

Index linked derivatives for property investors

Derivative markets are so called because they are derived from the asset, commodity or other direct market from which they are priced. This tautology is no less true in the case of real estate even though the pricing in this case has to be linked to an index rather than a liquid underlying asset market.

The UK indices have been traded synthetically to a far greater extent than those for any other property market since the re-emergence of a derivatives market at the back end of 2004. Thereafter the UK property market rose continuously to a peak value at around July of last year, and then collapsed at an unprecedented rate. This collapse was exclusively yield driven (rent levels have yet to start to fall), fuelled by a reversal of investor confidence. This reversal resulted in forced selling from, and the subsequent redemption closure of, several open ended funds, and more generally it led to a big reduction in turnover levels as the managers of long and medium term funds began to batten down the hatches against the storm of the sharpest cyclical downturn on record.

How is the property derivatives market responding?

After a relatively slow start in the first few months of 2005, there were some very significant large derivative trades undertaken by major institutions and property companies, including the Prudential and British Land. These participants took significant long/short positions on the IPD UK total return Index through over-the-counter contracts intermediated by major investment banks.

The pattern of activity began to change through the back end of 2005 and well into 2006. During this period many more participants entered the market and many more banks were granted licences by IPD to trade the UK indices. The deals quite rapidly increased in number and reduced in average lot size – from around £35m in the early months of 2005 down to closer to £10m at the back end of 2007. The accumulated notional value of all trading to date on the UK indices is now up to £12bn, with trading on the French and German IPD indices pushing the total to £13.3bn. In addition to this activity there have been a small number of test trades on four other IPD indices – Italian, Swiss, Japanese and Australian – as well as around \$500m notional traded on the NCREIF Index in the USA.

There is also a much smaller but quite active market trading the Halifax House Price Index in the UK and equivalent residential indices in the USA. Total notional value is, however, low and not documented.

Although, as 10% was wiped off the value of the commercial property investment market in the UK in the second half of last year, and as investment managers reacted by reducing their activity levels in the direct market, no similar trend was observed in the derivatives market. Since the end of June last year a total of 310 separate trades were conducted, to a total value of just over £3.3bn. Adding these numbers to the volumes accumulated

in earlier quarters and across all of the IPD indices, there have to date been just over 1,000 separate trades conducted, representing the cumulative total volume of £13.3bn noted above.

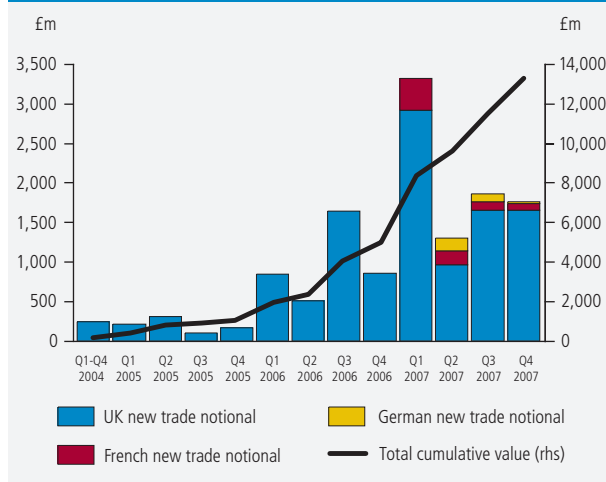
How does the property derivatives market work and what is it used for?

The real estate index linked derivatives market which has emerged in London over the past three years still takes an essentially simple form. Contracts are traded 'over the counter' and thus there is (in Europe at least) no exchange traded derivative market on a real estate index. These OTC contracts all take the form of deals intermediated by investment banks, each of which has been granted a licence to trade the indices by IPD (now 23 in total). This licence is free at the outset and attracts a licence payment to IPD only when the market becomes active and then at a rate which is linked to the level of business undertaken by the banks.



Dr Ian Cullen,
Head of
Systems and
Information
Standards,
IPD

Figure 1: The growing volume of derivative trading on IPD Indices



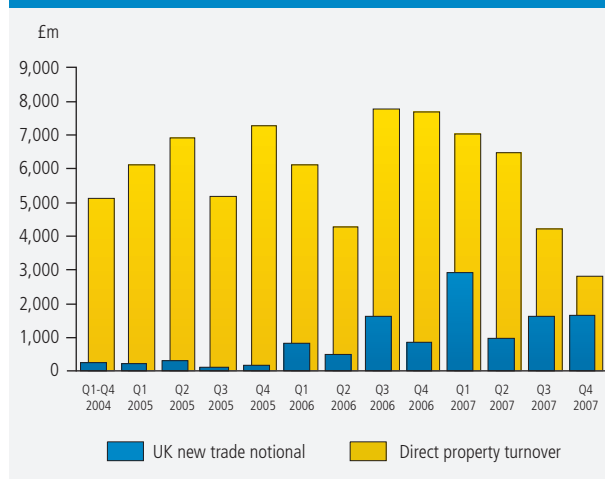
In addition structured products have been constructed for this market, including Barclay's Property Index Certificates, which were amongst the earliest offerings of a synthetic route to index linked investment. These are all typically cash settled in advance, and take the form of a bond linked to an underlying total return swap. The swap contract thus forms the basis of virtually all activity in the property derivatives market to date.

