2010-01-01

Managing an Unstable Housing Market

Brendan Williams
University College Dublin

Brian Hughes
Technological University Dublin, brian.hughes@tudublin.ie

Declan Redmond
University College Dublin

Recommended Citation

Williams, B., Hughes, B., Redmond, D.: Managing an Unstable Housing Market. UCD Urban Institute Working Paper Series, (1002), 2010. ISSN: 1649-3613 040310

Funder: Environmental Protection Agency under contract 2005-CD-U1-M1.

UCD Urban Institute Ireland

Working Paper Series

2010

Managing an Unstable Housing Market

Brendan Williams, Brian Hughes, Declan Redmond

UCD UII 10/02

UCD Urban Institute Ireland

University College Dublin

www.ucd.ie/uii

UCD Urban Institute Ireland

WORKING PAPER SERIES

2010

Managing an Unstable Housing Market

Brendan Williams, Brian Hughes, Declan Redmond

Working Paper Series: UCD Urban Institute Ireland

ISSN: 1649-3613

UCD Urban Institute Ireland
University College Dublin,
Clonskeagh Drive,
Clonskeagh,
Dublin 14
Ireland
www.ucd.ie/uii/

This working paper can be downloaded as a PDF at
www.uep.ie

Urban Institute Ireland
Working Paper Series

Managing an Unstable Housing Market

Brendan Williams [a, c*], Brian Hughes [b], Declan Redmond [a]

[a] *UCD School of Geography, Planning and Environmental Policy*
[c] *UCD Urban Institute Ireland*
[b] *School of the Built Environment, Dublin Institute of Technology*

Abstract

In this paper it is intended to place the recent experience of the Irish housing market in the context of economic and property market cycles, how these interact over a property cycle and lessons from recent policy experience including interventions in the housing area. In spatial terms the current housing market can be seen as the result of an ad-hoc development led urban growth pattern which contributed to a dispersed development pattern with problems in oversupply. It is clear that alternative options exist to this approach and that evidence based management systems in terms of planning, development and financial decisions will be required to reduce the severity of future property market corrections.

The incidence of rapidly increasing residential property prices has been a feature of many international economies in the past decade. This has resulted in house price surges and corrections across much of the industrialised world. Factors associated with such surges include growth in housing demand often supported by relaxed monetary policy stances, planning and zoning systems and fiscal regimes which encourage the investment in residential property acquisition and development. The falling prices for housing in Ireland in 2007-2010 nationally has created a stagnating effect with purchasers reluctant to enter the market while the price correction is worked through. In turn suppliers, construction interests and vendors are highly reluctant to accept lower bid prices in the market due to often unrealistic expectations created during the long boom. The result of oversupply is falling prices, reduced occupation demand and decreased investor demand, leading to lower building activity and profitability. In addition the banking and liquidity crisis have contributed to a radical deterioration in economic circumstances and increasing out-migration. As part of the Urban Environment Project at UCD this working paper considers the current evidence of a market correction and oversupply in the Dublin region and Ireland based on data available up to March 2010 including the authors' working projections for 2010.

Keywords: *property cycle; Irish housing market; housing supply; housing demand; housing vacancy; planning and development.*

* Corresponding author: Brendan Williams
E: brendan.williams@ucd.ie. T: + 353 1 7162765
UCD Urban Institute Ireland Working Paper Series (1002)
ISSN 1649-3613 040310

1. Market Cycles and Policy Interventions in Housing Markets

In order to assess future housing market trends it is necessary to assess the implications of cyclical patterns of development and corrections. Decision making in the housing market is often subject to imperfect knowledge of shifting supply and demand trends related to changing economic conditions, changing planning and policy parameters and the time lag between development initiation and completion. For owner occupier dominated housing markets such as in Ireland, the combination of speculative supply processes, housing space demand with investment attributes and market sentiment creates a complex mixture of demand driven by housing needs and demographics, housing preferences and investment considerations. Research on housing markets and urban development policies in Ireland is hampered by the absence of up to date independent and reliable market data.

