

# IPD Index Research and Development Review

January 2010

On the pulse of  
the property world



Analysing the inputs to IPD Indices



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## Analysing the inputs to IPD Indices

### 1. Introduction

IPD's national, European and global indices are sourced from certified open market valuations plus full capital and revenue account cash flows provided for a massive sample of the professionally-managed real estate investment portfolios worldwide. They are tracked at asset/lease level by applying a single set of data standards and definitions. They therefore represent the most consistent, accurate and comprehensive record of the direct property performance of around 800 European national and cross-border funds, and close to 1,000 globally. The comprehensive and consistent nature of the underlying Databanks, from which IPD's indices are sourced, is such that they constitute the primary source for professionally-managed investment portfolio benchmarks.

IPD's benchmark and index figures are aggregates of numerous investment portfolios, each with different legal structures, liabilities and sizes. As a consequence they are reflective of a wide mix of investment strategies. In addition, IPD benchmarks report on the performance of assets through their development as well as standing investment phases, with all manner of active investment strategies applied in between, adding even greater variety to the performance mix.

The actual value created by investors is ultimately determined by the income derived from leasing. However, most real estate investment is not listed and so the price of the income stream cannot be observed but has to be estimated periodically using appropriate local valuations. IPD indices will therefore only move at the pace of the underlying local valuation practices, cultures and assumptions, mediated through widely varying leasing models. It is for these reasons that IPD continues to work with investment market participants and organisations to research the underlying valuation and leasing drivers of income and capital movements.

Investors need these estimates of value to price units or shares in investment funds and to inform investors in listed as well as unlisted vehicles and segregated funds on matters of capital allocation efficiency and underlying asset performance.

If valuations are 'behind the curve' then individual portfolio results, IPD's headline indices and all related benchmarks will also similarly suffer some lag. If the IPD market indices do not truly reflect the real estate investment market then that market cannot be fairly judged against other asset classes and if the benchmarks are not consistent then comparisons of portfolio performance may reflect value uncertainty as well as relative performance.

IPD has always accepted a broad responsibility to research the inputs to indices, refine their computation methods and enhance the outputs. In 2009, seven separate research and index development projects, each closely related to the investment issues raised in the context of unprecedented cyclical volatility, have been undertaken by IPD and our partners. The purpose of this report is to summarise that work.

## ***2. European Valuation Accuracy Research***

As it is not possible to observe 'prices' for rarely traded assets, it is only feasible to measure the price/value gap for sold assets against their preceding valuations in order to infer how valuations may generally differ from transaction prices.

The IPD Valuation and Sale Price research study has been running for more than 20 years and was first undertaken as a collaborative study with the Royal Institution of Chartered Surveyors (RICS) in 2003, in response to the Carsberg report recommendations. This advised that the relationship between achieved sale prices and previous valuations should be monitored on an annual basis.

The analysis in this year's report – released in November and reported at the RICS Annual Valuation Conference – covers the markets of France, Germany, the Netherlands and the UK and addresses several key questions:

- How much do sale prices differ from previous valuations?
- Are differences random or were sale prices consistently above or below the latest valuation?
- How much did the results differ across the 4 European markets and across property types within each country?

Addressing these questions has involved market adjusting over 2,100 valuations delivered across 2007/08 for average movement between valuation and sale dates and then applying a rigorous set of tests against the corresponding achieved open market transaction prices. The headline 2009 findings across these major markets were as follows:

- In 2008 the weighted average absolute difference between valuation and sale prices ranged from 8.7% in Netherlands to 12.3% in Germany, with the UK showing a 9.6% average mismatch.