In its simplest form a contract is constructed by a bank which matches long and short positions taken by two counterparties with opposing views and requirements. The counterparty with a long position receives the IPD total return over the agreed period, and pays to the other counterparty an amount linked to the inter-bank lending rate (LIBOR), plus or minus a spread. There is no exchange of capital up front (unless there is a structured product overlaid upon the swap) and so positions are simply adjusted quarterly during the lifetime of the contract in line with index movements.

More than 90% of all of the activity to date has been linked to the IPD all property total return index. This suggests that the overwhelming pattern of usage so far has been either for broad medium to short term asset allocation (in favour of or against real estate) or for asset class hedging of risk. Only a relatively small number of sector or segment trades have been conducted and in the very recent past the volume of activity at sector level has declined virtually to nothing.

Will the market continue to grow?

Figure 2: The converging trends of direct and derivative trading volumes



There can be no guarantee of the long term future of synthetic trading on real estate indices. However, the market seems very unlikely to continue to tick over at or below current quarterly volumes which are in the region of £1.5bn. Compared with mature derivatives markets this is a very low level of activity and one which seems likely to be unsustainable in the long run. The market will either grow to a level which exceeds by some multiple the volume of activity in the direct market, or it will disappear as current contracts unwind and new ones are not signed.

A casual observation of the trends of the last few quarters, however, suggests that there is at least a possibility of a cross over in activity levels between the direct and synthetic markets in the near future. IPD recorded turnover levels in the direct market have been falling continuously since Q4 2006. Over the same period, whilst the activity in the derivatives market has been erratic, it has nonetheless shown no signs of decline, and if these two trends continue, a cross over seems likely sometime this year.

How might the derivative market develop in the near future?

It is hard to predict the way in which such a novel investment technology will be assimilated further into the real estate investment sector. However, it does seem probable that growth in liquidity in the OTC market will spread soon to the sector level. This will permit the use of derivatives for the short and

medium term management of portfolio structure and risk, and thus encourage more real estate investors into the market. It will also permit more precise and focused liquidity management for those real estate investors who wish to use derivatives to help cope with the sometimes long drawn out process of identifying and acquiring direct assets. There has also been some very modest early interest shown in trading options on IPD indices, and it seems likely that if the current swap market continues to grow then an options market will develop in parallel.

Will changes in the derivatives market feed back into the direct market?

No direct asset market remains unaffected by a highly liquid synthetic market linked to its performance. Short term impacts may well include a quicker responsiveness on the part of the direct market to circumstantial changes, and possibly also to higher short term volatility as the sentiment which instantaneously drives the synthetic market feeds back to the pricing of the direct market.

Such short term impacts upon the direct market will clearly not represent the end of the story. In the medium and long term, if the market deepens and becomes an integral feature of the investment infrastructure available to the real estate sector, then we should anticipate many and possibly more profound changes. The conversion of real estate investors over the past 10 or 15 years to the use of indirect means of accessing property investment (through open ended funds, listed vehicles and other close ended structures) has had very major impacts upon the shape of the market. Now small pension funds with no more than £20 or £30m to invest in real estate can have shares in some of the largest lot size assets in the land. There is no reason to believe that derivatives will have any lesser impact upon the shapes of portfolios and the way in which the market operates over the next 10 to 15 years.

Where may derivatives take the direct property market in the near future?

The derivatives market that has emerged to date may have already helped to de-couple the UK real estate investment market from many of the slower moving and less transparent markets in Europe and further afield. It is tempting to conclude that the pace of the reversal in the UK market observed over the past 6-9 months has had something to do with the availability on a daily basis of prices of 1-, 2- and 3-year total return contracts flowing from banks and derivative brokers. A deep and liquid derivatives market may also facilitate a quicker recovery in the UK (perhaps after a pricing overshoot) through a reversal of the above mentioned mechanisms.

However, the role of a derivatives market should not be overstated. It cannot change the underlying fundamentals which drive the long cyclical structure within any direct market. So if current investor uncertainty translates now into consumer and employer uncertainty occupier markets will be impacted and the cyclical downswing will be prolonged. Derivative pricing and activity will then reflect rather than cause the trends.