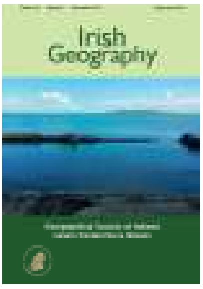

Irish Geography
November 2015

ISSN: 0075-0778 (Print) 1939-4055 (Online)
http://www.irishgeography.ie

Bouncing back: the political economy of crisis and recovery at the intersection of commercial real estate and global finance

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How to cite: Byrne, M. (2015) 'Bouncing back: the political economy of crisis and recovery at the intersection of commercial real estate and global finance'. *Irish Geography*, 48(2), 78-98, DOI: 10.2014/igj.v48i2.626

Bouncing back: the political economy of crisis and recovery at the intersection of commercial real estate and global finance

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Abstract: A growing literature demonstrates that the increasingly inter-dependent relationship between finance and real estate intensifies the boom-bust dynamics associated with property markets. Thus, the relationship between finance and real estate is frequently critiqued by examining how it produces crises with devastating impacts on societies, economies and cities. But despite the focus on property crises, much less attention is paid to the resolution of financial real estate crashes. How do bust property markets recover? And with what consequences? This paper responds to these questions by examining Dublin's office real estate market. Dublin is a particularly suitable case as its booming property market collapsed in 2008 but recovered rapidly from 2013. Analysing the transition from crisis to recovery provides important insights at a number of levels. Firstly, just as credit is crucial to property booms, the relationships between finance and the built environment play a crucial role in shaping the recovery of Dublin's office market. Secondly, state intervention in the financial system is crucial to this process. Finally, the dynamics associated with recovery work through the production of new circuits linking finance and commercial real estate.

Introduction

The cyclical nature of property markets is well known and there is a growing literature examining the ways in which what has been called the 'financialisation of real estate' intensifies boom-bust dynamics. The rapid growth of the financial system, the volatile nature of global real estate markets and, of course, the global financial crisis (GFC), have all placed this issue at the centre of much critical commentary. The existing literature has focused on residential property and particularly on mortgage markets in a small number of countries, the USA and UK in particular. This is perhaps unsurprising, given the centrality of the 'subprime' crisis to the global chaos of recent years. However, commercial real estate markets, and office development in particular, are also a crucial point of intersection between the financial system and the built environment and are equally, if not more, prone to rapid collapses in value. What remains very much unexplored, however, is the aftermath of crises of financialised real estate. The

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concept of crisis and the increasing tendency towards crisis arising from the integration of real estate and finance is central to the literature in critical urban and housing studies (Aalbers, 2012; Aalbers and Christophers, 2014) and urban political economy (Harvey, 2006; Brenner, 2006; Blackburn, 2011). This literature emphasises how the cyclical nature of property is dramatically intensified by financialisation (Coakley, 1994; Beitel, 2000) and how wider economic crises are displaced into the built environment (Harvey, 2012; López and Rodríguez, 2010; Brenner, 2006). Yet there is very little, if any, attention given to the subsequent resolution of financial real estate crises. How do bust property markets recover?

This paper responds to this question by examining Dublin's commercial real estate market and office space in particular. The Irish capital is a particularly suitable case for exploring these dynamics because it experienced a massive boom in commercial real estate values and lending followed by a catastrophic decline triggered by the 'credit crunch' and leading to systemic crisis across the financial system. As is well known, the Irish government responded to the Irish property and financial crisis by 'bailing out' its entire banking sector, only to require its own bailout from the European Commission, the European Central Bank and the IMF, bringing with it a series of austerity measures which have been enormously destructive.

Dublin is not only a 'poster-child' for the volatile nature of the relationship between finance and commercial real estate markets, it is also undergoing a remarkable recovery, particularly in the office and office development sectors. Indeed, a recent report from PWC and the Urban Land Institute named the city as the second hottest Commercial Real Estate (CRE) market in Europe in 2014 (PWC and ULI, 2015). Some analysts argue that Dublin's CRE assets are the current best performing asset class in the world (CBRE, 2015).

In what follows, I argue that the transition from crisis to recovery sheds important insights into the resolution of financial real estate crises at a number of levels. Firstly, the relationship between finance and CRE is such that dislocations which pertain to the financial system have key impacts on property markets. Just as credit magnifies the intensity of a property boom, so debt intensifies the collapse of property values and shapes the potential for recovery. This, in conjunction with national and international contextual features, creates opportunities for new types of investors and a new cycle of investment. Secondly, whereas most mainstream accounts suggest that property busts are worked out by the market and limit or even ignore the role of the state, I argue that public institutions and state intervention are crucial to this process. In particular, Asset Management Companies, or 'bad banks', play a crucial role in resolving distressed debt in ways which impact decisively on the built environment and CRE. Finally, recovery is made possible through the production of new financial circuits that link Irish CRE with global pools of capital, specifically US-based private equity firms and hedge funds.

The article begins by providing an overview of the boom and bust of Dublin's CRE market with particular attention paid to office development. It goes on to empirically examine the transition from a market in crisis and complete paralysis to the rapidly recovering one we find today. The final section of the article presents an analysis of the key issues at stake and their wider relevance for understanding the financialisation of real estate.