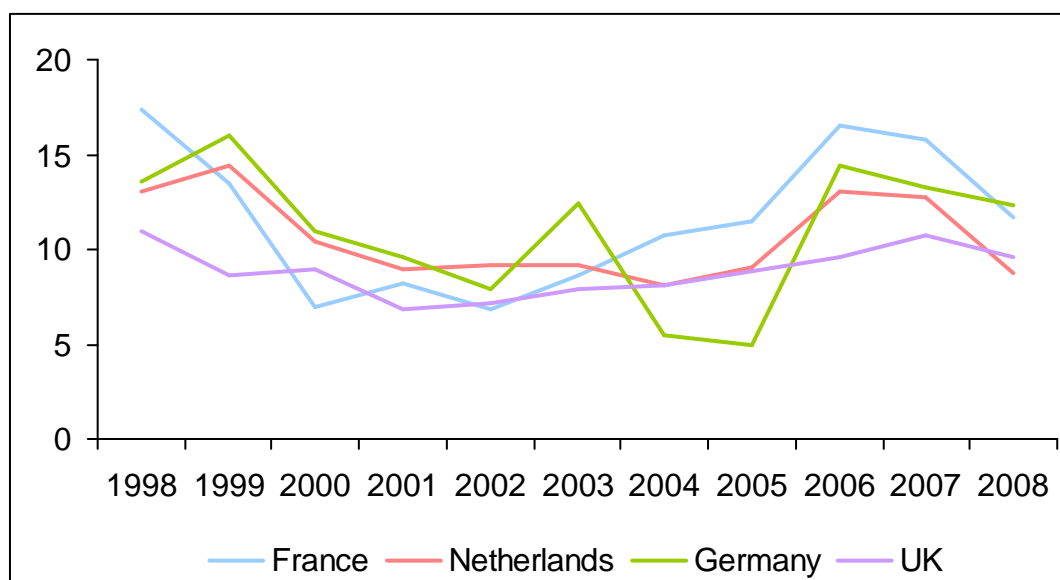
#### *Valuation/Price Differences, % 2008*

	France	Germany	Netherlands	UK
Weighted average absolute difference	11.7	12.3	8.7	9.6
Weighted average direction difference	4.8	5.7	4.9	-4.8

- All countries bar the UK recorded a majority of assets sold above valuation in 2008, with French and Dutch values most clearly lagging the tail end of the boom.

- Weighted direction differences – the consistent tendency to under or overstate value – averaged close to 5% in all markets, but had only turned negative by end 2008 in the UK, reflecting the early start and pace of the turnaround.
- Across the board, weighted average absolute differences between valuation and sale price were lower in 2008 than in 2007, indicating an improvement in valuation accuracy, although not yet consistently back to 2001/02 levels.

*Weighted average absolute differences, % pa 1998 – 2008*



In summary, the 2009 Report revealed a small but consistent innate conservatism in valuations over the cycle compared to the prices achieved. This produced a smoothed estimate of the actual volatility of real estate if measured using valuation based indices.

### **3. UK Valuer Synchronisation Studies**

There remain many additional questions as to the implications of valuer contributions to an industry that relies upon valuation based indices and benchmarks. One such key question is whether there are systematic differences in valuation patterns reported by different valuation firms.

