienced professionals stands for excellence and rigorous consistency for both index sponsoring and equity research in the field of listed alternatives.

The NMX index family distinguishes fundamentally from current index providers offering infrastructure indices. Our research and selection process ensures that only companies are considered which are engaged in the provision of “basic infrastructure” facilities.

With a steadily growing range of innovative financial products linked to the LPX index series (exchange-traded funds (ETFs), investment funds, derivatives and certificates), the LPX indices have become the most widely used in the financial industry. The LPX index series has therefore increased the awareness of listed private equity by attracting new investor circles and hence has made an outstanding contribution in the promotion of listed private equity.

For more information, please visit: www.lpx-group.com

# About Preqin

Preqin is the alternative assets industry’s leading source of data and intelligence.

Our products and services are utilized by more than 8,000 professionals located in over 70 countries for a range of activities including investor relations, fundraising and marketing, and market research. Preqin, founded in 2002, operates from offices in New York, London and Singapore.

Preqin provides data and information on the private equity, real estate, hedge fund and infrastructure asset classes, which encompasses the following areas:

- Funds and fundraising
- Performance
- Fund managers
- Institutional investors
- Deals
- Fund terms

For more information, please visit: www.preqin.com

# Executive Summary: Opportunities for Institutional Investors

Driven by superior returns, private equity (PE) has grown enormously over the past two decades, becoming a core asset class for institutions globally – AUM reached $2.9tn in 2011, growth of over 300% from the $716bn in 2000.

These returns come at a price, however – illiquidity; the need to make large 'bite size' commitments to PE funds; and the lack of control over when and where capital is called and distributed are all factors that make private equity challenging for all investors – and inaccessible for some, especially smaller investors.

As private equity has grown and matured, the range of options available to investors has grown and segmented along several dimensions:

- Strategy: 65% of all PE funds in 2000 were either venture or buyout; by 2010 this had fallen to 37%, as many new fund strategies emerged – distressed, growth, mezzanine, secondaries, etc.;
- Geography: though traditionally based in North America and Europe, emerging markets are now playing an increasing role in the private equity industry;
- Format: the predominant route into private equity remains the closed-end, fixed-life limited partnership; however, new options are emerging to meet the needs of investors large and small – direct investment, co-investment, separate accounts, and **Listed Private Equity** will all have an increasing role to play in future years.

**Listed Private Equity** (LPE) is the focus of this special joint Research Report from Preqin and LPX Group.

LPE currently constitutes a significant niche within the global PE market – approximately 108 listed vehicles with a market cap of $65bn. Our research focused on the question of performance – how does the performance of LPE compare with that of the core limited partnerships that make up the bulk of the market?

The objective of our research was to compare the underlying NAV performance; hence we compared two leading performance indicators:

1. Preqin's Private Equity Quarterly Index: captures the overall net-to-investor performance of core limited partnership private equity, based on over 3,900 individual private equity funds, with aggregate capital raised of over $2.7tn; and
2. LPX 50 NAV Index: which captures the NAV performance of the 50 largest and most liquid LPE stocks globally.

The results of the research are clear and of fundamental importance to private equity investors everywhere:

**LPE NAVs have a very high correlation – 94% – with the NAV performance of core limited partnership private equity.**

This finding is of fundamental importance to investors: it means that by investing in LPE stocks they are getting access and exposure to similar assets with a similar risk-return profile to core limited partnership private equity.

This has profound implications and opportunities for investors, large and small:

- **Smaller Investors:** find it difficult to access core limited partnership private equity due to considerations of liquidity, bite size, and diversification. Investing in LPE or one of the financial products driven off the LPX indices gives them easy and inexpensive access to the same assets and prospective returns;
- **Larger Investors:** can use LPE as a valuable addition to their investment program in several ways:

  1. **Managing Exposure:** investors in limited partnerships have no control over when commitments are called up, or when distributions are made. Investing in listed PE gives them added opportunities – increase exposure when they need it; reduce it when they want to;
  2. **Tactical Discount / Premium Investment:** LPE trades at a discount or premium to NAVs, and astute investors already use this to play the discount game, coming in and out of LPE according to the discount level; and
  3. **Cash Management:** cash need not sit around earning just the risk-free rate whilst waiting to be called up to limited partnerships – investors can have a portion invested in liquid LPE stocks or financial products, thereby reducing the cash drag on portfolio returns.