From boom to bust

While reference is often made to Ireland's 'housing bubble', commercial real estate played a leading role in the expansion of construction and credit between the mid-1990s and 2008 (MacLaran, 2014; McCartney, 2008). Without wishing to underplay the magnitude and duration of the housing boom (Norris and Byrne, 2015), it is important to highlight that some of the riskiest forms of credit related to commercial real estate and the development sector in particular (Woods, 2007; MacLaran, 2014). From the mid-1990s, office development began to increase dramatically primarily in response to increased demand heralded by the arrival of Ireland's 'Celtic tiger' economy. Between 1993 and 2002, the stock of Dublin Office space almost doubled (Goodbody, 2015). Despite a fall off in demand and development in the early 2000s, investment recovered from 2003 and office stock increased by a further 50% between that year and 2011. Output in other CRE sectors experienced similarly dramatic increases. Between 2005 and 2010 retail park and shopping centre space doubled (Kitchin, 2011).

As noted, the upturn in office construction was largely kicked off by strong occupier demand. Office take-up increased by 55% between 1993 and 1994, and grew by 16% in 1995 and 1996, by 21% in 1997 and another 54% in 1998 (MacLaran and O'Connell, 2007). This was reflected in falling vacancy rates, which fell from 11% in 1993 to 1.9% in 1999, despite massive upsurge in development/completions, indicating very strong demand (MacLaran and O'Connell, 2007). Rental growth exhibited similar trends: 'By late 2000, prime "third generation" newly completed office space in central Dublin commanded rents... some 55% higher than their level in 1998' (MacLaran and O'Connell, 2007: 88). Rental growth was extremely robust at 43% for the period 2003 to 2011 (Goodbody, 2015).

These factors combined to see an explosive appreciation of capital values. Between 1995 and 1999 commercial property prices experienced a cumulative increase of 195%, the fastest growth rate in Europe (Gavin, 2000; Provisional University, 2012). These trends continued for much of the 2000s as cumulative growth in capital values reached approximately 46% in that decade, with a peak annual rate of around 24% in 2006 (Woods, 2007). Crucially, however, price increases in CRE became disconnected from occupier demand as 'bubble' dynamics took over in two senses. Firstly, yields were driven down as rental returns relative to capital values shrank. Secondly, but relatedly, asset price increases were being driven by investor demand, rather than by occupier demand. Between 2003 and 2006, the cumulative rental growth was just 7.4%, compared with a massive surge in capital values of over 46% (Woods, 2007). Generous fiscal policy throughout the period added further fuel to the flames (MacLaran, 2014; McCabe, 2011). However, the key force propelling the bubble towards its eventual implosions is not to be found in the 'demand side' factors but rather in the expansion of credit. Lending for commercial real estate as a percentage of overall lending rose from 4.7% in 1998 to just under 21% in 2007 (O'Riain, 2014). In 2006 alone, lending for commercial property increased by around 60% (Woods, 2007). Commercial property, and particularly the office sector, became a major source of investment and profit for Ireland's banking sector (MacLaran, 2014).

The availability of credit was shaped by a number of factors which have been well documented elsewhere (O'Riain, 2014; Norris and Byrne, 2015; Kelly, 2014). These include financial liberalisation during the 1980s and 1990[1] and, importantly, membership of the Economic and Monetary Union (EMU). EMU reduced exchange rate risks and thereby the risks of cross-border, interbank lending which underpinned Ireland's credit boom (discussed further below). It also led to low and predictable interest rates across the Eurozone. Net borrowing from abroad by Irish banks increased from 10% of GDP in 1999 to over 60% in 2007 (Honohan, 2009).

The increase in the availability of relatively cheap credit and the aggressive targeting by banks of commercial property development led to the proliferation of reckless lending. Investment in development land and office development was typically debt (rather than equity) financed and the sector was characterised by the prominence of a relatively small number of highly leveraged individuals whose access to increasing quantities of credit was predicted on the assumption of ever-increasing asset values and with frequent use made of personal guarantees, cross-guarantees and various other dubious practices (O'Toole, 2009). In this sense, '[t]he collateral cycle played an important role with rising property prices improving the net worth of domestic investors, which in turn enabled extra leverage and a further impetus to the property market' (Lane, 2011: 9; see also Author 2016a).

The cyclical patterns of property-market behaviour meant that credit and asset price growth were a key feature of the CRE sector during the boom. With regard to property more generally, and in particular housing, some authors have argued that this period should be conceptualised in terms of a process of financialisation (Downey, 2014; Kelly, 2014). The importance of the relationship between banking and urban development certainly suggests the growing importance of finance during this period (O'Riain, 2014), however, the concept of financialisation remains somewhat ill-defined (Christophers, 2015). The long-standing relationship between credit and real estate (Aalbers and Christophers, 2014) is such that it is not always clear what is novel in the process of financialisation and, even more so, to what extent it can be characterised as qualitative or even epochal shift, an argument put forward by many in the field of urban studies and more broadly (Moreno, 2014; Lavapistas, 2009; López and Rodríguez, 2010).

In order to understand the Irish boom, however, it is crucial to examine the relationship between finance and CRE during the period. Following Halbert and Attuyer (2016: 1347), this can be approached by examining 'financial circuits',

[1] Including the removal of sectoral guidelines for the extension of loans, reductions in interest-rate ceilings and falls in primary liquidity ratios (Woods, 2007; see also Kelly, 2014)

in the sense of 'sociotechnical systems that channel investments in the forms of equity and debt into urban production'. Working along similar lines, Martin Sokol (2015: 6) has developed the concept of 'financial chains' to describe how actors and processes are connected across space through financial linkages, such as credit-debt relationships. This captures both the transfer of value across space and time through legal and contractual forms, as well as the way disparate actors become chained to each other, 'shaping each other's actions in the process' as well as shaping economic geographies. The concepts of financial circuits and chains draw attention to the importance of examining specific sets of relations between urban production and capital happening through particular institutional forms.

