



# LAUNCH OF THE IPF PAPER: ALTERNATIVE USES FOR PROPERTY DERIVATIVES

## **Chair:**

Jon Masters, Arca Property Risk Management and Chairman, Property Derivatives Interest Group (PDIG)

## **Speaker:**

Bill Bartram, Independent Risk Management Solutions Ltd and lead author of the Paper

## **Panellists:**

Nick Fisher, Legal & General Investment Management  
Stuart Heath, Eurex Frankfurt AG



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# Alternative Uses for Property Derivatives

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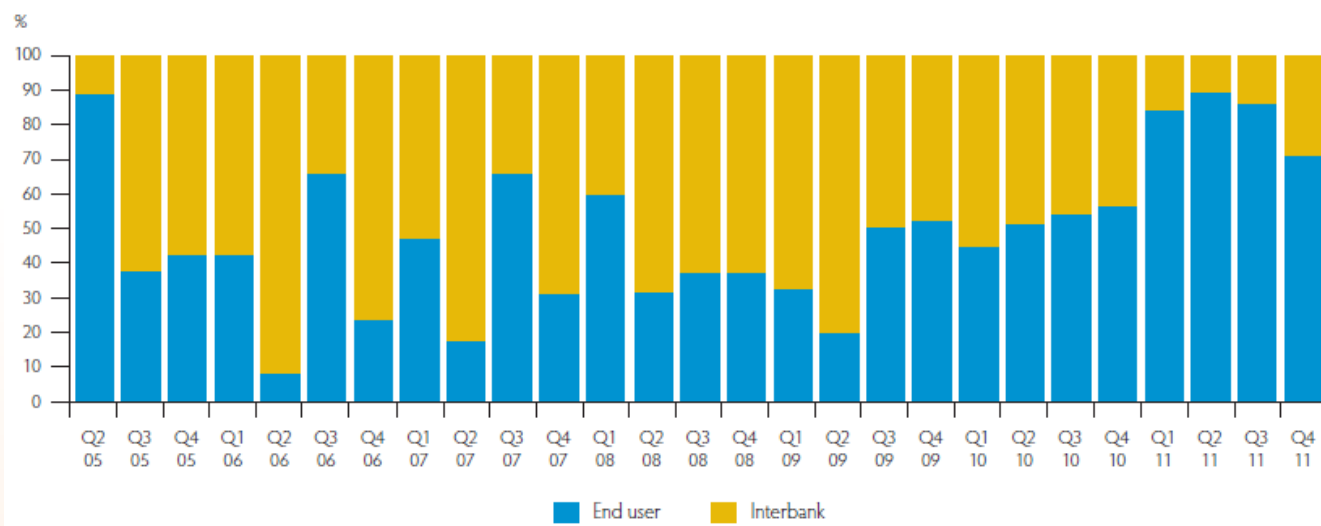
## Property Derivatives – Where are we today?

- Available on/off since 1991 (London FOX)
  - Versus IPD since 2004 (British Land & Prudential)
    - the “Total Return Swap”
  - Volumes reached their peak in 2008
    - Numbers heavily inflated due to interbank trading
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## Property Derivatives – Where are we today?

Comparison of Interbank and end-user trading 2005 to end-2011



- Today volumes are much lower but there is much more end user involvement



More price efficient market



## Property Derivatives – The Paper

Includes;

- Synthetic vs. physical real estate for yield
  - Alpha return / market risk management
  - Beta returns
  - Enterprise risk management
  - Property futures for defined contribution pension schemes
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## Synthetic vs. physical for yield

- Since GFC real estate values have rebounded with a vengeance
- Pricing today in many sectors higher than 2007/08
- Why?

CRE is not the answer to life, the universe and everything!

- The answer is in fact – Yield!
  - CRE offers an attractive risk-adjusted yield relative to fixed income
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## Synthetic vs. physical for yield

- But CRE is not fixed income!
    - No tenant = No income
  - By contrast CRE is;
    - illiquid
    - unpredictable
    - expensive to buy
    - expensive to own
    - prone to catastrophic shifts in values
  - If yield is your objective, is there a better way?
-



## Synthetic vs. physical for yield

### Case Study

“We propose to invest in a well-established industrial park inside the M25 with passing rent of £1m per annum. Offers are sought at ca. £18.8m, which would reflect an initial yield of 5% (allowing for standard purchasers’ costs). We believe that the market can support income growth of 2% per annum. The property would therefore provide an unleveraged IRR of 6.02% over seven years.”

