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IPD Global Quarterly Property Fund Index

3Q 2013 results report
December 2013

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RESEARCH

The IPD Global Quarterly Property Fund Index:
Performance as of 3Q 2013

Core open-end global funds produced a net fund level return of 2.8% and a direct property return of 2.5% during 3Q 2013. This performance outpaced property equities and bonds, but fell well short of the 6.5% performance of global equities, as measured by the MSCI World Equity Index. Core open-end funds play an important role in global real estate markets as a source of returns for investors, but also as a baseline for the expected performance of other investment strategies at other points on the risk spectrum. This report explains the structure and characteristics of core open-end funds, as measured by the IPD Global Quarterly Property Fund Index, as well as their performance across property types and global regions. The results are presented in three parts. The first reviews the structure and composition of the Index. The second part reviews real estate performance at the asset level as of 3Q 2013. The final section explores some of the differences in fund level and asset level performance.

AT A GLANCE
IPD Global Quarterly Property Fund Index

Background

The governance of commingled funds improved in the wake of the Global Financial Crisis. Because most institutional investors benefit from the comingled structure, there has been renewed interest in such exposure, particularly for core funds. This parallels a growing interest in cross-border real estate as investors broaden and diversify the geographic scope of their exposure. The IPD Global Quarterly Property Fund Index, currently under development, is designed to facilitate the measurement of such fund performance against a reliable benchmark. The consultative period for developing the Index began in 4Q 2012 and continues through the end of 2014. This report analyzes the Index results development as of the end of 3Q 2013

(Note: The index is not frozen, therefore historical numbers will change when new funds are added to the sample.)

Measurement criteria

- Open-end funds
- Core strategy
- Transparency
- Quarterly asset appraisals
- Gross asset value (GAV) > USD 100 million
- 85% of GAV in real estate
- Leverage < 60% of GAV

Timeline

- 4Q 2012 – consultative period begins; initial performance results issued
- 3Q 2013 – consultative period continues; more funds incorporated
- 4Q 2014 – consultative period scheduled to end; formal index expected to be released

Section 1: IPD Global Quarterly Property Fund Index structure and composition

The total global market for open-end real estate funds with quarterly appraisals is valued at over USD 250 billion[1]. As of 3Q 2013, the IPD Global Quarterly Property Fund Index included performance data for 80 funds with a GAV of USD 211 billion spread across 5,200 individual assets. The Index is still under development (a 'consultative' phase), and the number of funds included in the index continues to expand. Six new funds were added in 3Q 2013.

Though the Index is designed to have broadly comparable characteristics, the structures of the participating funds reveal surprisingly wide variations across regions. These differences reflect the scale of the global market as well as the spectrum of maturity across regions. A typical North American fund, for example, averaged about USD 6 billion in GAV as of 3Q 2013, more than double the average size of funds domiciled elsewhere. The asset counts of North American funds also tend to be much higher than their global counterparts, as do the average leverage ratios. Funds domiciled in the Asia Pacific region hold relatively few assets on average. These assets, though smaller in number, tend to be concentrated in trophy and prime properties, so this inflates the average asset values of Asia Pacific funds compared with funds domiciled in other regions. In EMEA, the average fund sizes are relatively small with mean asset values less than half the global average. And as of 3Q 2013, the average cash ratios of funds domiciled in the EMEA region were outpacing their Asian and North American peers.

The comparative regional averages for real estate funds can be useful at a headline level, but they reveal little about the intra-regional dispersion of funds. Within the EMEA region, for example, fund sizes (based on net asset value, or NAV) tend to be quite small. This is true in the UK and even more so in Continental Europe where only a handful of funds exceed USD 1 billion in size.

The average sizes of individual assets in these funds also differ across the regions. In North America, Continental Europe, and the UK, the majority of funds within each region have fairly similar average asset sizes. True, North America and Continental Europe have a handful of outliers in which the average asset size is quite large, but on the whole, most funds within their respective regions tend to cluster relatively close to the mean. This is not true at all among Asia Pacific funds, where average asset sizes vary widely, with relatively few falling close to the mean.

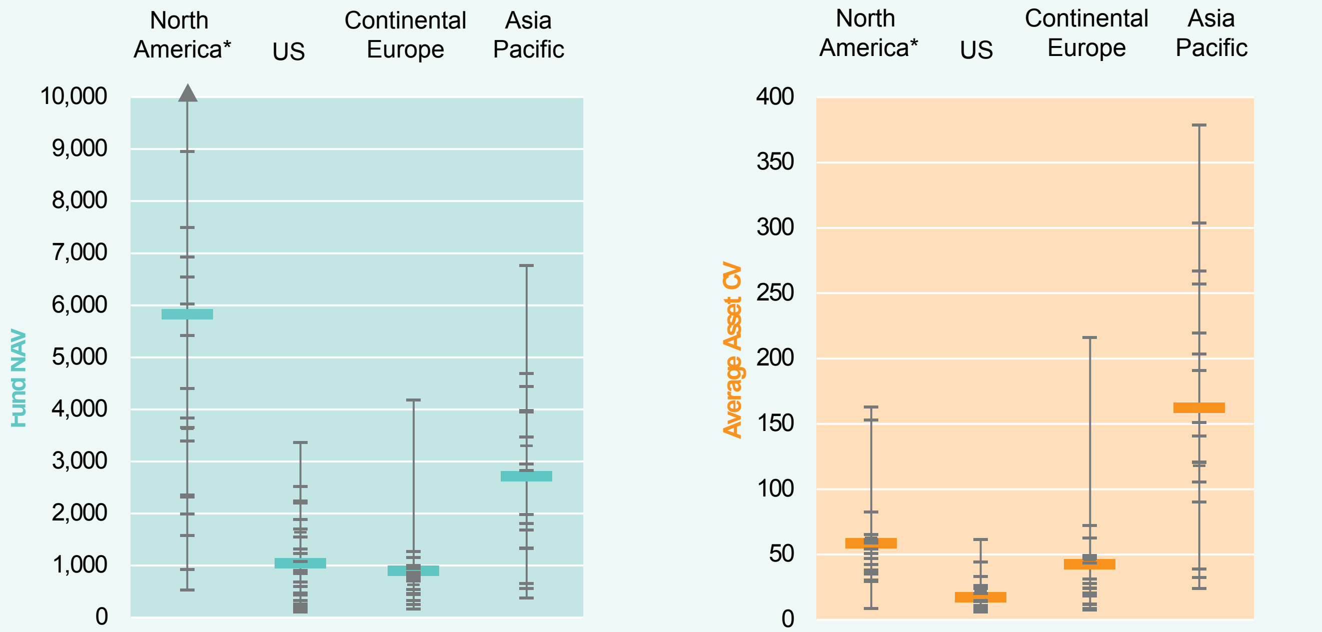
Composition of Global Property Fund Index: 3Q 2013 benchmark metrics in USD