With regard to Irish CRE during the 1990s and 2000s, the most important financial circuits did not take shape through the development of securitisation and derivative products. The financial circuits which developed during this period rather relate primarily to the Europeanisation of the Irish financial system and the flow of capital from European markets into Irish real estate. This occurred through Irish banks accessing inter-bank lending markets in order to raise money to lend on as development finance. The majority of CRE development was almost entirely debt financed by banks. In addition, a number of European banks began operating directly in Ireland, in particular Royal Bank of Scotland (through Ulster Bank), Lloyds Bank and Danske Bank (MacLaran, 2014). The EU and EMU were central here. As argued by Kelly (2014), financial markets were deregulated from the 1980s and as a consequence restrictions on credit growth were abolished; banks' reserve requirement ratios were lowered; capital controls were dismantled and restrictions on interest rates were withdrawn. Irish reforms were inspired by similar reforms in other Anglophone countries but also by the requirements of EMU (i.e. the process of removing barriers to free movement of commercial finance between EU members which culminated in the establishment of the Euro in 1999) (European Central Bank, 2009; McCabe, 2011). In addition, the prolonged low interest rates set by the ECB (Aalbers, 2015) were particularly disruptive in Ireland where interest rates were historically particularly high (Norris and Byrne, 2015). Despite the somewhat slippery nature of the concept of financialisation, this circuit can be understand as a form of 'financialization of urban development' in the sense put forward by Ted Rutland (2010: 1173), the 'entanglement' of 'real estate finance more closely with worldwide capital markets'.

Needless to say both the extremely high concentration of credit in commercial real estate and the financial sectors reliance on short-term borrowing from international money markets to finance long-term development projects left the sector highly vulnerable to financial shocks and downturns in demand, both of which occurred to an unprecedented extent from 2008 (MacLaran, 2014). As liquidity in international money markets dried up and credit 'crunched' Irish banks found themselves unable to service their short-term borrowing commitments and loan repayments, the financial system as a whole to seize up. What initially appeared as a liquidity problem, however, rapidly became a solvency problem as the extent of over-exposure to speculative property development became evident.

At the same time, commercial real estate values entered a phase of precipitous decline and the construction sector virtually collapsed. Rents collapsed by 45% between 2007 and 2012 and vacancy in Dublin's office sector rose to 23% (MacLaran, 2014) while capital values declined by an enormous 67% (Goodbody, 2015). Simultaneously, there was a 'complete elimination of investment demand' (MacLaran, 2014: 104). In 2007, commercial construction (office and retail) amounted to €4.75 billion; in 2011, this figure dropped to €195 million. In 2011, there was only one instance of office construction completion and there were no new completions in any commercial property in 2012 (Savills Research Ireland, 2012).

The 'financial circuit' through which Irish CRE had been linked with European financial flows evaporated. The declining and uncertain value of Irish real estate assets meant that they could no longer operate as security for the issuing of further rounds of credit. Conversely, asset prices were depressed and difficult to determine due to the absence of liquidity and transactions, in turn a symptom of the absence of credit due to the seizing up of the inter-bank lending markets, general financial instability and the insolvency of the Irish banking sector. The result was that the cycle of real estate investment, and hence of urban development, ground to a halt.

In the wake of a crisis

As was the case during the boom, understanding the office development and CRE sector in Dublin since 2010/2011 demands a focus on finance rather than real estate per se. In the years following the crisis, 'impaired', 'distressed' or 'toxic' assets have been at the centre of events. A report commissioned by the government in 2009 (Bacon, 2009) estimated that the six domestic banks covered by the government's bank guarantee faced impairments on their real estate loan exposure of approximately €34 billion, amounting to 20% of the total value of outstanding property loans at the end of 2008. The majority of this (€20bn) related to development loans, with the remainder linked to the investment loan books. Foreign lenders also faced acute impairment problems in their Irish CRE loan books. 84% of Lloyd's Bank (formerly Bank of Scotland Ireland) commercial loan book was impaired in 2010. Ulster Bank swallowed up a third of the UK government's €53.6 billion bailout of its parent bank Royal Bank of Scotland, indicating high levels of impairment, much of which related to commercial real estate (MacLaran, 2014).

Thus, distressed CRE loans formed a major part of the wider crisis in the Irish financial system (Bacon, 2009). With Irish developers and investors either bankrupt, paralysed or defunct, it was very much unclear how the sector might return to life. The primary process through which this happened, as explored in detail below, was the rapid deleveraging of a number of institutions holding large volumes of CRE assets, specifically the National Asset Management Agency (NAMA), the Irish Banking Resolution Corporation (IBRC) and a number of foreign lenders.

The National Asset Management Agency

NAMA is an Asset Management Company or 'bad bank'[2] set up in early 2010 and was tasked with acquiring, managing and resolving large-scale (upwards of €5 million) real estate loans held by the five participating banks[3]. NAMA acquired loans with an original value of €72 billion, but paid €32 billion on the basis that this reflected the market value of the loans (based on the value of the underlying collateral), plus a 15% premium supposedly reflecting 'long term economic value' (Kitchin *et al*., 2012). This reflects a 58% fall in the value of the assets (Williams, 2014). Thus, NAMA issued €32 billion worth of government guaranteed securities (or 'NAMA-bonds') to the participating banks as consideration for the acquired assets (O'Broin, 2012). This supports the banking sector by replacing loans of declining and uncertain value with government guaranteed securities. These securities can also be used to draw down liquidity from the European Central Bank (O'Broin, 2012). Moreover, while the banks took a loss on the assets acquired by NAMA, this was more than made up for via the provision of capital and liquidity through other government measures. NAMA has an extraordinarily large portfolio equal to an incredible 47% of Irish GDP (Byrne, 2016a). Following the completion of loan acquisition, NAMA's loan portfolio was secured by over 60,000 property units (Department of Finance, 2014). The type of property breaks down roughly as follows: office (16%); development (23%); land (11%); retail (20%); hotel and leisure (9%); industrial (3%); residential (12%); other (5%) (Department of Finance, 2014). 67% of the Irish properties are located in Dublin, with 94% concentrated in the main urban centres. Around 36% of loans related to properties in the UK and Northern Ireland.

