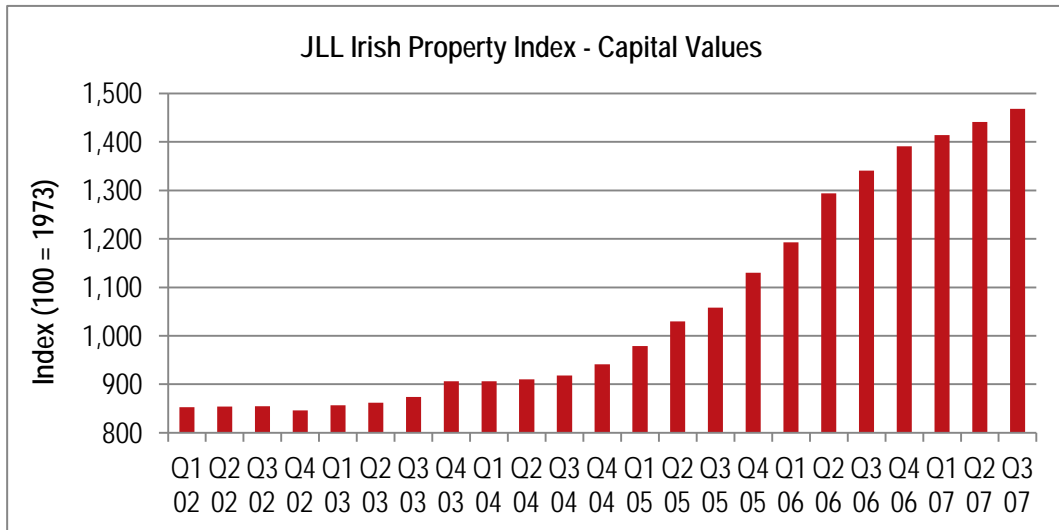


Issues relating to the nature and functioning of the commercial real estate market in the period prior to 2008 in the context of the Banking Crisis in Ireland

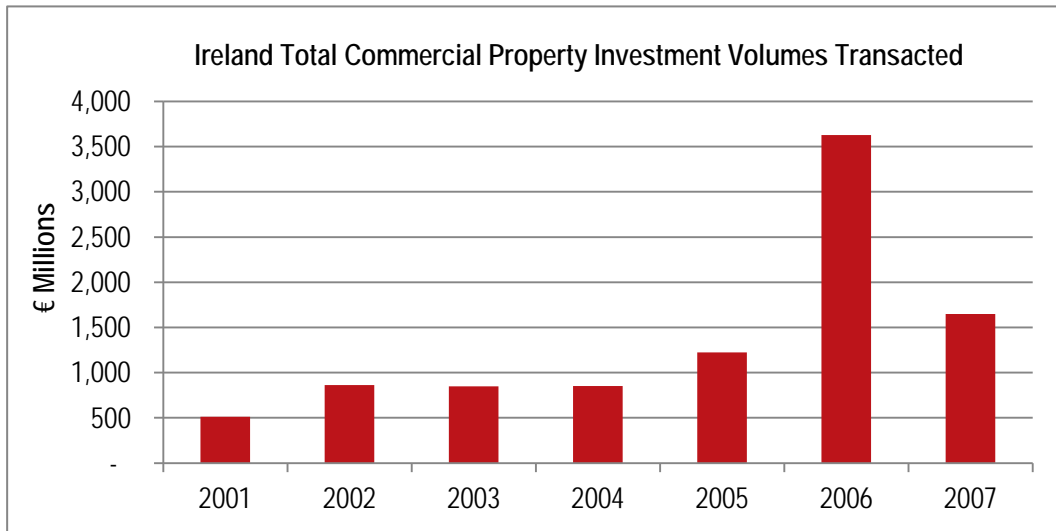
The size and nature of the real estate market in Ireland

In the period prior to 2008, the commercial real estate market grew strongly, with increasing levels of purchasing, leasing and construction activity. Ireland's economy was performing well, with GDP and employment growth driving the expansion.