Aggregates	Global	North America	EMEA	Asia Pacific
Gross asset value (USD billions)	**211**	115	48	49
Net asset value (USD billions)	**169**	86	42	41
Number of funds	**80**	19	44	17
Number of assets	**5,199**	2,388	2,381	430
Averages				
Asset size (USD millions)	**38.5**	46.3	18.2	107.1
Fund size				
GAV (USD millions)	**2,642**	6,031	1,096	2,853
NAV (USD millions)	**2,112**	4,506	963	2,408
Number of assets	**65**	126	54	25
Financials				
Leverage %	**20.1%**	25.3%	12.1%	15.6%
Cash %	**3.6%**	3.3%	6.3%	1.6%

Source: IPD

[1]Estimate based on gross asset value (GAV).

Differences in fund structure across regions: Distributions of funds across regions



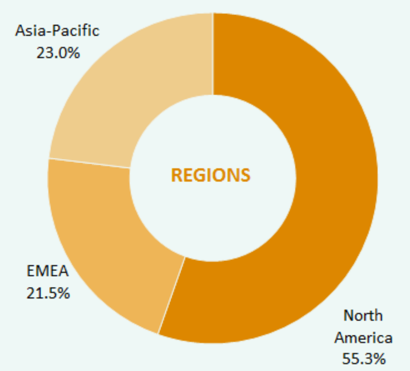
*Note: Two North American funds are larger than the scale of the fund size exhibit.

Source: IPD

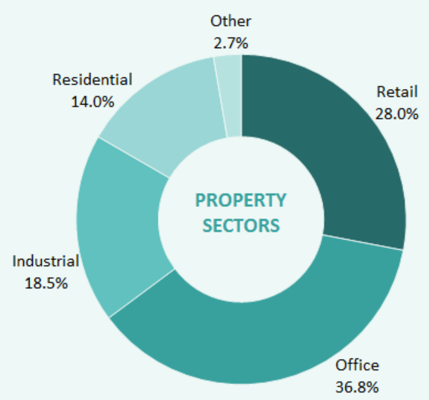
The sheer scale of the North American market and the large average size of its funds means that it is heavily weighted in the IPD Global Quarterly Property Fund Index. More than half (55%) of the capital value of the index lies in North America, with the remainder nearly evenly split between the EMEA and Asia Pacific regions.

The Index includes property specific funds as well as those diversified by property type. The office sector (37%) and retail sector (28%) together comprise nearly two-thirds of the combined capital value of the participating funds. Industrial properties account for nearly one-fifth, or 19%, of the index, and residential properties (apartments) make up about 14% of global fund holdings in real estate.

Fund allocations – by direct capital value



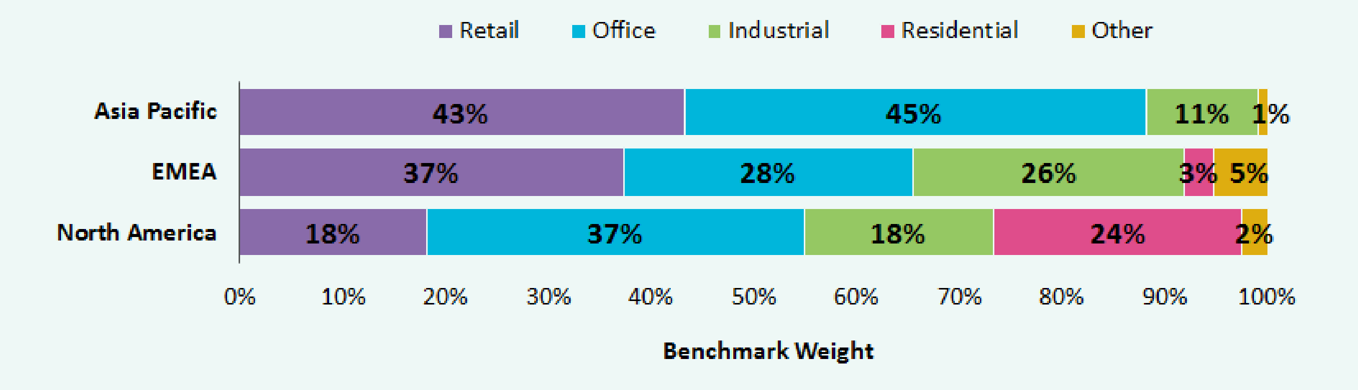
Fund allocations – by direct capital value



Source: IPD

Funds differ regionally in their allocations to property sectors. Apartments, for example, tend to be a less common portfolio component outside of North America where they make up nearly one-quarter (24%) of fund values. Offices are the preferred property sector of funds domiciled in the Asia Pacific region as well as those domiciled in North America. EMEA-domiciled funds prefer the retail sector with remaining real estate investments split fairly evenly across office and industrial properties.