It is clear that limited partnerships will remain the primary route into private equity for major institutions for some years to come. However, it is equally clear that a wider range of 'format' options will have an important role to play for these investors – direct investment, co-investment, separate accounts and **Listed Private Equity** all have distinct attractions and will increasingly be used as part of a balanced portfolio approach to private equity.

**What about premiums and discounts?** LPE stocks trade at discounts or premiums to NAV, giving investors the prospects for increased – or decreased – returns as the discount widens or narrows. These clearly increase volatility, and need to be taken into account. No-one can predict future premiums and discounts with any certainty; however, it is clear that current average discount levels across the sector (as at June 2012) are significantly above the historic average.

# Private Equity for Institutional Investors

Private equity has grown significantly over the past decade, and now forms a core part of most institutions' investment programs. As Fig. 1 shows, total AUM in the PE industry globally has increased from $716bn in 2000 to $2.9tn in 2011, growth of over 300%.

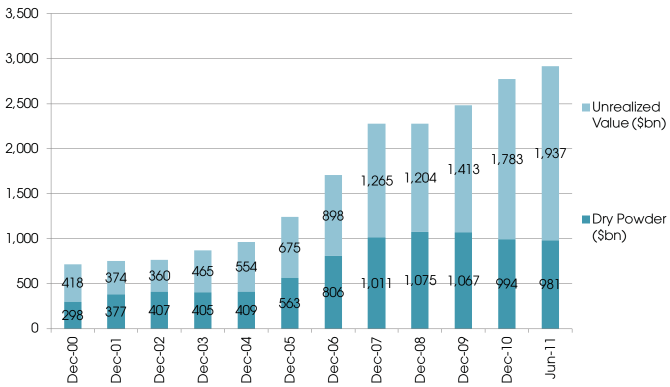
Not only has total AUM grown, but PE has become an almost universal part of institutional investors' portfolios globally – Preqin's Investor Intelligence database of investors in PE funds includes no fewer than 5,245 institutions worldwide that currently invest in PE funds and / or have invested in the past.

How has PE made the transition from a specialist niche investment to become such a core part of the investor landscape? The answer is simple: assets follow returns, and PE has delivered very good returns to its investors. Preqin conducts an annual survey of pension fund returns, looking at the performance across different asset classes for over 100 public and corporate pension funds globally, the results of this being that PE has been the best-performing asset class for these investors over 5-year and 10-year time horizons. As a result, even in these challenging times following the global financial crisis, most investors are broadly satisfied with the returns they have earned on their PE investments, and there is a consistent trend for institutions to increase their target allocations to PE – please see Figs. 2 and 3 below, drawn from Preqin's regular surveys of investor attitudes and performance.

This recognition of the good performance of PE and the need among investors to compare performance with other asset classes – especially equities and bonds – led Preqin to create the Private Equity Quarterly Index – PrEQIn for short.

This index represents the aggregate money-weighted performance of a universe of over 3,900 PE limited partnerships with total committed capital of over $2.7tn, and shows the returns that an investor would have experienced if she had owned the entire universe of these PE limited partnerships – for

Fig. 1: Private Equity Assets under Management, 2000 - 2011




methodological notes please visit www.preqin.com/benchmarks. The returns from the index have been very strong over the past 12 years, comfortably exceeding that of the major equities indices (with the S&P 500 shown in Fig. 4).

This history of strong out-performance, coupled with the recognition thereof among institutional investors, provides strong support for the continued long-term growth of private equity as an investment for institutions.

The predominant format or route into private equity for institutions has been the closed-end, finite-life limited partnership – and indeed this will in all likelihood remain the predominant route in for most investors. However, investors today are becoming increasingly sophisticated, and many of them are interested in other options as an adjunct to their limited partnership portfolio. These additional options include direct investment, co-investment, separate accounts and LPE.

Fig. 2: Proportion of Investors that Feel their Private Equity Portfolios Have Lived up to Expectations

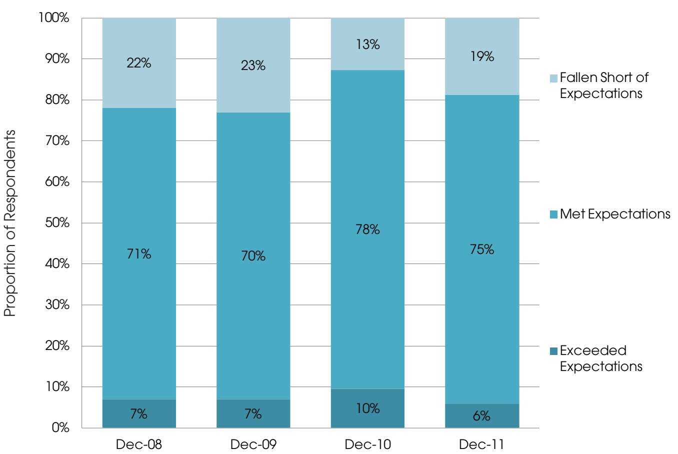



Fig. 3: Investors' Intentions for their Private Equity Portfolios over the Next 12 Months and Longer Term