- IRR can be increased from 6.02% to 7.19% through use of property futures
    - Lower costs = greater exposure
-



## Synthetic vs. physical for yield

### Physical Return

- 6.02% includes purchase and sale costs
- Adding asset management fees of 0.85% reduces IRR to 5.25%

### Synthetic Return

- Depositing cash at 7 year gilt rate (1.40%) increases IRR to 8.34%
  - Breakeven for IRR (5.25%) if contracts priced at 103 or below
-



## Synthetic vs. physical for yield

Optimal pricing will be different for every investor;

Contract Price	Rf Rate (7yr)	IRR
104	1.40%	4.36%
104	1.80%	4.75%
103	1.40%	5.35%
103	1.80%	5.75%
102	1.40%	6.35%
102	1.80%	6.75%

Where do  
you draw  
the line?



## Focus on Beta

- Beta is the oft maligned cousin of Alpha
  - Where Alpha is 'sexy', Beta is just 'average'
- Alpha requires property and is therefore expensive
  - Alpha can go both ways; excess returns are not always positive!

Question?

“Is Alpha what you really want, or do you just want market exposure?”

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## Focus on Beta

In the case of a new allocation to CRE an investor/fund manager has four options;

Sector	Alpha or Beta
Physical Property	"Alpha or bust"
Listed Vehicles	Alpha relative to peers
Unlisted Funds	Explicitly Alpha
Property Futures	Pure Beta

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## Is Beta enough?

Modern Portfolio Theory teaches us that through diversification;

$$ER_p \rightarrow ER_m$$

If this is true, significant cost savings could be made for large funds by buying a laddered portfolio of bonds and using them as collateral for a portfolio of property futures

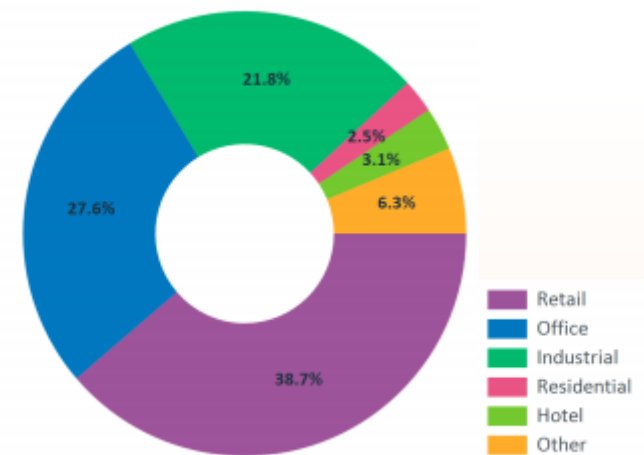
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## Enhanced Beta

- Widely acknowledged danger of over-exposure to certain sectors through index composition in ETFs (tracker funds).
- Property futures allow you to change your Beta by buying or selling exposure in different sector and sub-sector contracts

PROPERTY SECTOR WEIGHTS



Source: MSCI (December 2017)



## Property Futures for DC Pension Schemes

- DC Pension Schemes require daily pricing
  - Solution: Hybrid funds
    - 70% physical & 30% REITs
    - Price of physical is inferred from value change in REIT
  - Then something goes wrong ....
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# Property Futures for DC Pension Schemes

Comparison of REIT and FTSE 350 share price indices before and after the Brexit vote on 23 June 2016





## Property Futures for DC Pension Schemes

- REITS exhibit risk in relation to real estate, but also risk in relation to equity
  - Possible reasons for post-Brexit shift include;
    - Uncertainty about occupier market
    - Relative value of foreign earnings
    - Mad dash for liquidity
  - The real reason is likely to be a combination of all of the above
  - Regardless, prices inferred from post-Brexit REIT values were not representative of changes in the value of physical property
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## Property Futures for DC Pension Schemes

- A fully collateralised property futures contract offers liquidity on-demand
  - End of day settlement pricing is available on Eurex
  - Property futures reference IPD only
    - Immune from equity specific risk
  - Adding property futures to hybrid funds increases the amount of data available for inferring value of physical property
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# Thank you for listening!

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# Q&A

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### **Continue the conversation**



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