Property sector allocations within regions – by asset level capital value



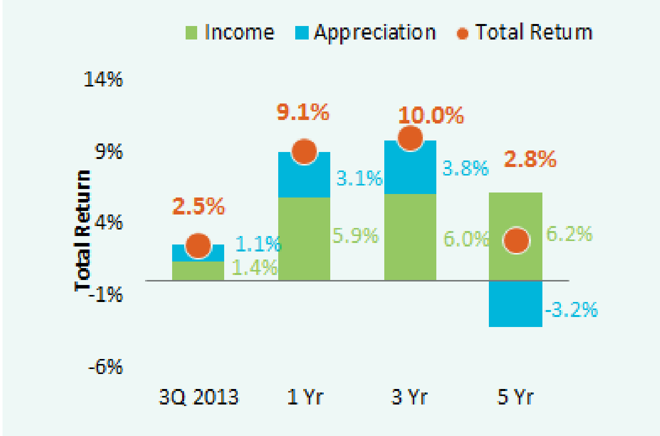
Source: IPD

Section 2: Real estate performance at the asset level in 3Q 2013

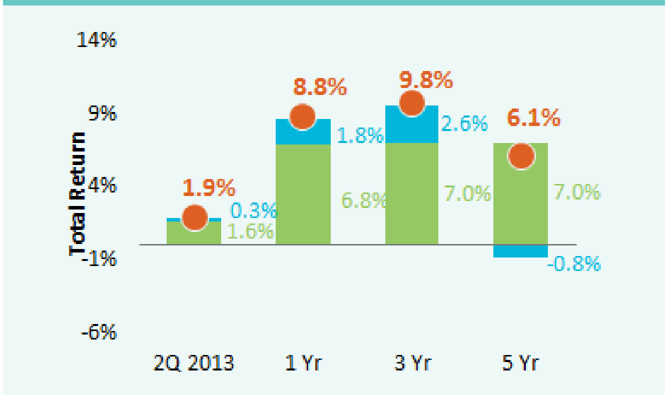
Before digging into fund performance, it can be valuable to first provide some context. Direct investments in global real estate produced a 2.5% return in 3Q 2013 as measured in local currency at the asset level. Real estate's relatively stable income component explains some of its overall appeal to investors. The income return portion of global real estate investments indexed over the past one to five years has ranged from 6.2% to 5.9%. This represents a solid level of stability, even during a period when economic uncertainty reached high levels. Income returns vary only slightly across regions, with Asia historically a bit higher than the global average and North America a bit lower.

On the flipside, real estate's volatility lies in its capital value[2]. The global capital value change in 3Q 2013 was

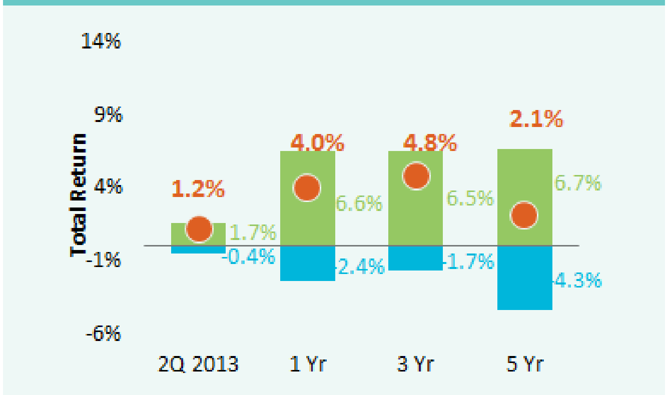
GLOBAL
Components of direct RE returns – performance as of 3Q 2013



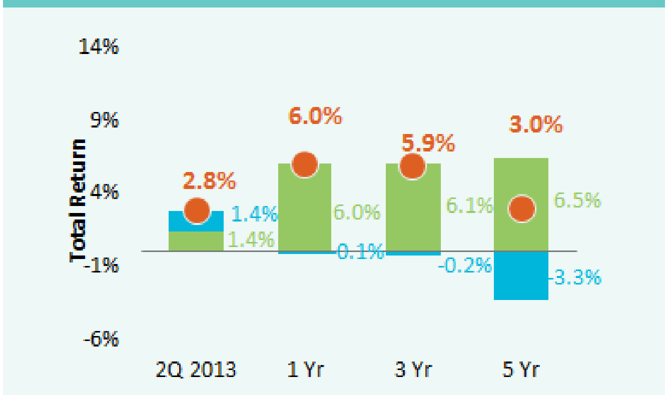
ASIA PACIFIC
Components of direct RE returns – performance as of 3Q 2013



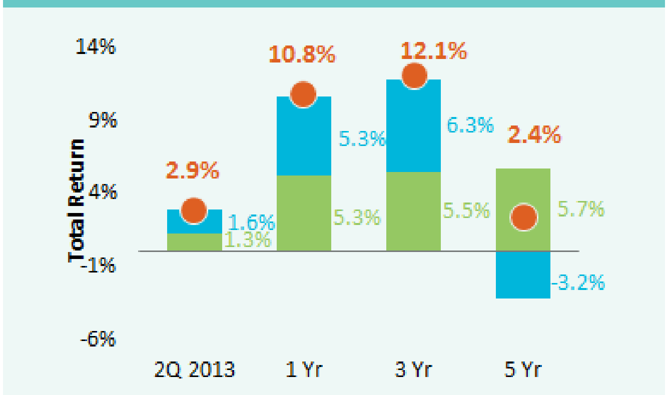
CONTINENTAL EUROPE
Components of direct RE returns – performance as of 3Q 2013



UK
Components of direct RE returns – performance as of 3Q 2013



NORTH AMERICA
Components of direct RE returns – performance as of 3Q 2013



Source: IPD

[2] The volatility of property values is an important reason for the IPD Global Quarterly Property Fund Index's emphasis on the transparency of quarterly appraisals.

a positive 1.1%, just below the global income return. Unlike the income return, capital appreciation varied more widely across regions. In North America, values rose 1.6%, making it the only region in which capital appreciation outpaced income return during the quarter (although the UK came very close). Continental Europe was the regional laggard, with values slipping 42 basis points during the quarter.