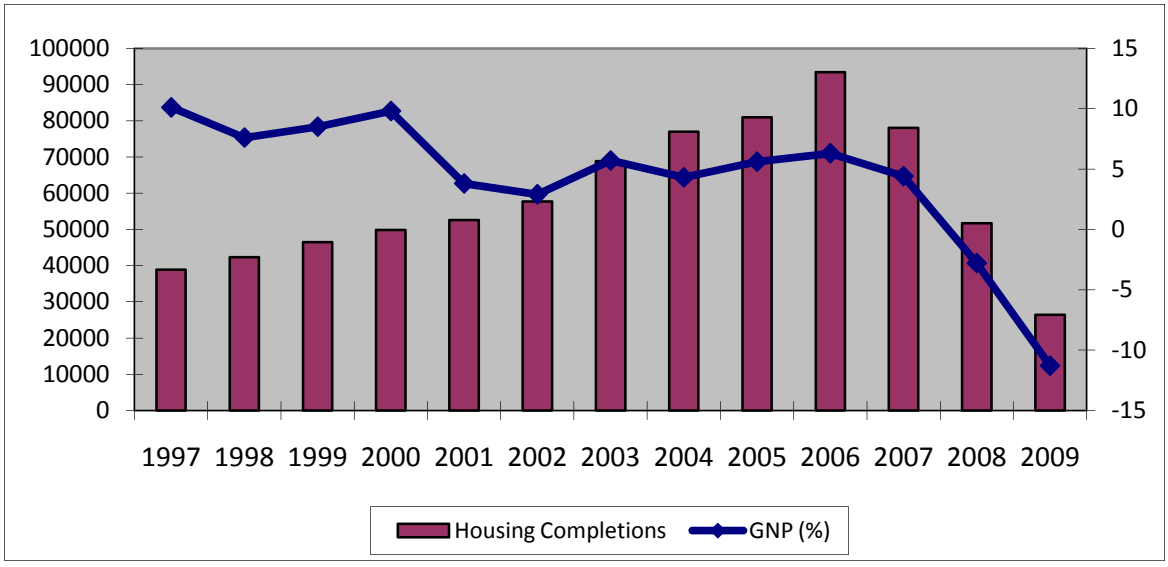
In this section it is intended to place the recent experience of the Irish housing market in the context of economic and property market cycles, how these interact over a property cycle with house price trends and policy initiatives. The Irish housing market is dominated by the owner occupied sector which is the principal focus of this research. It is apparent that the demand for housing can be seen as deriving from the changing demographic, economic and social context which emerged over the period from 1980s. In particular, the research notes the divergence between the potential or latent demand for housing examined to the effective or real demand experienced in the market during the recession in 2010.

It is clear that there is no internationally accepted economic measure of a fair or expected price for housing to purchase on an open market. It is more generally regarded as a market good subject to price rises and falls based upon market demand/supply interactions and investment sentiment. Affordability measures are generally divided into two sets of ratios or measures. The first group of ratios assess the relationship between incomes and house pricing levels or rental costs. In this way the relationship over time of average house prices to income levels may be assessed. Analysis of international historical norms shows that indicators such as families paying up to 30 % of their income on housing is regarded as sustainable by international agencies such as the US Department of Housing and Urban Development (www.hud.gov, 2010). This can be linked to other indicators including median price ratios of 3-4 times median income levels being considered sustainable. As house purchase markets are critically dependant on finance the second stream of approaches assess ratios borrowers might use to fund purchases. These can include the relationship between a deposit expected and annual income such as 1:1 or the percentage of monthly or annual income expected to be paid for the purchase of a home.

Divergence of a number of these ratios from historical norms is often regarded as a bubble in the market with eventual price deflation expected. Both the assessment of such ratios and seeking measures to avoid the negative consequences of sudden market shifts is a priority of governments experiencing market corrections. A particular concern is often the loan to value ratio of the debt incurred in house purchases to the shifting price/value of the property subject to the debt. This ratio increased significantly in many countries with a shift in bank lending practices towards 100% loans representing a leverage ratio of 1:1 (Central Bank Financial Stability Reports 2006). Any ratio higher than 1:1 occasioned by downward shifts in prices and often exacerbated by refinancing, second mortgages and home equity type arrangements results in negative equity. The result of negative equity is often high numbers of borrowers defaulting on loans which has major economic and social consequences.