This in turn was supporting the property market, with real strength in occupier and investor demand. This demand was driving activity levels and increases in values. Capital values of Irish commercial property increased by 72% in the 5 years up to 30th September 2007, which we define as the peak of the market. Property yields were at record levels, which was a reflection of the strong investor demand and the availability of significant amounts of debt.



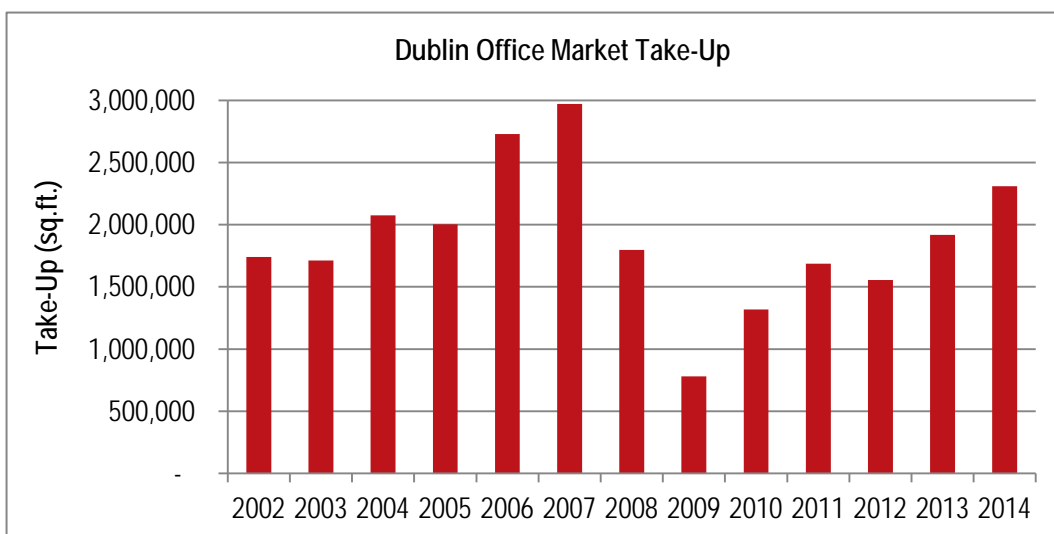
Between 2004 and 2008 almost €8 billion worth of commercial investment property was sold in Ireland. 2006 was the peak year for investment volumes, with €3.6 billion traded in 12 months. For context, this compares to the previous record of €1.2 billion in 2005 and an average of €768 million per annum between 2001 and 2004. In addition to domestic spending, there was also considerable Irish investment activity overseas, particularly in the UK and continental Europe.



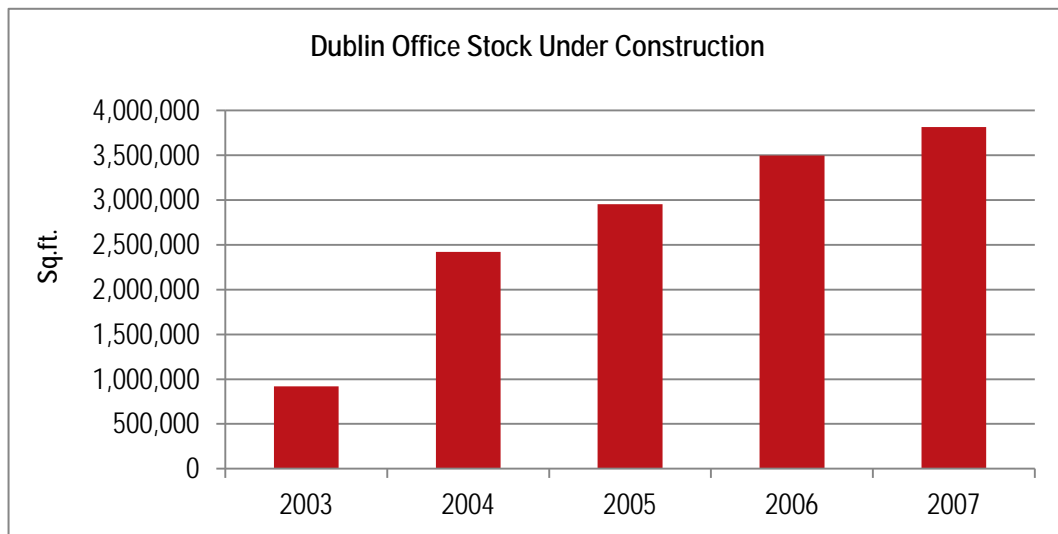
All sectors of the market were active, with demand outstripping supply. Demand was not solely focused on prime space, with secondary and tertiary quality assets also trading. There was evidence of demand across all sizes categories and activity was taking place in all locations across the country.