Industrial property continued to be the top global performer in 3Q 2013, a position it also held in the previous quarter.

Through much of the recovery period immediately following the Global Financial Crisis (GFC), residential property led global real estate performance.

The residential sector's recent run at the top was due largely to a significant re-alignment of market fundamentals in North America, including a subdued for-sale home market, stricter mortgage lending standards, and demographic shifts in key age cohorts.

In the Asia Pacific region, all the key property sectors lagged the global benchmark in 3Q 2013 at the asset level. Asia Pacific's office sector, which held up relatively well through the GFC, did not keep pace with global performance over the past three years. EMEA's office and industrial sectors achieved above-average returns during the quarter, but the region's retail sector fell just short of the global benchmark.

Property sector performance across regions – composition of return as of 3Q 2013

	3Q 2013	1-Year	3-Year	5-Year
Benchmark	**2.5%**	**9.1%**	**10.0%**	**2.8%**
Office	▲ **2.5%**	▼ **8.8%**	▲ **10.0%**	▼ **2.2%**
North America	▲ 2.9%	▲ 10.3%	▲ 11.8%	▼ 1.4%
EMEA	▲ 2.7%	▼ 5.8%	▼ 5.9%	▼ 2.3%
Asia Pacific	▼ 1.8%	▼ 7.8%	▼ 9.6%	▲ 5.4%
Industrial	▲ **3.2%**	▼ **8.8%**	▲ **10.0%**	▼ **2.2%**
North America	▲ 3.6%	▲ 12.7%	▲ 13.2%	▲ 2.8%
EMEA	▲ 2.8%	▼ 7.1%	▼ 6.5%	▲ 3.2%
Asia Pacific	▼ 2.3%	▲ 10.3%	▲ 10.4%	▲ 6.4%
Retail	▼ **2.2%**	▼ **8.6%**	▼ **8.8%**	▲ **3.6%**
North America	▲ 2.9%	▲ 11.8%	▲ 11.7%	▲ 3.3%
EMEA	▼ 1.8%	▼ 3.8%	▼ 4.6%	▼ 2.4%
Asia Pacific	▼ 1.9%	▲ 9.4%	▼ 9.8%	▲ 6.9%
Residential	▼ **2.4%**	▲ **9.5%**	▲ **12.7%**	▲ **3.9%**
North America	▼ 2.4%	▲ 9.9%	▲ 13.1%	▲ 4.0%
EMEA	n/a	n/a	n/a	n/a
Asia Pacific	n/a	n/a	n/a	n/a

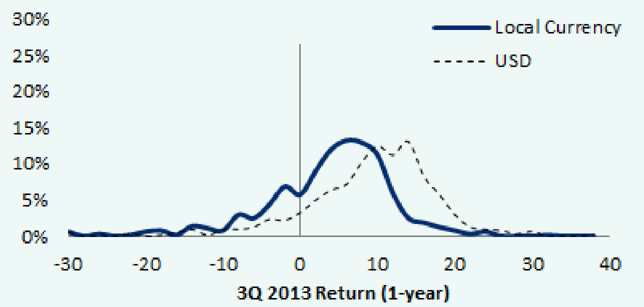
Source: IPD

▲ above benchmark ▼ below benchmark

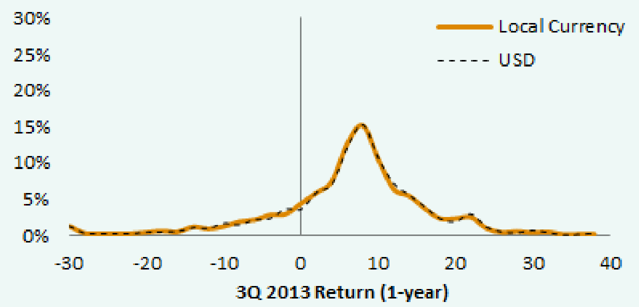
In all four regions measured, annual returns at the asset level were widely dispersed as of 3Q 2013. This dispersion could be observed even in Continental Europe where a few assets in the distribution were generating double-digit returns despite sluggish overall real estate fundamentals in the region. As this distribution shows, well chosen assets – even assets in Continental Europe – can, in theory, contribute to an outperforming cross-border portfolio.

But cross border performance can also be difficult to measure, as one region's gains may not cash out exactly as they accrued. Consider the example of a hypothetical US investor in 3Q 2013 with a cross-border portfolio of assets performing at exactly the benchmark level over the past year. If accrued gains were to be converted back into US dollars at the end of 3Q, then how different would things look? The British pound depreciated only marginally against the US dollar between 3Q 2012 and 3Q 2013, so UK performance looks relatively consistent. The euro, in contrast, appreciated by nearly 5% during this period, enough to shift the distribution of returns at the asset level modestly to the right. The big difference, however, is in the Asia Pacific region where the currency effect shifts the distribution curve sharply to the left. Double-digit depreciation of the Japanese and Australian currencies against the US Dollar leaves otherwise solid Asia Pacific real estate performance looking more precarious if unhedged gains were to be converted back into dollars.

