

History of Commercial Real Estate Derivatives

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History of Derivatives

- ▶ The history of derivatives remains largely unexplored because there are few historical records of derivative transactions.

Why?

1. Derivatives left no paper trail because they are private agreements that have been traded over-the-counter (OTC) for most of their history.
2. Conceptually, forward contracts - contracts for differences (between delivery price and spot price) - have no market value at initiation. So why record a zero value?
3. Banks were at the forefront of derivative trading during the 18th and 19th centuries. Information on the derivative dealings of banks is scarce because they kept operations secret and their customers valued privacy.

∴ There are no official statistics available on derivatives or derivatives trading.

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We must rely on other sources that provide evidence that derivatives were used including

- ▶ laws and regulations
- ▶ court decisions
- ▶ charters and business conditions of exchanges and trading companies
- ▶ surviving derivative contracts

Derivative contracts emerged as soon as humans were able to make credible promises.

- ▶ it is essential for a credible promise that it is somehow recorded
- ▶ writing was invented in Mesopotamia in 4th millenium BCE and satisfied this commercial need
- ▶ contracts for future delivery emerged soon thereafter

These contracts enhanced the efficiency of agricultural markets in the ancient world and were an important prerequisite for long distance trade.

Unfortunately, there is no evidence of the widespread use of property derivatives until recently.

- ▶ Perhaps because until recently real estate ownership was concentrated in the hands of a few wealthy individuals and later the Church and the state.

Recent History of Commercial Real Estate Derivatives

- ▶ Focus on commercial and not residential real estate derivatives.
- ▶ Concentrate on the BC period (BC \equiv Before financial Crisis).

UK and Continental Europe

Off to a bad start:

- ▶ FOX
 - ▶ In May 1991 London Futures and Options Exchange (FOX) launched trading in commercial property futures based on capital component of IPD and IPD commercial rent index.
 - ▶ By October 1991 trading in contracts is suspended.
- ▶ REIM
 - ▶ This OTC commercial property futures market failed in 1998.

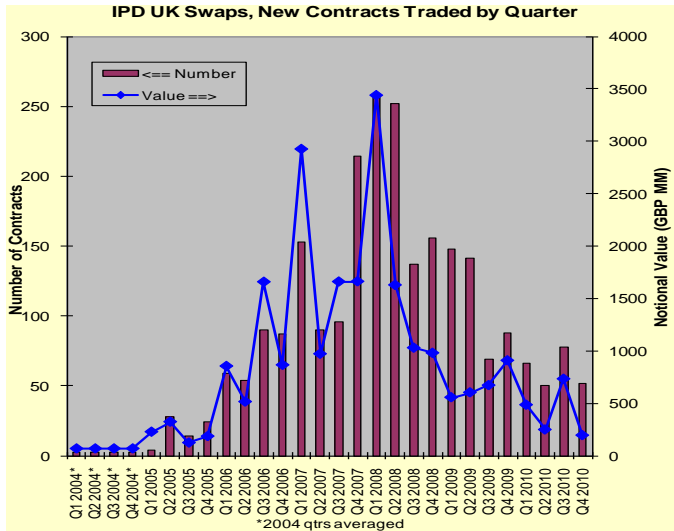
But a modest beginning:

- ▶ Barclays
 - ▶ Barclays' investment bank successfully introduced:
 - ▶ Property Index Certificates (PICs) MTNs linked to total yield of IPD in 1994.
 - ▶ Futures contracts - Property Index Forwards (PIFs) - on the capital component of IPD in 1996.
 - ▶ Property Index Notes (PINs) paying current yield of IPD and redemption value linked to capital component of IPD in 1999.

Significant development:

- ▶ Regulatory changes in the UK gave birth to a modern property derivatives market:
 - ▶ In 2002 FSA allowed life insurance companies (which own the majority of invested real estate) to include real estate swaps and forwards as admissible assets in the computing of their solvency ratios.
 - ▶ In 2004 Inland Revenue standardized the taxation of property derivatives and allowed losses through the use of derivatives to be offset against capital gains.
- ▶ By 2004 twenty-one investment banks acquired licenses to use IPD indices to offer property derivatives in UK.
- ▶ Markets for credit derivatives linked to IPD indices were subsequently exported to:
 - ▶ France in 2006,
 - ▶ Germany (1st quarter) and Switzerland (3rd quarter) of 2007,
 - ▶ Australia (2nd quarter) and Japan (3rd quarter) of 2007.

- ▶ IPD swaps market grew rapidly in UK after 2004.
 - ▶ Grew to 265 contracts (£3.5 billion notional) written in 08Q1.
- ▶ Then became victim of the financial crisis.



In contrast to UK, very little history of commercial property derivatives in US during BC period:

- ▶ First property derivatives trade did not occur until April 2005 through Credit Suisse's exclusive two-year agreement with NCREIF to use NCREIF Property Index (NPI).
 - ▶ in 2005 two to three trades;
 - ▶ in 2006 "a few more" trades;
 - ▶ Credit Suisse license expires later in 2006.
- ▶ In October 2007 Chicago Mercantile Exchange (CME) launched trading in futures and options on the S&P/Global Real Analytics commercial real estate indexes (SPCREX).
 - ▶ ceased production of SPCREX by December 2008.

Why was UK property derivatives market more successful?

- ▶ UK commercial real estate market is less geographically fragmented which contributes to more effective hedging and less basis risk.
 - ▶ How does one hedge industrial warehouse risk in Dallas TX?
- ▶ Widespread acceptance of a single index (IPD) that covers a majority of UK property market.
 - ▶ Not the case in US.
- ▶ UK property funds (end users) played a significant role in development of UK property derivatives market:
 - ▶ Drove regulatory and accounting changes;
 - ▶ Their demand for property derivatives has been a key driver of market's development.
 - ▶ By contrast, portfolio managers and pension funds in US did not actively seek out derivative products. More education?
- ▶ Property transaction costs higher in UK making property derivatives more attractive.