The investment market was characterised by large volumes of money seeking product. Demand was strong, with the majority of transactions involving domestic purchasers. After a period where pricing of quality investments intensified, there was a notable shift in 2005 / 2006 in attitudes towards opportunities. Investors were more aggressively seeking to move up the risk curve and undertake either development in their own right, or in conjunction with developers as joint ventures.

The letting market was also very active with strong occupier activity across all sectors. In the office market, take-up averaged 2.3 million sq.ft. per annum between 2004 and 2008, totalling 11.6 million sq.ft. over the 5 years. This is significantly higher than the 8.8 million sq.ft. in the last 5 years (2010 – 2014). 2007 remains the record year for take-up in Dublin. Demand was focused on the core, city centre locations, accounting for approximately 60% of take-up per annum. Traditional banking, financial and professional service companies were driving demand during this period, with a new wave of the technology sector just starting to take off.



In response to strong demand from occupiers, office construction was extensive, with 8.8 million sq.ft. constructed between 2004 and 2008. This represented 33% of the total stock levels at the end of 2003 (26.7 million sq.ft.).

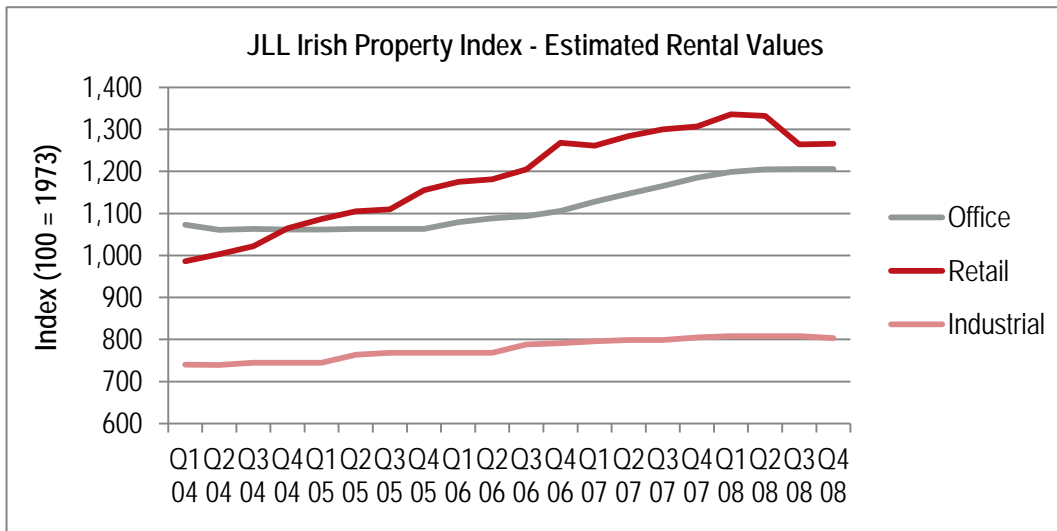


The retail market was also performing strongly, with improvements in the economy boosting consumer sentiment and spending. A number of international chains and domestic retailers were entering the market and trading well. As demand continued, vacancy in core schemes and high streets was tightening, with limited choice for occupiers. The market responded to this with a surge in retail development. Between 2004 and 2008, total shopping centre stock in Ireland went from 13.7 million sq.ft. to 22.4 million sq.ft. (+8.7 million sq.ft.). A lot of this was in provincial locations.