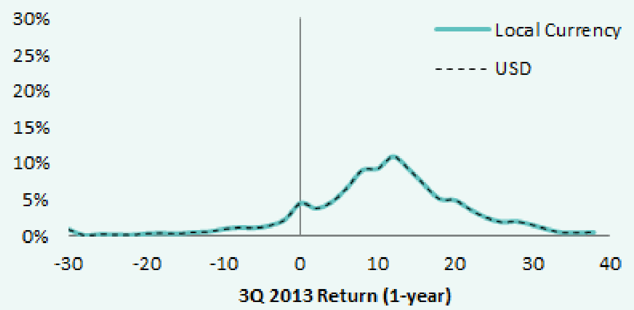
CONTINENTAL EUROPE
Currency impacts: distribution of 1-year asset-level real estate returns – local currency vs USD as of 3Q 2013



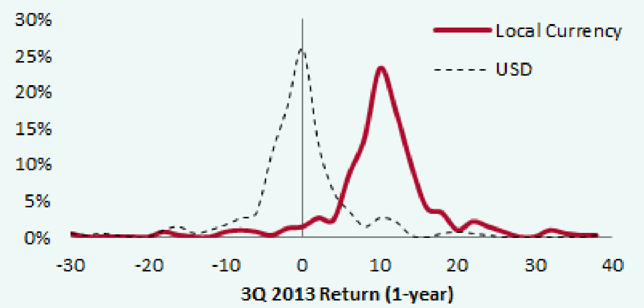
UK
Currency impacts: distribution of 1-year asset-level real estate returns – local currency vs USD as of 3Q 2013



NORTH AMERICA
Currency impacts: distribution of 1-year asset-level real estate returns – local currency vs USD



ASIA PACIFIC
Currency impacts: distribution of 1-year asset-level real estate returns – local currency vs USD

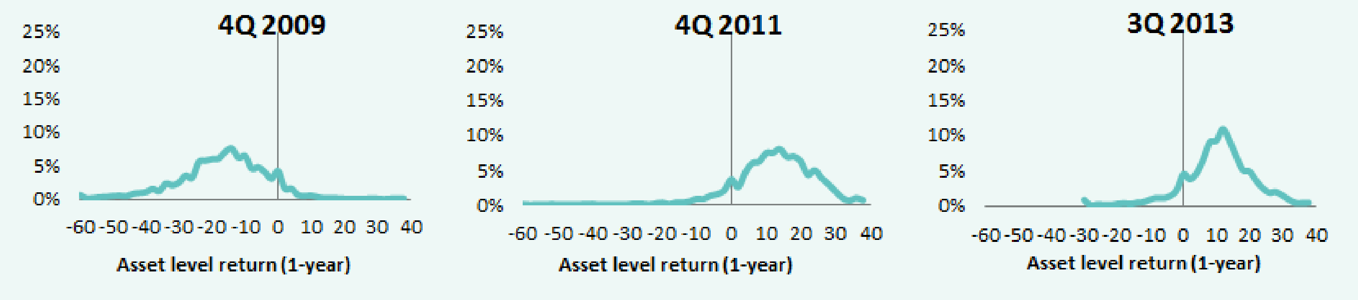


Source: IPD

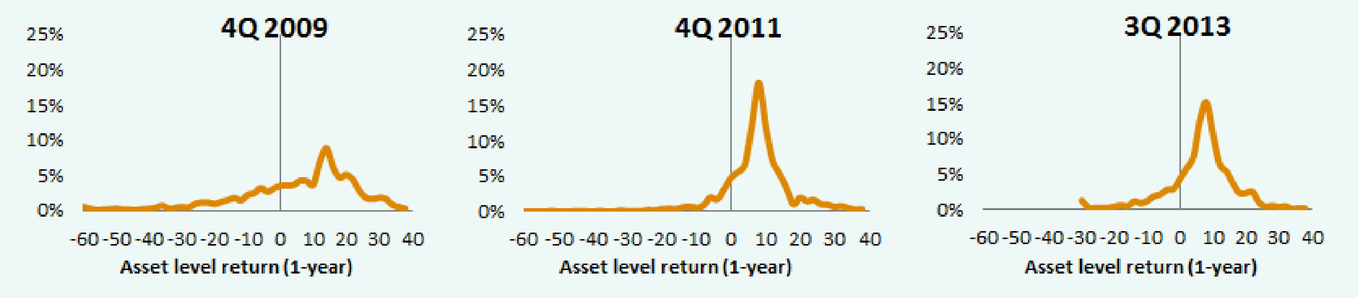
The cyclical aspect of real estate performance at the asset level is not always fully understood. Whether an overall property market is in a boom or a bust cycle in terms of performance may say little about total returns at the individual asset level within that property market. The distribution of asset performance across an entire cycle is in constant flux, with sometimes surprising levels of dispersion.

Consider the four major global regions at various points through the post-GFC period. The exhibit shows comparative distributions of one-year total returns at Q4 2009, Q4 2011, and 3Q 2013. In North America, the distribution held its shape between 2009 and 2011, even as it shifted rightward. The placement of the distribution held relatively steady between 2011 and 2013, but overall performance during this period began to cluster more closely to the mean. The UK market in 2009 was headed toward early recovery and this was reflected in the distribution of assets, many of which were experiencing double-digit returns, but with a sizable share of others still in negative territory. In both Continental Europe and Asia Pacific, a lumpy distribution of returns can be seen in 2009, indicating just how much asset level performance can be vary at a given point in the cycle. Even in the post-GFC years as distributions changed and kurtosis rose, tails of asset level performance stretch in both directions in all four regions.

NORTH AMERICA
Cyclical patterns: distribution of 1-year asset-level real estate returns – local currency as of 4Q 2009, 4Q 2011, and 3Q 2013



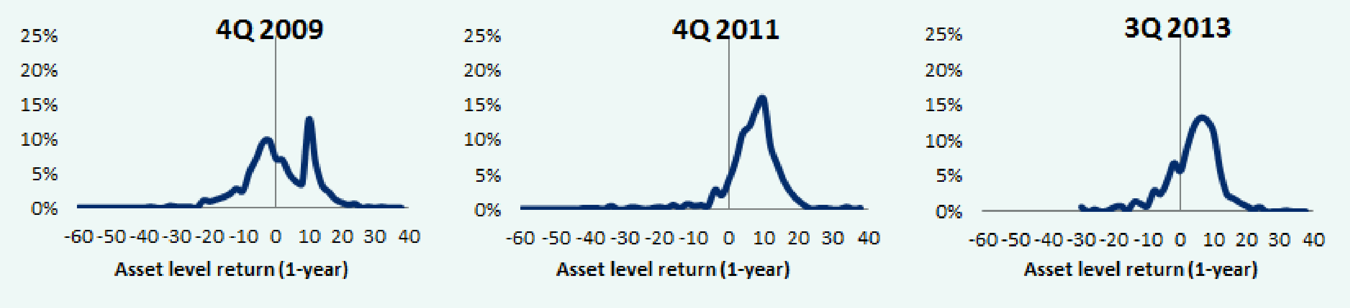
UK
Cyclical patterns: distribution of 1-year asset-level real estate returns – local currency as of 4Q 2009, 4Q 2011, and 3Q 2013



