



# Liquidity in Commercial Property Markets







Summary of Research Findings

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#### 1. Introduction

In examining the qualities of real estate as an investment asset, "illiquidity" is a much cited disadvantage. Institutional, professional and private investors express concern at the lack of liquidity or require higher returns in compensation. Much of the justification for new property investment vehicles - such as REITs – comes from their ability to enhance liquidity. Surprisingly, there has been very little research into such a key concept.

This brief report summarises key findings from a research project on liquidity in commercial real estate markets, funded by the joint Research programme of the IPF and IPF Education Trust. The Research Team, drawn from three leading universities and from IPD, was supported by a strong IPF steering group.

The broad aims of the project were to provide an overview of research on liquidity in real estate markets and to provide preliminary empirical analysis of liquidity and turnover in property and other capital markets. The project was intended to act as a foundation for further research studies on property liquidity in the future.

We examined four aspects of liquidity:

- What is liquidity; how do concepts of liquidity from other financial markets fit commercial real estate?
- What evidence is there on the relative liquidity of different asset types?
- How long does it take to sell a property investment and what causes delay?
- How does liquidity affect the riskiness of investing in real estate?

We conducted a literature review , analysed property transactions and the sales process and built statistical models. The main findings are set out below.

#### 2. What is Liquidity?

Most people in property have an "intuitive" understanding of liquidity. However, examination shows that usage varies. Liquidity is a *complex, multi-dimensional concept*, which captures much more than the time taken to execute a trade. Liquidity also includes:

- The costs, direct and indirect, of trading;
- Risk and uncertainty concerning the timing of the sale;
- Risk and uncertainty concerning the achieved sale price;
- Trading volume and frequency; and
- The price impacts of the act of sale and purchase.

The importance of these dimensions of liquidity will vary across asset classes and, within property, by type of building, sector and location. Importance will also vary according to market conditions. It is, thus, not possible to have a single, portmanteau definition of liquidity.

From bond and equity market literature, the emphasis is on pricing impacts of trading. Five main aspects of liquidity are used to characterise markets: the cost of liquidating a portfolio quickly; the ability to sell without affecting prices; the ability of prices to recover from shocks; the costs of selling now rather than waiting; and transaction costs - the direct and indirect costs of trading.

These apply largely to public traded markets where depth and the presence of market makers ensure that adjustment to supply and demand occur through the *price mechanism*. They are relevant to investment property nonetheless.

Property's high transaction costs drive longer holding periods (which, in turn may lead to inefficient portfolio allocations). Given thin trading, a fund attempting to sell out of property may suffer losses due to forced sale values. Large investors shifting their property weightings may influence prices.

Property prices are sticky and change slowly. A major difference in direct (private) property markets, however, is that adjustments to changes in supply and demand occur as much through transactions *volume* and *time* to trade as through shifts in values and prices.

A key issue in liquidity studies is whether there is a *liquidity premium* – that is, whether or not investors are compensated for the costs and uncertainties of trading. Evidence for stocks suggests that there may be a return premium for shares that are *systematically* more illiquid and when markets are particularly illiquid.

#### 3. Transactions Activity

The rates of sales and purchases provide invaluable information on the relative liquidity of different assets and different market conditions. There is no single ideal database for analysing commercial property transactions. The research used data from the Inland Revenue, ONS, IPD, ARAS and Property Data to analyse UK direct market activity. We also examined activity in indirect property markets and in other countries.

Activity rates in the commercial, investment grade market are considerably higher than for smaller private deals and in the residential markets. Inland Revenue figures suggest that around 5% of the non-residential stock turned over in 2002. Institutional turnover was around 12-15% suggesting a median holding period of around six to seven years.

Activity levels are cyclical but have been trending upwards from the early 1990s at around 3% per annum (see Figure 1). Much of the variation in activity is explained by stock market yields and property market returns. Surprisingly, it is hard to see a significant impact from Stamp Duty increases – although this may be masked by the increased use of special purpose vehicles, in part a response to Stamp Duty changes.

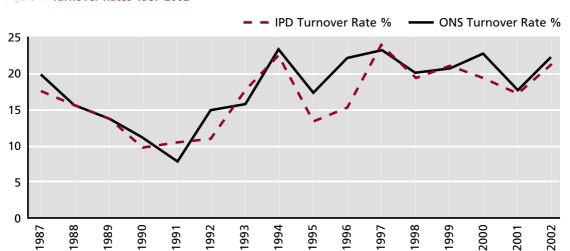


Figure 1: Turnover Rates 1987-2002

Activity varies by lot size, by type of property and by geography. Many of the variations would be expected: high value property trades less frequently and lower lot sizes (standard shops, smaller offices) are more liquid. There are surprises, however. In particular, Central London offices trade less frequently than other segments. The total volume of activity is high – providing transparency and comparable information – but the rate of sale is lower than in regional markets.

UK commercial property trades more frequently than property in other countries in Europe – in 2002, the transaction rate was double that found in France and the Netherlands. In indirect markets, UK property companies show greater liquidity than US REITs or Australian Listed Property Trusts – an interesting finding given the prospects for a UK REIT structure. Since these tax transparent vehicles are aimed at retail investors, buy and hold strategies may be more common. For similar reasons, Limited Partnerships and PUT units trade less often than direct property holdings.

#### 4. Time on the Market

The ability to enter and exit the property market depends on how long it takes to buy or sell. In the research, we examined the sales process through three case studies – a major property company, and two institutional investors, a life insurer and a pension fund, both with large property portfolios. Interviews were used to examine the sales process, then around 200 sales records were used to estimate typical times on the market.