The NAMA Act (2009) stipulates that the agency must wind down its loan book and redeem the NAMA bonds by 2020. In addition, a number of bond redemption targets were set in Memoranda for Understanding between the Irish government and the 'Troika' creditors as part of bailout arrangements. As such, NAMA had to sell off a huge volume of impaired assets within a short time frame. In order to meet its bond redemption targets, NAMA initially focused on UK assets, and especially London assets, which had experienced a lesser deterioration in value and which recovered much quicker than Irish assets[4]. However, since 2013 its attention has increasingly turned towards Irish assets.

Since it was established in 2010, NAMA has sold assets (loans and property) with a value of €18.7 billion, €7.8 billion (42%) of which was sold in 2014 when the agencies focus switched to its Irish portfolio, particularly Dublin assets (NAMA, 2015). NAMA represented an incredible 50% of all direct property disposals in 2014 (Goodbody, 2015). Limited geographical and sectoral data is available

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[2] AMCs are a common form of government intervention in systemic financial crisis (Byrne, 2015b).

[3] Anglo Irish Bank Allied Irish Bank, Bank of Ireland, Irish Nationwide Building Society, Education and Building Society.

[4] From inception to end 2012 63% of disposals were of London-based assets, 16% in the rest of the UK and 12% in Ireland.

which would help us to specify the extent of office and land for development (the two asset classes of most interest here) in NAMA asset sales. However, a quick review of some of the large portfolio sales provide some insight.

NAMA's Platinum Portfolio included four office blocks in south central Dublin and was sold to Blackstone and Google in early 2014 for over €150 million. In mid-2014, Irish Life, Hibernia Real Estate Investment Trust and Lone Star were the successful bidders for Redwood Portfolio, made up of buildings in the same area. The properties in question were large office blocks with tenants such as international legal firm William Fry, and achieved a price of over €200 million (CoStar Finance, 2014). Also brought to market in 2014, the Central Park Portfolio included an office component consisting of six suburban properties covering 691,000 sq ft and was snapped up by Green Real Estate Investment Trust and international hedge fund PIMCO for €200 million. This snapshot of NAMA market activity gives an indication of the large amount of transactions involving office stock in 2014, the key year for the turnaround in the Dublin Office market.

NAMA has also been active in the development land market, and 2014 was the key year once again. Much of this involved land in Dublin Docklands, a Strategic Development Zone enjoying fast-track planning permission mechanisms and a dedicated development plan, and in which NAMA controls over 75% of development land (Byrne, 2016b)[5]. NAMA is currently involved in five large developments, all of which mainly feature office space. Two of these are being undertaken via Joint Ventures (JV) in which NAMA acts as a shareholder partnering with global financial institutions including Kennedy Wilson and Oaktree Capital. NAMA is also providing development capital for a third development. Overall, NAMA is expected to add 3.5 million sq ft of new office space in the Docklands area alone (Goodbody, 2015). NAMA also sold a very large 400-acre site, also under a Strategic development Zone, in Dublin's southern suburbs. This site, sold under 'Project Cherry', was bought by Texas based real estate development company Hines and US Private Equity firm King Street Capital in 2014 for a reported €270 million.

The above gives an indication of the role of NAMA in shaping the market for office and development and assets in Dublin over recent years. Not only has NAMA been rapidly deleveraging, it has also fueled market activity through participation in joint ventures, the provision of vendor financing and the assembling of large portfolios of assets to attract investors (Byrne, 2016a; 2016b). Indeed, NAMA was the second largest vendor of commercial real estate loan assets in Europe in 2014 (Cushman and Wakefield, 2014). It also indicates the very aggressive entry of international financial firms into the Irish market, and NAMA's role in this process (Byrne, 2016b). As the agency puts it, 'NAMA is keen to attract international

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[5] Dublin's Docklands, a former industrial port area, was a hotspot of commercial real estate investment during the 1990s and the 2000s, and saw some of the most spectacular collapses in real estate values after the bust (especially land values). Many of the developers involved in the area had their debts transferred to NAMA, making the agency the principal land owner in the area (Byrne, 2016B).

capital interested in acquiring loans or property assets' (NAMA, 2013: 6).

The Irish Banking Resolution Corporation

As noted, NAMA was the second largest vendor of commercial real estate loan assets in Europe in 2014. The largest vendor in this category was the Irish Banking Resolution Corporation, another public wind-down operation, giving a sense of the very significant role of the Irish state in European commercial real estate markets (Cushman and Wakefield, 2015). The IBRC is, like NAMA, a wind down operation. It was formed in 2011 via the merger of two banks which had been nationalised in 2009 and 2010: Anglo Irish Bank and Irish Nationwide and Building Society (INBS). Both institutions had invested heavily in real estate during the boom and both faced collapse after the crisis. Anglo, the much larger of the two and Ireland's third largest bank, was in many senses a poster-child of the real estate feeding frenzy, growing rapidly throughout the boom and financing many of the most high-profile developments. Similarly, after the crisis, it has become associated with the unjust bailing out of private institutions as well as cronyism and 'poor governance' (former high profile officials at the banks have been caught up in parliamentary inquiries, court proceedings and even extradition cases). In February 2013, the government passed emergency legislation to liquidate IBRC. The liquidation process involved various forms of loans and other assets. While a large portion of real estate loans had already been transferred from Anglo Irish Bank and INBS to NAMA in 2010, IBRC nevertheless liquidated huge volumes of its remaining assets in 2014, accounting for its pole position as a vendor in European real estate loan markets. In 2014, it sold approximately €16.7 billion of distressed real estate assets (residential and commercial) (Cushman and Wakefield, 2015). Many of these loans, such as those pooled together in Projects Rock and Salt, were underpinned by commercial property outside of Ireland. However, Projects Stone and Pebble, sold in March 2014, included Irish commercial real estate loans to a value of just under €6 billion and were sold to international financial firms such as Goldman Sachs, CarVal, Lone Star Capital and Colony Capital. Lone Star has been a particularly active purchaser of IBRC assets. The Texas based private equity firm has snapped up 60% of all distressed real estate portfolios brought to market by the IBRC (Cushman and Wakefield, 2015).