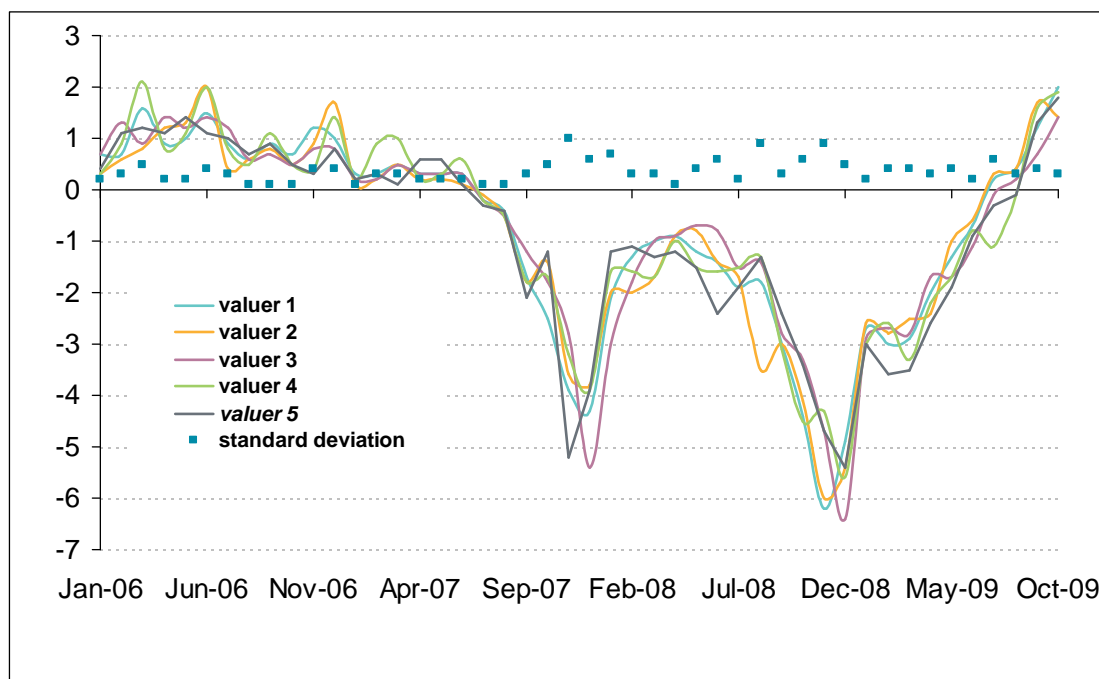
Two major reports have now been prepared, first in 2004 and again in 2008. IPD agreed with each of the major valuation contributors to the IPD UK Monthly Index to analyse the correlations between their results and the index itself. The valuation industry has become more concentrated and since 2007 the top five valuers in the IPD Monthly Index have covered more than 80% or more of the total sample.

The analyses have been focused upon:

- The degree of synchronisation between the capital growth, rental value growth and yield shift series comparing each firm with the overall index;
- Evidence of leads and lags between each valuer's appraisal movements and market averages and;
- The short-term timing of valuation movements – are changes clustered at certain times of the year.

As well as these major studies, the key month-on-month indicators of synchronisation are now tracked by IPD every month, and despite the heightened volatility of recent market conditions have demonstrated a robustly high level of sustained consistency.

*Monthly Capital Growth rates, % 2006 – 2009*



#### **4. Exploratory Development of Transaction Based Indices**

As the above research shows, indices and benchmarks based upon valuations are measurably less volatile than the changes in market prices suggested by price/value comparisons, where available. This begs the question: why not create an index based solely upon transactions?

For a number of years, the possibility of creating a transaction based index (TBI) has been researched by IPD – historically, the major obstacles have been a lack of transaction data and methodology limitations. However, given improvements in transaction index methods as well as the increasing amounts of transaction data in recent years, the construction of such a TBI now seems more feasible.

To pursue this further, over the last 12 months IPD's research division, in collaboration with the University of Aberdeen, has undertaken a feasibility study with the aim of producing a UK TBI. This was presented at the pre-conference briefing at last year's IPD / IPF Property Investment Conference in Brighton.

The research has had two distinct, though related, areas of work, which were as follows:

- Exploration of all the main TBI methods, applied to IPD transaction evidence drawn from both the UK Annual and Quarterly Index databases, i.e.
  - Hedonic modeling;
  - Repeat sales regression and;
  - Assessed value approach.
  
- Construction of a most robust annual historic series, back at least to the late 1980s, and for five years minimum on a quarterly basis. These will be limited to the simpler assessed value approach most recently tried with some success on US data.

The results of the work to date are encouraging. However, small sale samples and 'estimation noise' will prevent use of a TBI as a benchmark or as a traded index – applications that are highly sensitive to issues of reliability and continuity of production, which are both threatened if sale samples drop too low. On the other hand, a well

constructed TBI, supported by continuous valuation evidence, may have role as an additional barometer of market conditions at the most aggregated levels (i.e. all property and three sector). Plus, more fundamentally, it should provide an evidence-based estimate of price volatility, and so be of enormous potential use in risk modelling and asset allocation.

As a tool to measure turning points in the market, however, the results from the research into a TBI actually support the existing valuation-based indices and benchmarks. The evidence from the TBI is that movements upwards and downwards in prices occur in synchrony with movements in the valuation based indices.