All three funds applied a pre-sales filtering process. Properties that had a high risk of failure to sell were not brought to market. Once a decision to sell had been reached, most finally sold: there were few abortive sales. However, many factors could delay the sale. These included solvable problems such as tenant disputes, imminent rent reviews and lease terminations and unexpected events – tenant insolvency or default for example.

Most delays occurred at the due diligence stage. Factors included discovery of inherent problems, changes in market conditions or shifts in the purchaser's intentions. It was felt that use of debt by the purchaser increased the likelihood of delays. Properties that were "ready for sale" were less likely to be affected by delays, but there was a cost in maintaining all stock in such a state. It was suggested that periodic valuations might not always fully reflect the true saleable condition of the property. This, in turn, could cause delay if the offer price was below the prior valuation.

On average, the average time from formal marketing to completion was nearly ten months. This figure is misleading as the distribution of sales is heavily skewed, with a small number of sales taking a very long time. The median time to sale, at 190 days, is a more representative figure. That still represents six months to sell the typical property from the funds examined. The longest stage is the period from initiation to heads of terms (median 88 days). Due diligence averaged 62 days while the typical time between exchange and completion was 19 days. These averages hide considerable variation in time on the market.

50 40 30 20 10 0 550 550 750 350 950 250 350 450 20 20

Figure 2: Time to Sale, Case Study Funds

The sales process, then, is lengthy and complex. Although many properties sell readily and (comparatively) swiftly, unexpected "shocks" can cause major delays both before and after heads of terms. Streamlining seems to have reduced the final settlement period somewhat.

#### 5. Liquidity and Risk

The length of the sale process and uncertainty as to the timing of sale adds an extra layer of risk for an investor contemplating a property acquisition. This risk in entering the market – the ex ante risk – will be larger than backward looking risk measures reported by IPD and others. Valuation-based returns do not consider possible delays and losses in realising capital value, while the sale data is known with certainty for transaction-based returns.

It is possible to model this additional risk facing the new investor. To do this, we need information on the distribution of times to sale, data on the volatility of property values and the expected holding period of the investor. The additional risk factor will depend on these three variables:

- The shorter the holding period, the greater the additional risk;
- The more volatile are asset returns, the greater the additional risk;
- The longer the time to sale, the greater the additional risk.

For highly liquid public-traded assets, where time to sale is very short, the additional risk is trivial. For an illiquid asset with a long holding period and potentially lengthy time to sale, the extra risk factor may be large.

Using the time on market data from the case studies and IPD market volatility, an investor with an expected holding period of seven years and an asset with an expected time to sale of six months faces a risk factor of 1.38. Ex ante risk is 38% above the conventional reported measure. For a five year holding period and eight months to sale, the risk factor rises to 1.98 – ex ante risk is doubled. For longer holding periods and easily sold properties, the additional risk is minor.

These preliminary findings are important in understanding the nature of risk – particularly in the context of finite life private equity vehicles. The research shows that the additional risk factors significantly reduce as an investor diversifies by building a larger portfolio.

#### 6. An Agenda for the Future

The IPF Research Study was preliminary in nature and intended to act as a springboard for future work. In order to improve our understanding of liquidity, a number of practical tasks could be pursued:

- Regular transaction reporting by the major data providers;
- Improved data on the size of the investible market;
- Improved data on activity levels in indirect property vehicles;
- Collection of data on the time taken to buy and sell property.

This would greatly improve the data and aid decision-makers and analysts. It would also enable more focused research into commercial property market liquidity. Possible future research questions include:

- Can we explain variations in transaction activity?
- Are certain types of property more likely to be traded? If so, why?
- How do market structures and attitudes influence the sales process?
- What are investor expectations about holding periods and risk?
- What are the costs and penalties associated with illiquidity?
- Is there a property risk premium for illiquidity?

Some of these tasks are relatively easily accomplished. Others require greater industry cooperation, development of improved datasets or lengthy, resource-intensive research. We hope – and believe – that the IPF Liquidity Study will form an important foundation for this developing research agenda.

Full results of the Liquidity in Commercial Property Markets project are set out in five working papers:

- WP1: Defining Liquidity in Property
- WP2: Deconstructing the Transaction Process
- WP3: The Analysis of Transactions Evidence
- WP4: Liquidity Risk and Real Estate
- WP5: Liquidity Findings and Recommendations

The five working papers are available from IPF, 3 Cadogan Gate, London SWIX 0AS, (ipfoffice@ipf.org.uk, 020 7334 3799) price £150. Alternatively only a copy of WP5 is available, price £50.

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The IPF congratulates the Research Team on an excellent project that lays the foundation for an ongoing research programme into liquidity in commercial property markets.

The IPF will commission further research into this important area. This report is the start of a structured research programme to give a deeper understanding of property liquidity and the implications for property as an asset class.

The IPF invite comments on the findings and the recommendations for future research. Please address comments or suggestions to: Charles Follows, Research Director, IPF 3 Cadogan Gate, London SWIX 0AS **Email:** cfollows@ipf.org.uk, **Tel:** 020 7695 1649

#### The Liquidity Research Team:

Dr Shaun Bond (University of Cambridge)
Mark Callender (Investment Property Databank Ltd.)
Prof Neil Crosby (University of Reading Business School)
Soosung Hwang (Cass Business School, City University)
Prof Tony Key (Cass Business School, City University)
Prof Colin Lizieri (U of Reading Business School)
Patrick McAllister (U of Reading Business School)
Prof George Matysiak (U of Reading Business School)
Prof Charles Ward (U of Reading Business School)

#### The IPF Steering Group:

Stephen Palmer (Seven Dials Consulting)
Richard Barkham (Grosvenor)
Charles Follows (IPF)
Paul McNamara (Prudential PIM)
Stuart Morley (GVA Grimley)
Francis Salway (Land Securities)

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