Foreign lenders

Whilst the Irish 'bad banks' dominated in 2014, initially deleveraging of Irish commercial real estate assets was led by three foreign lenders; Lloyds Bank, Dankse Bank and Ulster Bank. These banks had entered the Irish property market and invested heavily during the peak years of the boom. In the four years between 2002 and 2006, Ulster Bank, owned by British bank RBS, doubled its assets to €65 billion, while Bank of Scotland Ireland (later taken over by Lloyd's Bank) had a commercial loan book of €21 billion (MacLaran, 2014). Following the financial crisis, all three began to rapidly reduce their exposure to Irish commercial real estate. Dankse Bank, which held an Irish commercial investment property portfolio valued at €4.7 billion in 2012 transferred all Irish CRE loans to a dedicated non-core wind down unit in mid-2012 (Sunday Business Post, 2012). The bulk of these loans were rapidly sold off in 2013 and 2014 and the bank hopes to have gotten rid of its entire CRE exposure by mid-2016. Ulster Bank/RBS has been involved in similarly rapid offloading of commercial real estate. Project Achill included €550 million of distressed CRE loans secured by properties in both Ireland and the UK and was sold to Lone Star in 2014. Project Aran, a massive portfolio of distressed Irish CRE with an original value of €6 billion, was sold to Cerberus for just €1.1 billion in late 2014, making it the second largest transaction for the year. These transactions were completed by RBS Capital Management, an internal wind down unit within the bank. Lloyds, another British bank, is close to complete withdrawal from Irish real state. In 2014, the bank reduced its Irish CRE loan book from £3.7bn to £1.8bn. While these banks are not public 'bad banks' or Asset Management Companies like IBRC or NAMA, neither should we assume that they are entirely private. Both RBS and Lloyds have been the beneficiaries of massive bailouts by the UK government. In late 2008, the UK government took a 43% stake in Lloyds as part of a bailout that cost over £20 billion. At the same time, the government acquired a 58% stake in RBS at a cost of £15 billion, later increased via further recapitalisation. While the relationship between state intervention in these British banks and their rapid deleveraging of their Irish CRE portfolios remains unclear, it is certainly of note that the vast majority of distressed assets brought to market in 2013 and 2014 came from institutions which were either entirely public or partially so.

Global finance in the wake of the crisis

Over 2013 and 2014, as indicated by the above, the deleveraging of distressed CRE assets was the definitive feature of the Irish market. Thus, the deleveraging institutions acted as 'market makers'; by putting their assets on the market they initiated the end of a period in which there were almost no transactions and in which the value of CRE was difficult if not impossible to determine. This in turn allowed values to bottom out and drove a return to transactions, thus bringing about the shift from complete paralysis to the beginnings of recovery. Irish CRE loan sales in 2014 amounted to an incredible €21 billion, while direct property sales in the sector also rose to €4.5 billion (CRBE, 2015; SCSI, 2015). Direct property transaction volumes represented a record high, and this was despite the collapse in commercial property prices, suggesting an enormous quantity of transactions and a veritable feeding frenzy (Goodbody, 2015). The office sector represented the largest chunk of this activity, representing 29% of investment but possibly rising to over 60% when mixed use properties were taken into account, and approximately 90% of this investment was focused on Dublin (Goodbody, 2015).

The prominence of loan transactions signalled both the continuing significance of the financial 'side' of real estate but also the strong role of capital markets in the process of transformation. There is currently a very large appetite for CRE in financial markets. This is driven by a number of factors including the fact that the markets are 'awash with capital' (PWC and ULI, 2015), the low yields in rival asset classes (corporate and government bonds) and continuing low interest rates (Goodbody, 2015). European Central Bank quantitative easing has compounded these dynamics, driving up demand and asset prices in 2015-6.

In terms of investors, global financial firms have been the key players in all of this. Firms heretofore unknown in Ireland – Blackstone, Lone Star, Starwood, Oaktree, CarBal, Pimco, King Street, to name a few – have become the dominant force in real estate investment, purchasing both direct real estate assets and loans. Most of these companies are hedge funds or private equity firms, although a few international development companies have entered the fray (e.g. Kennedy Wilson, Hines and Oxley Holdings). Hedge funds and private equity firms, sometimes referred to as 'vulture funds', see opportunities in the heavily distressed Irish CRE markets, which is hardly surprising given that virtually every Irish financial institution is attempting to deleverage and exit CRE in an extremely short space of time (Byrne, forthcoming). A 'fire sale' dynamic has set in, making it possible for those who can access large amounts of equity or finance to pick up real estate at bargain prices. In addition, government legislation in 2013 provided for the establishment of Real Estate Investment Trusts and three such companies have subsequently emerged and become important buyers of CRE and office space in particular. Because of the systemic nature of the Irish financial and real estate crisis, with the exception of the new REITs there are currently no Irish financial institutions or property developers with the financial capacity to take advantage of these opportunities, leaving the door wide open to global firms. In this sense, the first stage of the recovery of Irish CRE has been marked by a profound transformation of the market. The Irish market has been typically dominated exclusively by Irish players and thus remained an extremely localised game. Today, in stark contrast, it has become globalised, a turn of events analyzed further below.