## **5. UK Lease Duration and Income Security Studies**

A further key driver of valuation results, and thus the indices which are built upon those results, is the leasing regime prevalent in each national market. These leasing defined drivers of value have an additional impact on indices and benchmarks beyond those produced directly by changes in market comparable rental values and yields.

The 12<sup>th</sup> edition of IPD's Annual Lease Review again reports the results a continuous collaboration with the British Property Federation (BPF) aimed at identifying the long and short term movements in the terms which govern the financial relationship between landlord and tenant in the UK. It draws upon detailed evidence of 75,000 tenancies and encompasses a full analysis of lease lengths, break clauses, rent free periods and income profiles. The latest analysis incorporates the 8,995 new leases granted between January 2008 and March 2009 and the headline results were as follows:

- The research has for many years documented the apparently secular trend decline in effective lease lengths, with the average length of all new lettings falling from 6.2 years in 2007/08 to 5.9 years in 2008/09, measured on an equally-weighted basis and including the first break, where applicable. If licenses and short leases of four years or less are excluded, then the average length of new leases (again including break clauses) decreased from 8.3 to 7.9 years.

- The average length of all new leases weighted by rent (including break clauses) fell to 9.7 years in 2008/09. This is in-line with the contraction in income weighted lease lengths that has been seen since 1999 when the average lease length was 14.3 years. Lease lengths are now at their lowest point on record.
- 2008/09 saw an increase in the proportion of leases up to five years in length from 63% in 2007/08 to 66% in 2008/09. Although, 66% of new leases were less than five years in length, on a rent weighted basis they make up 38% of new leases. The longer leases make up a small proportion by number and a larger amount by rent. This suggests that tenants who occupy larger units tend to sign longer leases.
- The proportion of leases with break clauses increased in 2008/09 to 28.2% compared to 22.7% in 2007/08. The proportion of leases with break clauses increased on leases of all lengths but noticeably on the longer leases. The proportion of leases longer than 21 years in length with break clauses increased from 15.9% in 2007/08 to 26.0% in 2008/09.

These results are important for understanding index movements since valuation methods – in all markets, not just the UK – attempt some linking of comparable pricing with a capitalisation of anticipated incomes, and these are governed by the leasing regime that is in place.

## **6. Pan-European Investor Indices and Benchmarks**

The risks involved in varying the mix of valuation methods, styles or cultures within a single index or benchmark are amongst the most difficult to research because little if anything of this mix is recorded at the level of the individually valued asset. However, the issue is of considerable importance because the dangers increase with the scale and complexity of the index; IPD's highest profile products – the pan-European and global index – are at greatest risk.

The aim of these indices has been to improve market transparency beyond national markets. The pan-European index is compiled by taking the national index for each of

the 14 single state markets that IPD covers and creating a weighted composite European return – weighted for the estimated total market size rather than the size of the index Databank.

This raises a potential problem in that the total return on each individual market depends on the valuation practices prevalent in that market. For example, the differences between UK valuation standards and the Verkershwert valuations used in Germany are widely recognised, possibly contributing to a much more volatile index in the UK than in Germany.

Furthermore, valuers in the UK and Ireland won plaudits for marking down the values on properties very quickly, creating capital falls of -40.8% and -34.2% respectively in Euro terms. Other markets have not had values marked down so severely and it is very difficult to determine if this is down to market conditions or differences in valuation practices.

As a response to these results and related questions, IPD has created a multi-national dataset based exclusively on funds with a pan-European mandate. Assuming these funds predominantly use valuers from the countries in which they are based, the national return profiles can be interestingly compared with those of the broader national indices.