Source: IPD

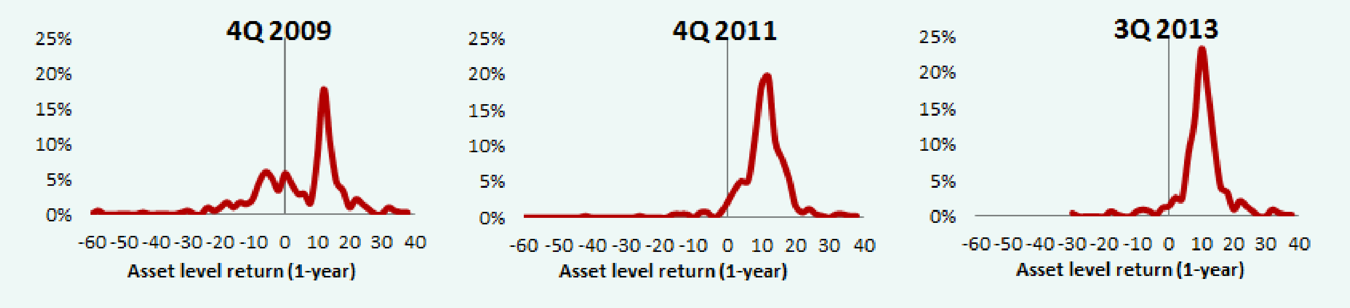
CONTINENTAL EUROPE

Cyclical patterns: distribution of 1-year asset-level real estate returns – local currency as of 4Q 2009, 4Q 2011, and 3Q 2013



ASIA PACIFIC

Cyclical patterns: distribution of 1-year asset-level real estate returns – local currency as of 4Q 2009, 4Q 2011, and 3Q 2013



Source: IPD

Section 3: Differentiating performance at the fund level

So in the context of direct real estate performance (and investment in general), how do global property funds stack up? IPD's consultative Global Quarterly Property Fund Index rose 2.8% in 3Q 2013 from the previous quarter. Momentum picked up 20 basis points from mid-year when the index gained 2.6%. The Index's performance exceeded both property equities (REITs) and bonds during 3Q 2013. But the Index's gain lagged global equity markets, which rose 6.5% during the same period according to MSCI. The US Federal Reserve's exit strategy from quantitative easing did not unfold as investors had anticipated in 3Q 2013, and this appeared to lift equity markets as investors adjusted their expectations.

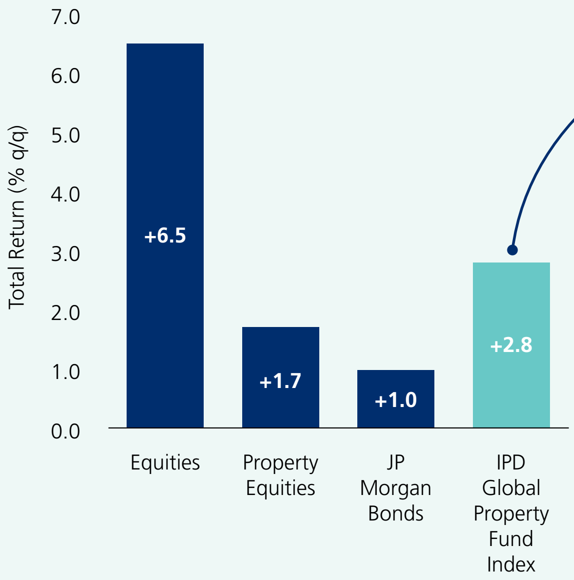
The Index's quarterly return of 2.8% in 3Q 2013, if it were annualised, would compare favourably with index performance over the past year (9.2%) and with annualised performance over the past three years (9.9%). The flat performance of the five-year index (0.1%) includes the period from late 2008 forward, thus capturing the scope of asset write-downs during the GFC.

The Index's quarterly return of 2.8% in 3Q 2013 outperformed direct real estate (2.5%) by 29 basis points. The spread between fund level and asset level performance represents the impact of a range of factors including joint ventures, leverage, cash, fund costs, and fees. These factors can restrain relative fund performance during certain points in the cycle, but at other times they can provide a differential advantage, as occurred with overall global performance in 3Q 2013. A gradual but steady improvement in the Index's spread has occurred during the post-GFC period.

In North America, real estate fund performance outpaced asset level performance in 3Q 2013, just as it has over the past three years. The spread among Asia Pacific funds turned positive during 3Q 2013 after lagging direct real estate in the previous quarter. Funds in the UK and Continental Europe provided positive returns in 3Q 2013 that were only modestly below direct real estate during the period.