The Recovery

While the distressed nature of assets and rapid deleveraging have been key to the business strategies of the new 'vulture funds', they have also been attracted by the strong recovery of demand for office accommodation and thus of the so called 'fundamentals'. Despite the collapse of the economy and a very sharp increase in unemployment between 2006 and 2011, office employment actually increased. This indicates that occupier demand remained relatively strong during the crisis, and therefore that the collapse in asset values was largely due to the unavailability of finance and the overvaluing of assets during the bubble. The fall in values of properties while occupier demand remained relatively strong created investment opportunities. As one property investment advisor said to me, 'the stats were jumping off the page'.

Total take up of Dublin office space was strong in 2014 at 2.3 million sq ft in 2014, and this in the context of a state embargo on new leasing which ended in October 2015. The net absorption rate, which many commentators treat as a more accurate reflection of occupier demand as it takes into account the ‘churn’ in lettings, was also strong at 200,000 sq m (Goodbody, 2015). The ICT sector was the largest in take ups (39%) with financial and professional services not far behind. Vacancy rates have dropped from a high of around 23% in 2012, to 14% in 2014. Many commentators also highlight the geographical spread in vacancy, with rates in the CBD for prime office space thought to be as low as 2% (Goodbody, 2015). Private sector consultants anticipate that vacancy would drop below 10% in 2015 and that there would be an acute shortage of well-located (non-suburban) Grade A office space[6]. Given all of this, it is perhaps unsurprising that rental growth has been extremely strong, rising from a ‘trough’ of €27 per sq ft in 2011 and 2012 to €35 per sq ft in 2013, and increasing by a further 30% to €45 in 2014 (Goodbody, 2015). Rent levels continued to increase in 2015 and into 2016. The increase in rents is supported by the fact that office rents are relatively elastic as they represent a small portion of operating costs for financial, ICT and advanced professional services. Overall, CRE in Ireland delivered returns on investment of over 35% in 2014, with the returns for the office sector reaching 43.4% and office capital values rose by 33% (Goodbody, 2015). While CRE in general has recovered strongly, the office sector led the way. The other CRE sectors saw rents increase by 18% and capital values by 27% (Goodbody, 2015).

As noted, investment in the office sector was in large part driven by the depressed prices of over-leveraged assets following the crash and the rapid deleveraging by several major institutions. However, if the ‘stats were jumping off the page’ in 2013 and especially 2014, it is also because the acute restriction of supply coupled with strong employment and robust occupier demand is driving positive ‘demand signals’, namely rental growth, absorption, take up, vacancy rate and capital values. In 2011 and 2012, due to financial crisis, there were *no new completions* to add to the supply of office space across the city, a virtually unheard of occurrence for a capital city. Moreover, given the time lag (usually estimated around 2 years, McCartney, 2008) involved in the construction sector, supply will continue to be ‘minuscule’ for some time (Goodbody, 2015).

Understanding the resolution of a financial-real estate crisis

In many ways, what is happening in Dublin reflects what we might anticipate based on the mainstream economics literature on office cycles. The conventional wisdom here is that office markets are cyclical because of the time lag between ‘demand signals’ and new development, causing supply to periodically overshoot demand (Beitel, 2000). Rental growth, dropping vacancy rates, take up and wider economic growth all encourage developers to begin new office projects. However, because of the time lag, rents and other demand signals continue to grow until new product comes on the market, and thus more developers jump on the band wagon. Eventually, the market reaches saturation and rents stabilise, but by then there

6 It is also worth noting that the ‘natural vacancy rate’ for Dublin is considered by property consultants to be around 11-12%, i.e. when rates dip below this rents start to rise (see McCartney, 2008).

is an excess of office space under construction, most of which typically reaches completion thus causing significant oversupply.[7] This in turn drives rent levels down, and thus new developments eventually cease. Mueller (1999) divides this classic 'office cycle' into four phases: recovery; expansion; hyper supply; and recession. The two key stages for the purposes of the present argument are the shift from recovery to expansion. John McCartney (2008: 84) has developed Mueller's theory in the context of the Dublin office market, he describes 'recovery' as when 'Beginning at the trough of the cycle, occupancy rates are well below their long-term average. Vacant space is abundant due to overbuilding towards the end of the previous cycle. This glut of surplus accommodation leads to negative rental growth which discourages new construction.' 'Expansion', in contrast occurs when:

As time passes, natural economic growth helps to digest the overhang of surplus office space on the market. Occupancy rates slowly recover to their long-term average and, as availability becomes tighter, rents stop falling before stabilising and beginning to rise. Eventually, they exceed the point where new office development becomes viable. Office starts begin to occur, but due to long construction lead times, the new space is not immediately available to the market. As a result, rental growth continues to accelerate, peaking towards the end of this phase.

In short, this is normal market dynamics with an added two-year time lag accentuating boom/bust dynamics.

The research presented here, however, suggests two important omissions from the mainstream framework. Firstly, the mainstream framework largely ignores the importance of the production of financial circuits in the boom, bust and recovery of commercial real estate markets. Secondly, the state and public institutions are completely omitted as it is presumed the market will 'digest' the surplus office space.