The industrial sector performed relatively steadily in comparison to other sectors. Activity was subdued in 2004 and 2005, but in 2006, there was an uplift in industrial transactions and occupier take-up to record levels of 2.9 million sq.ft.. Industrial land values in the sector saw significant growth due to a scarcity of supply in certain areas. Demand from occupiers was focused in the south west of the city and the north west near the airport. Occupiers were predominantly general distribution companies.

The values of commercial property adjusted to this strong demand with significant increases over a short period of time. Rents experienced similar growth, with prime office rents increasing from €40 to €60 per sq.ft. (+50%) and retail rents increasing even more significantly from €465 per sq.ft. to €1,000 per sq.ft. (+115%) between 2004 and 2007. Industrial also saw rental growth but not at the same pace as offices and retail, with an increase from €10.20 per sq.ft. to €11.50 per sq.ft. (+13%) during the same period. For each of these sectors, rents during 2006 / 2007 are still the highest level ever achieved in the market.

The table below shows how Estimated Rental Values (ERV) from the Jones Lang LaSalle Irish Property Index changed between 2004 and 2008:



Development land also saw a significant increase in activity. The land market always responds to occupier markets, and as activity and pricing grew significantly across all sectors, this was also mirrored in development land. Between 2004 and 2006, the number of deals in Ireland increased significantly. The market was characterised by strong demand from developers and investors, who were chasing product and competitively bidding for all assets that came onto the market. In 2006, the highest sale price achieved was €155 million per acre for a development site. This compares to current top values of approximately €35 million - €37 million per acre in Q1 2015.

There was a push for higher densities by the planning authorities, but in the absence of clear guidelines, many developers factored very ambitious densities into land pricing. The underlying strength of the residential market also contributed significantly to the high levels of land value that pertained.

In general terms, the clients and types of services provided by JLL in the context of the commercial real estate market in Ireland

Jones Lang LaSalle is a NYSE-listed financial and professional services firm that specialises in commercial real estate services and investment management. We have a full service offering with expertise across all sectors and processes involved in buying, selling, and managing real estate. This involves investment sales and acquisition, leasing activity (landlord and tenant), property and asset management, planning and building services, valuation advisory, land, and research.

Our main area of focus is commercial property across the following sectors: office, retail, industrial, land and hotels. We have undertaken some residential work for clients, but this is not a core specialism.

Our client base varies significantly, but historically, our largest client profile is institutional e.g. pension funds, life assurance companies and banks. This was particularly the case in the period preceding 2008. We have also acted for many developers and occupiers and been involved in some of the largest schemes in the country.

The advice that we give to clients is strategic and consultancy-based. Given that we act for both landlords and tenants or vendors and purchasers, our aims and objectives vary depending on the instruction.

As a firm, our staff have the necessary academic and professional qualifications for working in the property sector. Our staff are members of all relevant professional bodies including the Royal Institution of Chartered

Surveyors, Society of Chartered Surveyors Ireland, Irish Auctioneers and Valuers Institute, Engineers Ireland and Chartered Accountants Ireland. Being a member of a professional body means that you have to adhere to a set of strict standards and ethics on a daily basis.

Jones Lang LaSalle is noted for its independence and the quality of its professionalism. In 2013 it received honours that reflect the worldwide recognition of the firm's integrity and sustainability. For the sixth year in a row, Jones Lang LaSalle was named one of the "World's Most Ethical Companies" by the Ethisphere Institute, a respected international organization that promotes best practices in business ethics, corporate social responsibility, environmentalism and anti-corruption.

Sources and extent of funding of the commercial real estate market in Ireland

We are not directly involved in the funding element of commercial real estate transactions.

Our expertise is in real estate and the details of funding acquisitions and development are left for discussions between our clients and funding institutions directly. Whilst we may introduce parties and provide some background information, specific details about terms and agreements did not involve Jones Lang LaSalle and were not shared with us. Our view of funding conditions relates to what our clients informed us, and what was common knowledge in Ireland at the time.