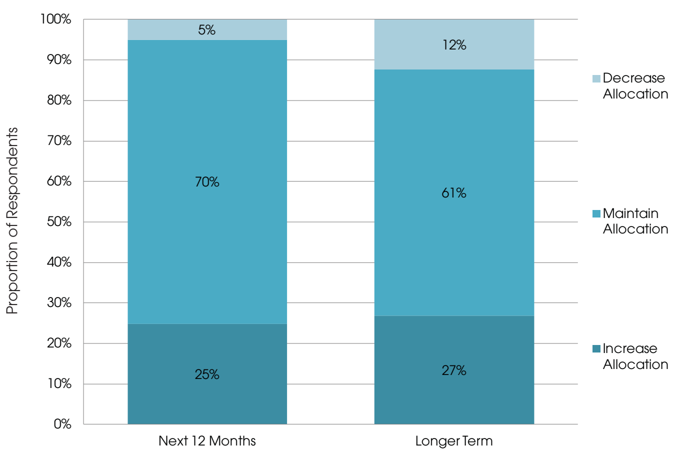
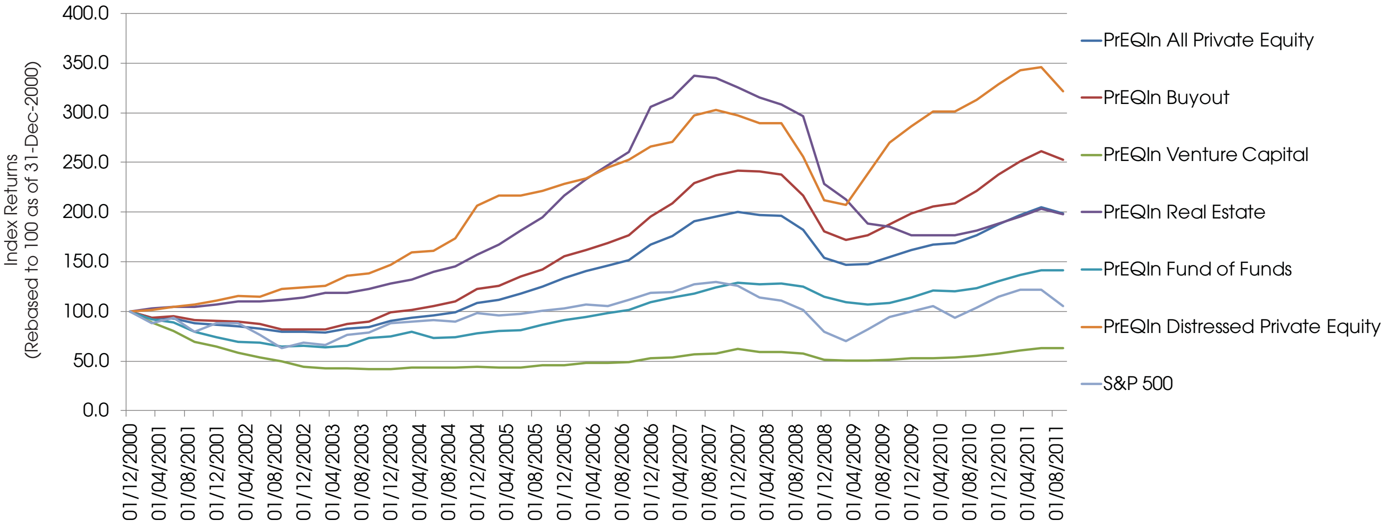


Fig. 4: PrEQIn Index: All Strategies vs. S&P 500




It is for this reason that Preqin has been delighted to work with LPX Group to explore the performance of LPE and the correlations between LPE and 'core' limited partnership private equity. We believe the results of the research are of fundamental importance for investors in widening their choice of options for constructing a balanced portfolio that meets their investment requirements.