The role of finance and Dublin's office recovery

As noted, mainstream analysis of office cycles continues to largely ignore the integration of finance and real estate (Beitel, 2000), and therefore cannot grasp the roll of key factors such as increasing credit availability or deteriorating lending standards, factors which have been well documented as central to housing booms and busts (Kitchin *et al.*, 2012; López and Rodríguez, 2011; Immergluck, 2011). The role of finance, I argue, must also be brought in to understand the resolution of the crisis in Dublin's office sector and CRE more generally as well as the emerging recovery. The work of Karl Beitel (2000: 2113) on US office cycles is instructive here. Beitel finds that:

'Cycles of excessive overbuilding are driven by the behaviour of banks and the speculative creation of credit money...the duration and volatility of the cycle are

7 Beitel (2000) notes that there may also be a 'second lag' which is a factor in cycles of over-building. Rental growth does not respond immediately to increased vacancy due to the long-term nature of leases in the office sector.

conditioned most fundamentally by the supplies of credit and rooted in a series of innovations within the financial sector....

This in turn arises from the 'existence of commercial property at the intersection of markets for space and markets for capital assets' (Beitel, 2000: 2113).

In this sense, overinvestment on CRE arises from the ways in which 'dislocations within the financial circuit are transmitted into the speculative overproduction of space' (Beitel, 2000: 2116). The recovery of Dublin's office market must also be understood by examining 'financial dislocations' within particular circuits, but this time focusing on dislocations associated with the bust, rather than the boom. As noted, asset prices in Dublin experienced an extreme collapse in part driven by oversupply and insufficient occupier demand, but also by the seizing up of the financial system and the widespread bankruptcy of developers (Byrne, 2016a). It was not just the case that the market value of CRE declined significantly, but in a sense there was no market, as evidenced by the very limited number of transactions and the complete absence of new development from 2010. The relatively robust performance of occupier demand is not enough to resolve these issues, as the debt overhang produces a situation in which the profitability of actual properties is undermined first and foremost by the impossibility of servicing enormous debts. Here we must remember that the CRE development during the boom was primarily debt financed and, moreover, that the nature of debt as a legally binding contractual relationship delimits the actions of all actors involved. Developers, as debtors, may lose significant control over properties when they enter default and may, for example, be unable to sell their property at a price lower than the outstanding debt, certainly without the permission of the creditor. Creditors in turn, may wish to avoid sales to avoid crystalising their losses and thus the associated losses appearing on their Profit and Loss accounts. In a situation of widespread crisis, as was the case in Ireland, the scale of losses placed banks at the risk of losing their banking licence, in addition to insolvency issues.

In this sense, what shapes how the CRE cycle evolves is not simply oversupply, but the 'distressed' nature of CRE as a financial asset, which I argue should be conceptualised, following Beitel, as a dislocation in the financial circuit caused primarily by the fact that asset-prices are significantly out of sync with outstanding debt levels. It is because of this dislocation that *deleveraging* becomes so significant as a driver of dynamics in the CRE market. As mentioned, lending institutions (including NAMA and IBRC) had to deleverage rapidly, simultaneously and at massive discounts. They were driven to do so because of the urgency of dealing with the debt overhang, in spite of the relatively robust performance of office take up and other 'demand signals' What attracted new investors to the Irish market, therefore, was not just rent levels and occupier demand, but the heavily depressed nature of capital values created by the debt-overhang and deleveraging process and the consequent possibility for exceptionally high yields, which remained as high as averages of 8% throughout most of the crisis for CBD office property and with yields of close to 10% being common by 2012 (CBRE, 2014). These yields, then, reflect a dislocation between the function of office space in the 'real economy' (reflected in rental growth, vacancy and net absorption) and its life as a financial asset, and it is this dislocation which created yields sufficiently high to attract international firms willing to 'move up the risk curve'.

Public institutions and the recovery of Dublin's office market

The second important omission from mainstream accounts is the role of the state and public institutions. Real estate crises typically occur in tandem with financial crises and financial crises typically give rise to systemic government intervention in the banking system (Author, 2015b). And yet, for mainstream analysts the state may as well not exist in terms of the resolution of the dynamics of crisis and recovery in CRE markets. The centrality of the state and public institutions to Dublin's recovery could hardly be clearer, however. Out of €96.7 billion of CRE loan sales and Real Estate Owned (REO, assets owned by lender) sales in Europe in 2013 and 2014, an incredible €36 billion related to assets sold by NAMA and IBRC (Goodbody, 2015; Cushman and Wakefield, 2014). In other words, the Irish state, despite its tiny size, is in a sense the largest vendor of real estate assets in Europe. In addition, other large vendors such as Ulster Bank and Lloyds have, as noted above, also recovered very significant government support and there are suggestions that their rapid withdrawal from Irish CRE is linked to that support. Finally, NAMA continues to play a very important role in Dublin's office market on a number of levels (for more discussion see Byrne, 2015b; forthcoming). Firstly, analysts predict that NAMA will deliver approximately 37% of all new supply of Dublin office space and that, importantly, NAMA will control the release of this supply to ensure rental growth is not unduly affected (Goodbody, 2015). Secondly, NAMA is financing new developments and financing investment in existing assets. Thirdly, and as noted, the agency is actively attracting international financial institutions to the Dublin market.

Thus, public institutions are playing a crucial role in the recovery of the Dublin office market. This fact has additional significance because it indicates that state intervention in the banking system can have decisive impacts on real estate markets and indeed on urban space (see also Byrne 2015a; 2015b; Gotham, 2006; Ashton, 2011). Both IBRC and NAMA were primarily designed to restore the solvency and credibility of the banking system and the flow of credit in the economy, but have ended up playing a key role in CRE and, therefore, in the dynamics of urban development and transformation.