### *Growth to Pan-European Index and Multi-National Funds*

Capital Growth, %pa	2008		3 yrs to 2008	
	IPD Pan European Index	Multi National Funds	IPD Pan European Index	Multi National Funds
Austria	-1.5	-1.2	0.5	0.6
Belgium	-1.2	-0.3	1.7	2.5
Finland	-1.2	-4.3	2.1	
France	-6.0	-4.7	6.7	3.3
Germany	-1.4	-2.6	-1.6	-1.6
Italy	-3.3	-2.5	1.0	1.4
Netherlands	-1.7	-1.9	3.5	1.2
Poland	-2.4	-3.8	5.1	3.9
Portugal	-3.3	-5.9	2.6	5.1
Spain	-6.8	-11.3	3.8	0.7
Sweden	-20.8	-15.5	-1.6	-2.5
UK	-44.0	-31.1	-18.4	-11.4

Source: IPD Pan European Index and Multinational Databases

The table shows the headline capital returns for 12 European countries in the IPD pan-European Index compared to the multi-national fund database over 2008 and the three years to the end of 2008 measured in Euros. The figures highlighted in red signify the higher return of the two samples, in each market over each time period. There is no clear pattern, as to which dataset has seen the biggest mark down in valuations. Notably, Sweden and the UK which saw severe falls in capital values in the national index saw less severe falls in the multinational dataset.

## ***7. Index Methods for Non-Synchronised Valuation Regimes***

In the majority of property markets measured by IPD, portfolio valuations are done once a year at the year end. Some national regimes do not match this standard, portfolios are not all valued at the same time and asset valuations can be carried out at different points throughout the year.

Since this generates valuation evidence on some of the properties in the index throughout the year, the index has typically been published quarterly. Where properties had no valuations in the measurement period the capital value was held constant until the next valuation which has caused smoothing or underestimated capital movement. This has become particularly obvious in the recent sharp downturn. IPD have committed to improving the quality of these indices and therefore holding valuations constant is no longer acceptable.

IPD has researched the issue closely, consulted with advisory groups and carried out detailed investigation on how to improve the quality of these indices so as to reduce the smoothing of market movements. As a result, the following three methodological changes are being tested and will be put in place from the end of this year:

1. The index will only include current period valuations in the latest published figures, and will report market movements and returns only if there is a minimum of 20% valuation evidence – at each sector and all properties levels – as at the reporting date. This means that there will be no more held constant capital values in the latest reported results.



2. The index history will be revised to replace missing asset valuations by interpolating between two valuations. This will improve the time series of market movements showing peaks and troughs more clearly.
3. In the current period the index will be adjusted to reflect the sector mix of the whole index rather than that of just the assets with current valuations. This will offset any bias towards any particular sector with more valuations in any quarter.

Points 2 and 3 indicate that there will be some restatement of recent period returns and market movements as more valuation evidence becomes available in proceeding periods.

There is ultimately no substitute for having valuations on all properties in every quarter. Our research leads us to believe that the solution outlined above is the best interim solution given the information available. IPD will do all it can to encourage valuers in all markets to make the quarterly valuation of entire portfolios a realistic and affordable service to fund managers.

So far a successful beta test has been conducted on the Q2 Australian Index, and the new method has been reapplied for Q3, though with the need to suppress the results for the smallest sector (under the threshold 1 condition) and clients are being consulted on this issue. Full consultation is planned to run through to June 2010.

## **8. Conclusions**

This programme of research and development will, of course, never be complete. With 20 years of valuation accuracy studies and 12 years working on lease durations, these are clearly the sorts of studies which must be refreshed – as valuation, leasing and general market circumstances evolve and develop from year to year, cycle to cycle.

The fundamental requirement is, ultimately, for transparency. For an index to support fully and effectively the market whose performance it tracks, rocket science is not



required. Indices must be simply constructed, properly governed, easily understood by all users, and reported with their key inputs subject to regular and robust research.

Most important of all, however, is that those Indices fulfill the market tracking needs of the industry whose investments are being tracked. So as well as full transparency, a central requirement is that the Indices should be predicated upon broadly based industry consultation. The UK Index Consultative Group has commanded the respect of the industry, and been of immeasurable importance in guiding index development, for all of the 16 years of its operation.

At present, this group is being extended to encompass a global mandate, with representation from all of our national ICGs. These exist for most of the main markets (US, Germany, France, Netherlands, Sweden and Australia), and we are endeavoring to establish such groups in all the markets in which we support an Index and Benchmarking service. No doubt when they are all in place the volume of index-linked research will increase well beyond the scope outlined above.

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