Between 2004 and 2008 the largest sources of funding to the commercial real estate market were domestic banks. All of the major banks were actively lending: Anglo Irish Bank, Allied Irish Bank, Bank of Ireland, Permanent TSB, Ulster Bank, Royal Bank of Scotland (Ireland), KBC, EBS, Danske Bank and Irish Nationwide. Each bank had a differing exposure and concentration across all sectors.

At the time, there was a lot of funding available in the market place. Whilst we were not involved in final loan-to-value calculations between our clients and the banks, we are aware that loans were available at high value ratios. Funding was also available for almost every type of property transaction, whether it was for a pure investment purchase, or a speculative development. Initially, a significant proportion of the lending was non-recourse, e.g. the asset was the only security that the bank held. The practice of borrowers giving personal guarantees to secure debt became increasingly common in 2006 / 2007, and led to significant cross-collaboration of debt.

Any further detail about funding and lending during this time would be more accurate coming directly from the banks, lenders, and borrowers themselves.

Aside from the banks, there was also a lot of equity available in the market (see below).

The composition of investors in the Irish commercial real estate market

The major players in Ireland were domestic buyers, accounting for approximately 90% of all investment volumes between 2005 and 2007. Active Irish purchasers included a mix of private syndicates, private high-net worth individuals, institutions and developers.

The largest proportion of transactions were undertaken by private Irish individuals or syndicates. These purchasers were backed with funding from banks, with very limited, if any, pure cash purchases. There were also a number of purchasers who were backed with equity.

This broad investor profile was backed with a variety of funding and equity sources:

2004 - 2007 Investor Types and Financial Backing	
Investor Type	Financial Backing
Private Syndicates	Pooled equity and debt
Private High-Net Worth	Mix of equity and debt
Institutions (Pension Funds / Life Assurance etc.)	100% equity
Developers	Equity and high amounts of debt

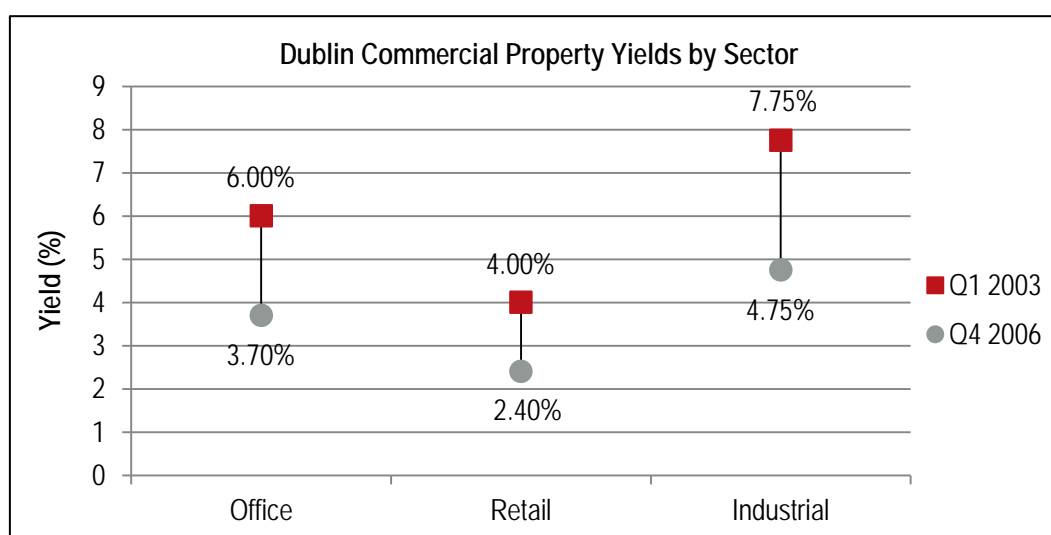
Over time, it became less certain how much actual cash was employed as opposed to 'equity release' lending.