In the section that follows, Michel Degosciu of LPX Group describes the analysis that was undertaken to compare the performance of LPE with that of 'core' limited partnership private equity. The central finding - that the two are highly correlated - has profound implications for institutional investors in private equity: they can consider using LPE as a core component of their private equity investment strategy, benefitting from its liquidity and flexibility.

# Measuring Listed Private Equity Performance

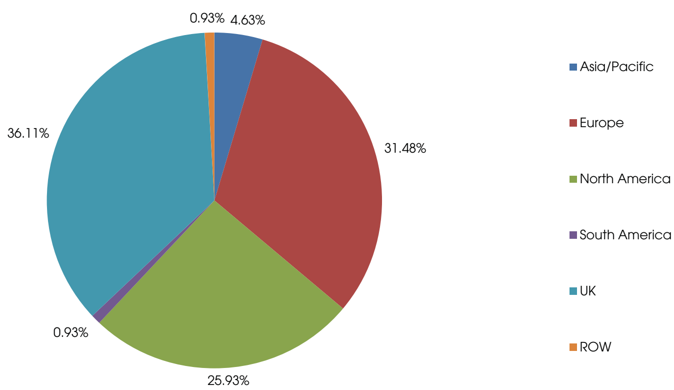
## Market Capitalization

The total market capitalization of listed private equity is $65.5 bn. This is split up into 108 vehicles that fulfil some liquidity criteria (minimum market capitalization, minimum trading volume, etc.). Most of the companies are listed in London and Continental Europe. Around 26% of the total market capitalization is listed in US and Canada.

## LPX50 Index

The LPX50 Index contains the 50 largest Listed Private Equity companies and is the most established Index for measuring this asset class. It is calculated in three versions: the LPX50 TR Index which is based on market prices and dividend payments; the LPX50 NAV Index which is measuring the fundamental valuations; and the LPX50 NAV Premium/Discount Index which compares market prices and NAV data. Pure fund management companies (e.g. Blackstone) are excluded from the LPX50 NAV Index. The NAV index was established in 2010 and is calculated on a daily basis.

Fig. 5: Breakdown of Total Market Capitalization of Listed Private Equity by Geography



While the LPX50 NAV index is only 18% below the peak of 2007 on a fundamental (NAV) basis, as measured by the LPX50 NAV index, the LPX50 TR index (market price) is still more than 45% from the peak, as shown in Fig. 7.

This mismatch reflects the fact that listed private equity stocks have moved over the period from trading at par or modest premium to NAV in the period 2002-2006, to today's market situation where they trade at average discounts of around 30%. While nobody can predict the future discounts/premium, the fact that the current discount levels are well above the long-run average discount of around 7.6% should give investors some comfort that there is the potential for narrower discounts over the medium term (see Fig. 8).

Given that NAV data exists for listed and unlisted private equity, it is possible to compare the NAV of both asset classes. This is the only way of comparing the fundamental performance of these assets (given that no market price data exists for unlisted private equity).

For the unlisted space, data from Preqin, which is the largest data provider on unlisted private equity funds, is used. Based on capital calls, capital distributions and valuation changes a NAV Index of unlisted private equity is calculated.

Fig. 9 compares the development of the LPX50 NAV Index with the development of unlisted private equity NAV before the financial crisis in 2008. Fig. 10 shows the development after the crisis and Fig. 11 during the crisis.

As one can see visually from the graphs there is a high correlation before the crisis and after the crisis. During the crisis there was still a correlation but LPE declined more than unlisted private equity. The main reason for this is the deleveraging process in LPE during the crisis.