3Q 2013 IPD Global Quarterly Property Fund Index

Comparative global performance by asset class



Global real estate performance by region

		3Q 2013	1-Year	3-Year	5-Year
Global	**Net fund return**	**2.8%**	**9.2%**	**9.9%**	**0.1%**
	Direct real estate return	**2.5%**	**9.1%**	**10.0%**	**2.8%**
	Spread	*0.3%*	*0.1%*	*-0.1%*	*-2.7%*
North America	Net fund return	3.4%	12.2%	13.8%	-0.9%
	Direct real estate return	2.9%	10.8%	12.1%	2.4%
	Spread	*0.6%*	*1.3%*	*1.6%*	*-3.4%*
U.K.	Net fund return	2.5%	4.9%	5.0%	1.8%
	Direct real estate return	2.7%	3.3%	5.7%	2.8%
	Spread	*-0.2%*	*1.6%*	*-0.8%*	*-0.9%*
Continental Europe	Net fund return	1.5%	2.6%	3.3%	-1.6%
	Direct real estate return	1.6%	4.8%	5.2%	2.4%
	Spread	*-0.1%*	*-2.2%*	*-1.8%*	*-4.0%*
Asia Pacific	Net fund return	2.1%	8.4%	8.8%	3.6%
	Direct real estate return	1.9%	8.8%	9.8%	6.1%
	Spread	*0.2%*	*-0.4%*	*-1.0%*	*-2.5%*

Source: MSCI World Index, Gross Total Return (equities); MSCI World Real Estate Index, Gross Total Return (property equities); J.P. Morgan GBI Global Composite, Unhedged Index, 7-10 years, (bonds); IPD Global Quarterly Property Fund Index (real estate funds); IPD Global Index (direct real estate)

A notable difference between fund level performance and direct property returns is that fund performance is less concentrated than asset level performance. Recall that in previous exhibits, individual assets ranged widely in performance even in the same geographic market at the same point in the cycle. It is significant then that fund level performance can be even more dispersed than asset level performance. In 3Q 2013, the spread between the 5th and 95th percentiles of fund performance was more than 100 basis points wider than at the asset level, and over the past year it was more than 400 points wider. Spreads of 200 to 300 points can also be observed over longer periods. Even when the medians and benchmarks for funds and assets are similar, the full range of fund level returns tends to be relatively wide, and this is due, in part, to their varying use of leverage[3].

Comparative real estate performance as of 3Q 2013

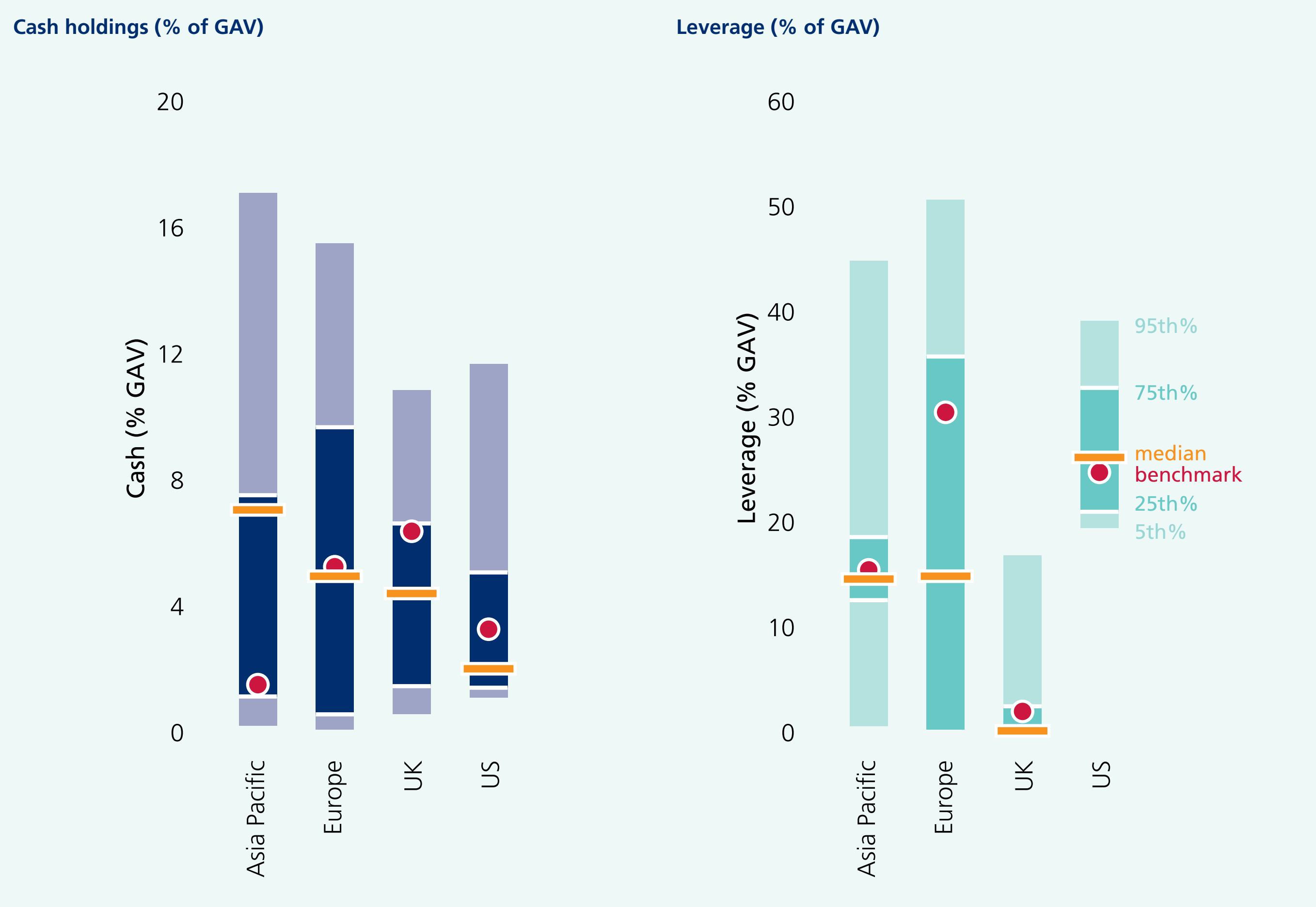
Source: IPD

[3]Investors can explore in more detail their own fund's performance relative to a benchmark with IPD's Portfolio Analysis Service (PAS). This service provides performance analysis from market through to asset and it can be carried out for all of the funds within the IPD Global Quarterly Property Fund Index. A timely paper by IPD, Private real estate: From asset class to asset, was released in November and it explains the balance between market factors (allocation and weighting by segment and submarket) and asset specific factors (property selection) in the real estate portfolio.