Overseas investors had a limited presence in Ireland during this time, as pricing had intensified significantly, making Irish real estate too expensive for international investors.

Inter-relationships of international commercial real estate markets, including assets and investors

The Irish market had traditionally been domestic in nature with a very limited international input, other than in occupier markets. Ireland was regarded as an expensive market in the period prior to 2008, and as a result, there were limited overseas investors in Ireland during this time.

Irish yields tightened significantly between 2003 and 2006, compressing from 6.00% to 3.70% for prime offices for example. At these levels, international purchasers were priced out of the market, with more competitive yields available in other European countries.



Irish purchasers were not just focused on domestic assets, with significant levels of Irish money spent across Europe and the world. It was reported that in 2006 Irish investors invested approximately €3.5 billion in the UK and a further €2 billion in the rest of Europe and the USA.

Understanding risk among advisors and participants in commercial real estate markets in the period prior to the banking crisis

As a real estate advisory firm, it is our job to advise clients on real estate issues. It is therefore imperative that we understand levels and impact of risk.

Prior to the banking crisis, we were advising our clients on the nature and impacts of the property market and how it was performing. Any advice was informed and reinforced with key primary research data. We collect and monitor research for each property sector, with some datasets going back to the early 1970's. Our advice was strategic, using our expert opinion to assess for example, saleability and lettable at that current time. We would provide detail to clients on end-use values based on current market levels, providing strategic advice around sentiment and general market performance.

Any valuations we provided to clients were carried out in accordance with the RICS Red Book Guidance Notes, and were based on evidence of historical market values. Valuation reports are not forward-looking. They are a snapshot in time based on current market evidence. It is not within our scope or remit as real estate advisors to put any sort of application to these numbers, particularly in order to generate future projections.

Our clients would take our advice, and it would then be their responsibility to apply our recommendations to their models to generate cash flows, repayment models and profits / loss projections themselves. From this, they could formulate their own inputs and assumptions, but this was not a process we were involved with. The responsibility of this lay with the property owners and we assume their bankers.

The strong demand from investors and occupiers was essentially what dictated the market performance during this period and is what drove market activity. A functioning property market is not purely driven by value. Capital Values are often used as an indicator to show how a market is performing. Value can, in fact, be affected by a number of factors. A more reliable method for assessing whether a market is functioning properly is to focus on demand and supply, using market transactions and depth.

In 2005 and 2006, there was a significant depth to the market. For any asset that was for sale, there were a number of bidding investors in competition with one another. As 2007 / 2008 developed, we saw that there were risks in the market. The warning signs were a shallowing of this depth in the market, with the number of bidders during the sale process of assets decreasing. As a consequence, we advised most of our client base not to participate in the market on the buy-side, and where appropriate, we advised clients to sell.

Our client investors were therefore aware of risks at the time. The market in Ireland operates in a very transparent way, and it would be impossible to have not been aware of some of these signs. Transaction processes are open with availability and sharing of information and data. Investors are attracted to Ireland ahead of other countries because of its transparency. In the 2006 Jones Lang LaSalle Transparency Index¹, Ireland ranks as the 15th most transparent market in the world. It was ranked within the 'High' transparency category.

Other participants in the market place, such as investors, developers and the banks either had the benefit of professional advice, or alternatively had significant in-house expertise to assist in their decision-making processes. By 2008, there was a recognition within the property industry that market conditions were overheating, however I do not believe that most market participants realised the extent of bank lending to the

¹ The Jones Lang LaSalle Global Real Estate Transparency Index is a biennial study that quantifies real estate market transparency across 97 markets worldwide and is a helpful gauge for the industry to understand the differences between countries in terms of openness to information, processes and regulation. This in turn affects decisions when transacting, owning and operating in foreign markets.

property market, and secondly, that we would witness the collapse in value that subsequently occurred, which was due to an extraordinary confluence of global macro-economic events, combined with an over-reliance on debt in the property market.



John Moran
Managing Director, Ireland
Jones Lang LaSalle Limited