Fig. 6: Number of Vehicles and Market Capitalization of Listed Private Equity

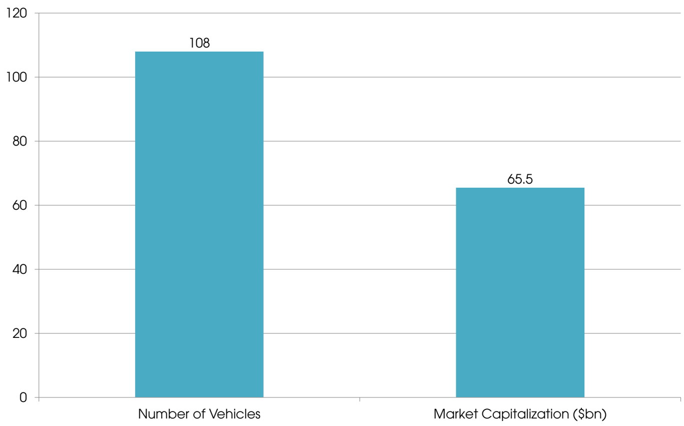



Fig. 7: LPX50 NAV and LPX50 TR Index

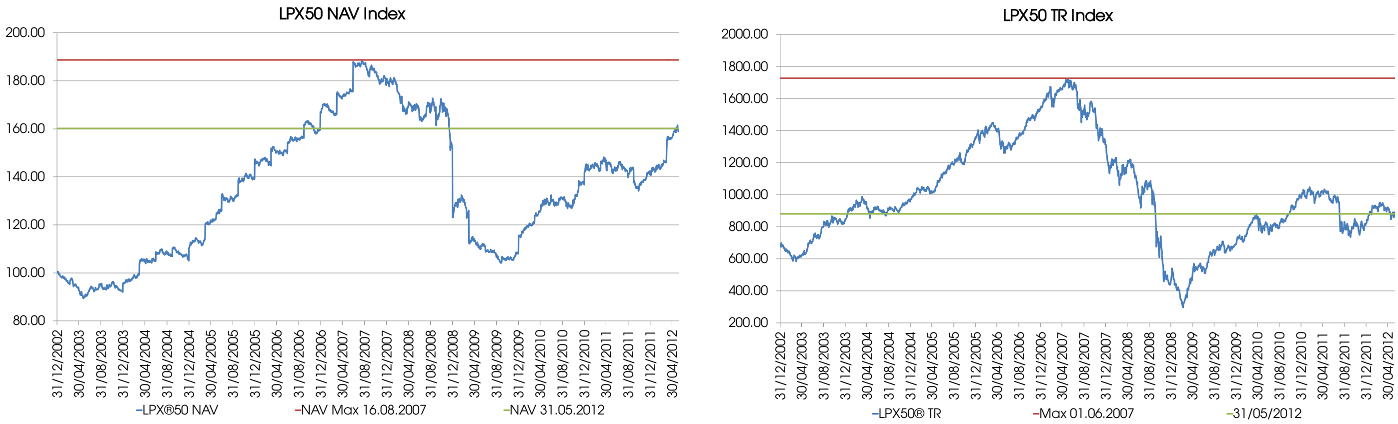



Fig. 8: LPX50 Premium / Discount

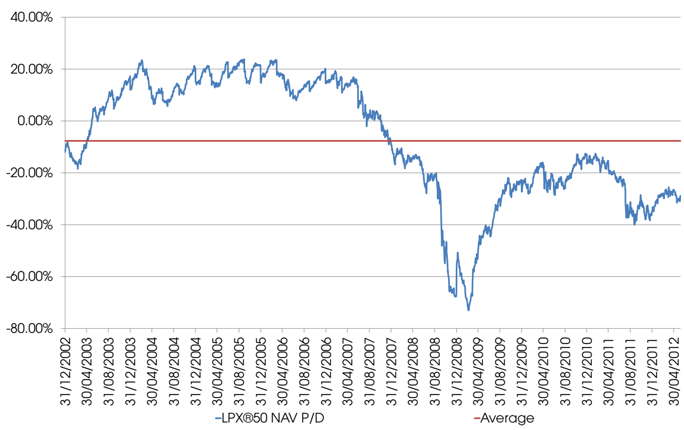


Fig. 9: Quarterly-End Values of the LPX50 NAV Index and Quarterly-End Values of PrEQIn All PE* in USD from 12/2002 to 06/2008

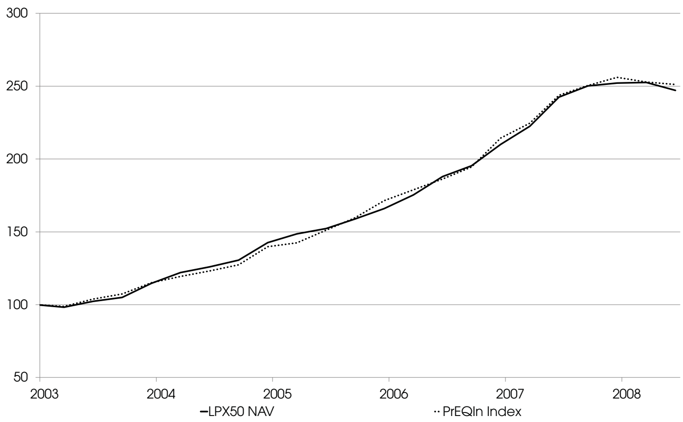
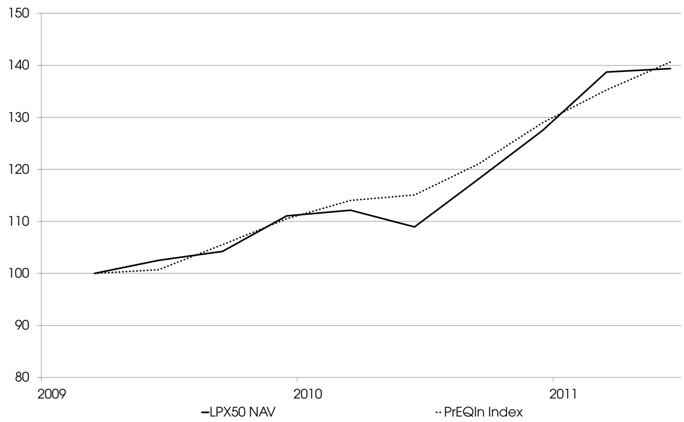