Structural differences among funds can contribute to variations in regional fund performance. One of these differences is effectiveness at deploying cash into productive assets. As shown earlier in Exhibit 1, one of the rules for a fund's inclusion in the Global Property Fund Index is an average of at least 85% of assets in real estate, or in other words, no more than 15% of funds in cash. Nevertheless, some funds skirted at or slightly above the IPD Global Quarterly Property Fund Index limit of 15% in 3Q 2013. Cash ratios in the Asia Pacific region were especially notable. The region's average cash ratio registered below 2%, the lowest of any region, but its median cash ratio in 3Q 2013 exceeded 7%, making it the highest of any region. In Continental Europe, the cash ratios of funds between the 25th and 75th percentiles varied by more than 900 basis points, the most of any region within those parameters.

The use of leverage also differentiates fund performance. Funds in North America and Continental Europe, for example, tend to employ higher levels of leverage than their counterparts in the UK or Asia Pacific. But not all Continental funds are highly leveraged, with some of those in the lower quartile largely unlevered. In the UK, the use of leverage is so uncommon that the median among funds approaches zero and the benchmark average is less than 2%, a stark difference from the benchmark leverage ratio of 25% in North America and 30% in Continental Europe. Leverage ratios among Continental Europe's funds vary widely, with those at the 95th percentile as much as 50% leveraged.

Variations in property fund structures as of 3Q 2013



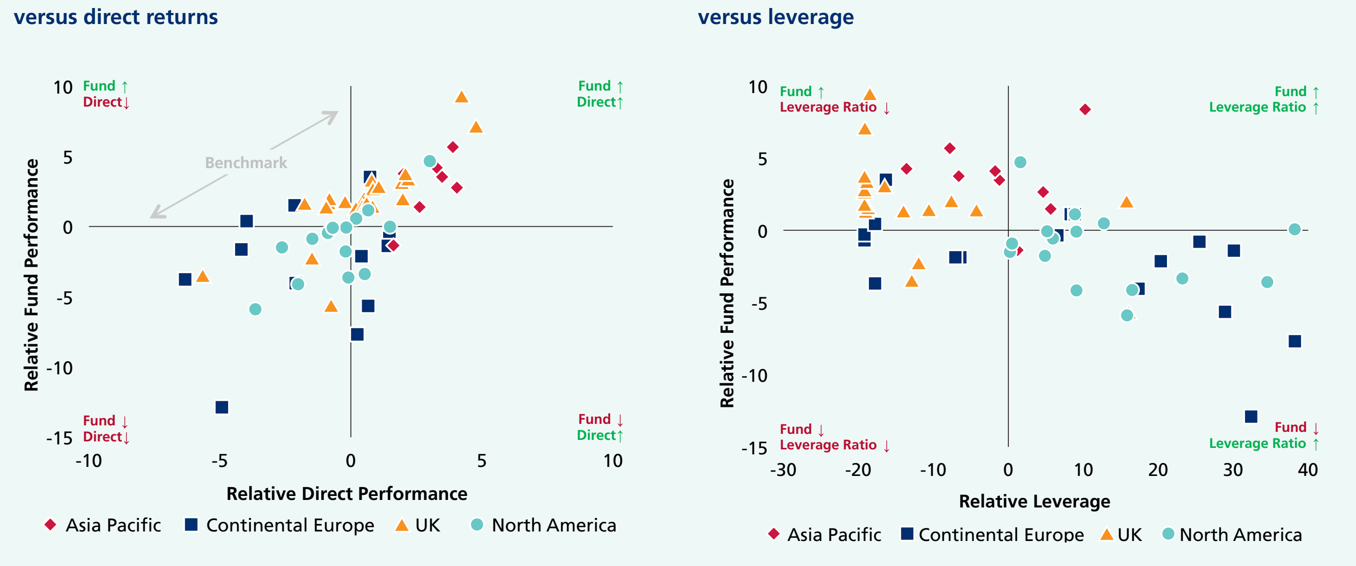
Source: IPD

Asia Pacific property on average over the past five years largely outperformed the global benchmark at both the fund and asset level. For other regions, fund performance has been more varied, especially among funds domiciled in EMEA countries. As a group, North American funds have tended to deviate less from the benchmark, but as noted earlier they compose more than half of the overall benchmark by value, so the lower standard deviations from global performance may be, at least in part, related to scale.

The correlation between leverage and fund performance can sometimes break along regional lines when it captures a particular turning point in a cycle. The five-year annualised performance, for example, extends back to 4Q 2008 and includes much of the GFC and its aftermath. During this volatile period and then through the subsequent recovery, heavily leveraged funds in North America and Continental Europe tended to lag the five-year Index benchmark, while minimally leveraged funds in the UK (and to some extent Asia Pacific) were more likely to be outperformers. This underscores the role that leverage can play in fund performance.

It is important for investors to understand how their funds differ from a given geographic benchmark, whether at the asset level or at the fund level. Tools such as the IPD's Global Property Fund Index and Portfolio Analysis Servic can help with this process of improving risk management and overall performance.

Relative fund performance, five year period ending 3Q 2013



Source: IPD

Conclusion

As the global real estate industry matures, more tools will emerge to encourage transparency and to measure risk. One tool, IPD's Portfolio Analysis Service (PAS) provides investors with a way to explore in detail their own fund's performance relative to an established benchmark. The PAS service provides comprehensive performance analysis from market through to asset.
IPD's recent paper, *v*, explains the balance between market factors (allocation and weighting by segment and submarket) and asset specific factors (property selection) in the real estate portfolio.

The development of the IPD Global Quarterly Property Fund Index is a logical progression in the industry's ongoing evolution. Measuring fund performance presents challenges of comparability, consistency, and transparency. As of 3Q 2013, the Index remains a work in progress, but the final index, when launched in the coming quarters, will provide a way to measure and compare real estate performance on a quarterly basis at both the asset and fund levels against a credible and well vetted benchmark. This represents a significant achievement of the real estate industry.

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