Financial circuits and the recovery

Paying attention to financial circuits and the role of the state in office cycles is not just important because it allows us to understand and describe the resolution of the crisis in the Dublin office and CRE markets. It is also vital to understanding the economic, social and political implications of that process of resolution. More specifically, at stake here is the further integration of local real estate in global financial circuits, largely facilitated by public institutions. In this sense, the very dynamics which led to the crisis are being reproduced and compounded through the process of recovery.

The current recovery is overwhelmingly based on the entry of global financial firms as the primary investors and developers in Dublin CRE. There is no official data on the proportion of investment represented by international firms, however it appears that all of NAMA's loan sales have been to international firms as have many of its sales of direct assets. We also know that Texas based Lone Star Capital was the largest buyer of IBRC assets, followed by similar firms (Byrne, forthcoming). On the development side, all of the developments currently underway in the Docklands area, where the vast majority of new supply in the CBD will be located, are being financed by international firms, such as Oaktree Capital, Kennedy Wilson, King Street Capital and Oxley Holdings.

At stake, then, is the emergence of a new financial circuit which once again links local real estate and global pools of capital. As argued, during the boom the primary financial circuit involved Irish banks borrowing on international money markets (primarily form European banks) and lending to Irish developers and investors. Today primarily US firms are directly owning and developing CRE. Private equity and hedge funds involved in Ireland create specific funds targeting Irish and/or European distressed real estate assets and raise money from various sources of capital seeking somewhat risky but high yield investments. Thus, such funds perform the function of connecting capital willing to 'move up the risk curve' with Irish real estate, and hence are at the center of a new financial circuit through which global capital can once again by allocated to Irish CRE. In this sense, what we find today is a more direct link between local property and global capital. The part played by public institutions in all of this, outlined in detail above, underlines the important political dimension here. This is not the market 'doing its thing', but rather the outcome of public policy choices, financed by citizens and undertaken using public powers and institutions.

Conclusion

There are three key points that emerge from the analysis presented here. Firstly, there is a dearth of studies which examine the resolution processes associated with bad banks and other 'wind down' operations and this needs further attention. Secondly, rather than leaving the sale of distressed assets to the 'invisible hand' of the market, public institutions and state interventions need to be crucial players in this process. Finally, the resolution of CRE crises involves the production of new financial circuits which re-connect Irish real estate with global flows of capital via novel sets of intermediaries; these are directly driven by the deleveraging actions of bad banks.

In exploring how this has occurred in Dublin's CRE markets, the salience of the financial circuits linking real estate and capital emerge as a key factor shaping recovery. Specifically, the 'dislocation' between loan assets (with their post-crisis debt overhang) and the direct property collateral that underpins them, constrains how relevant actors (in particular, indebted developers and financial institutions) can respond to the crisis and drives them towards deleveraging, thereby creating opportunities for outside intermediaries in a position to raise sources of finance seeking high yields. Here, the so-called vulture funds have been key, moving 'up the risk curve' by entering a heavily distressed property market to tap into exceptionally high yields. Thus, the space between the 'market fundamentals' (rental growth, take up, etc.) and distressed debt is crucial to the recovery of Dublin's office market.

Moreover, rather than the simple re-alignment of market dynamics of supply and demand, Dublin's property recovery has been largely driven by public agencies, specifically 'bad banks' or Asset Management Companies established to resolve distressed real estate assets. This is an important finding, particularly when we consider the prevalence of such 'wind-down operations' across Europe (Byrne 2015; 2016 forthcoming). There are currently AMCs in Germany, Austria, Spain, Portugal, the UK and Slovenia. Cushman and Wakefield (2014) estimate that they hold almost €264 billion in distressed real estate assets and are the most active sellers currently in the market (Cushman and Wakefield, 2014). And yet, there is virtually no research on AMCs and their impact on real estate markets or the built environment. More broadly, the role of the state in the recovery of Dublin's CRE market adds to existing research which highlights the centrality of the state to the financialisation of property. While much of this literature examines the interaction between state, finance and real estate in the context of property booms (Immergluck, 2011; Aalbers, 2012; López and Rodríguez, 2010), there is also a small but important body of work examining this interaction in the resolution of financial-estate crisis (Gotham, 2006; Ashton, 2011; Beswick *et al.,* 2016; Byrne, 2016 forthcoming).

Further research is also required on the economic, political and urban development implications of the recovery, and specifically of the entry of private equity firms and hedge funds into the CRE market. Here, it is important not to reduce the ongoing processes through which a new financial circuit is emerging to a monolithic conception of finance and financialisation, but rather to undertake empirical research to identify the range of actors, institutions, forms of finance and investment strategies which constitute this new circuit as a sociotechnical system. As Halbert and Attuyer (2016: 1350) note, 'financial re-intermediation and its role in city making [is] *potentially* unstable and open-ended. Just as reconfigurations of late-stage financialised capitalism writ large, are uncertain in their forms and outcomes, it can be hypothesised that the investment strategies, the interactions between actors and their outcomes may differ between places and evolve over time, be it in terms of their effects on socio-spatial cityscapes or on transformations of the political economy of urban production.' A future research agenda might address issues including the interaction between international funds and locally-based actors (contractors, real estate agents, planners, etc.); the impact of new factors on financing (e.g. US interest rates, federal reserve quantitative easing, US banking regulation); the extent to which funds are insulated from the Irish regulatory environment; and finally, the varied investment strategies such actors pursue and their respective impacts on urban development. Whatever happens, it appears that the ongoing reproduction of financial circuits and the relationship between local real estate and global capital will continue to play a key role in the future of urban development in Dublin.

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