Fig. 10: Quarterly-End Values of the LPX50 NAV Index and Quarterly-End Values of PrEQIn All PE* in USD from 04/2009 to 06/2011




### Correlation Results

The correlation analysis is based on the Bravais-Pearson method, a frequently used methodology. The advantage of using such a simple measure is that it is easy to interpret.

Investigating the NAV returns of LPE and unlisted private equity funds, we find a strong correlation between LPX50 NAV Index returns and the returns of a data set of unlisted private equity funds provided by Preqin.

Fig. 12 shows the correlations between LPX50 NAV and the PrEQIn All PE over the entire sample period using quarterly returns. The Pearson method shows a correlation of 0.94 between LPX50 and All PE.

### Routes into Listed PE

Several index-linked products have been established that track the indices thereby giving investors easy access to these returns. For more information on index-linked products please contact the providers.

**Michel Degosciu has published a formal academic paper regarding this research. This can be accessed here: http://ssrn.com/abstract=2081997.**

Fig. 11: Quarterly-End Values of the LPX50 NAV Index and Quarterly-End Values of PrEQIn All PE* in USD from 07/2008 to 04/2009

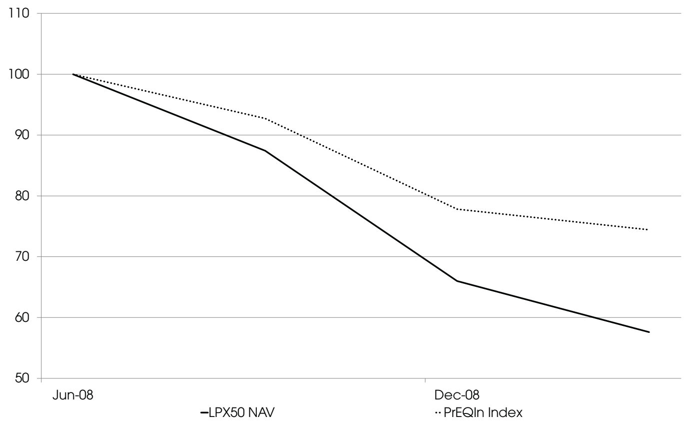



Fig. 12: Correlation Estimations with LPX50 NAV Index Between 12/2002 and 06/2011

| | Pearson | | |
|---|---|---|---|
| | Correlation | Confidence interval at 95% | |
| LPX50 NAV vs. PrEQIn | 0.9406 | 0.8834 | 0.9702 |

** All PE is the NAV development of unlisted private equity and is provided by Preqin.*

# Contact Us

For more information on this report, or on LPX or Preqin, please contact:


**LPX Group**

Florastrasse 17
8008 Zurich
Switzerland

Tel: +41 (0)44 382 90 20
Fax: +41 (0)44 382 90 21

**Email:** info@lpx-group.com
**Web:** www.lpx-group.com

**Preqin**

**US Office:**
One Grand Central Place
60 E 42nd Street
Suite 2544, New York
NY 10165, United States

Tel: +1 212 350 0100
Fax: +1 440 445 9595

**London Office:**
Equitable House
47 King William Street
London
EC4R 9AF
United Kingdom

Tel: +44 (0)20 7645 8888
Fax: +44 (0)870 330 5892

**Singapore Office:**
Asia Square Tower 1
#07-04
8 Marina View
Singapore 018960

Tel: +65 6407 1011
Fax: +65 6407 1001

**Email:** info@preqin.com
**Web:** www.preqin.com