Irish residential property prices have been at the top range of international price increases with major consequences for the market. This must be placed in the context that this growth followed a lengthy period from 1981-1987 during which the Irish economy was in recession and unemployment rose to levels exceeding 17%. While residential property held its price in nominal terms, during the 1980s the market experienced a major decrease in activity levels and price decreases in real terms allowing for inflation. This was followed by a period of gradual economic recovery in the 1987-1994 period (ESRI, various dates). The property market of these years experienced modest growth in an era with high interest rates related to the weakness of the Irish currency and the more cautious lending practices and business environment of domestic finance providers. It could be said that during this period the encouragement of the construction industry and supporting home purchaser demand were the principal concerns of policy makers. This was followed by a period of gradual economic recovery in the 1987-1994 period. With economic, employment and income growth over the period 1994 to 2007 along with strong fiscal support and incentives the price of housing rose to unprecedented levels.

The falling prices for housing in Ireland in 2007 -2010 nationally has created a stagnating effect with purchasers reluctant to enter the market while the price correction is worked through. The central link between economic growth and housing output is illustrated in Figure 1.

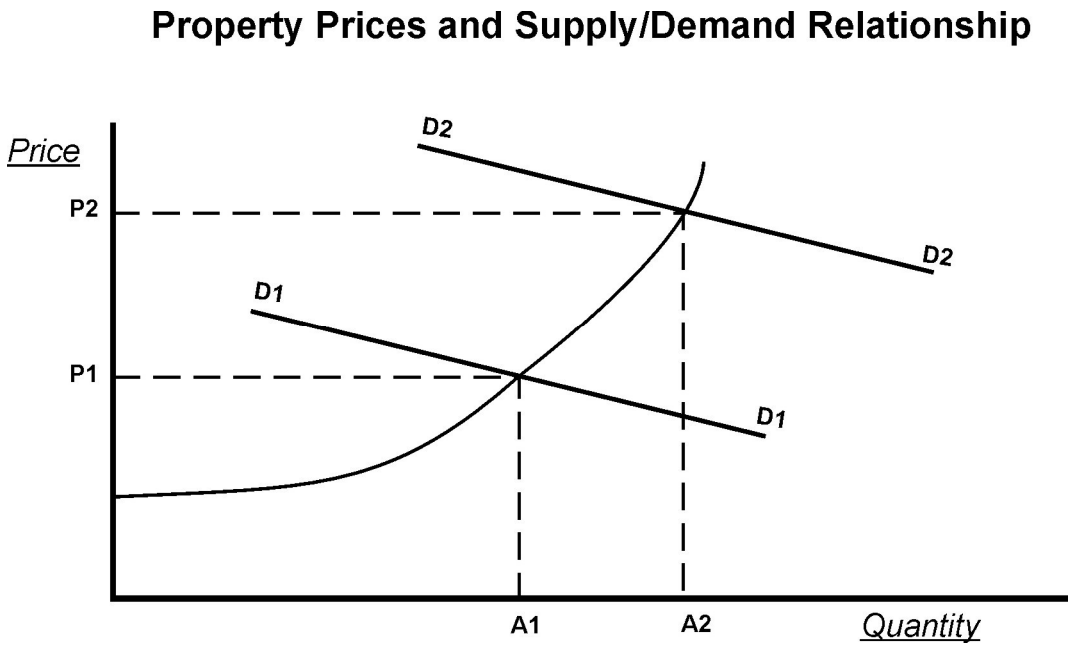


Source: Department of the Environment, Heritage and Local Government (various) and Department of Finance.

Figure 1 – Total House Completions and % Change in GNP

1.1 Analysing house price movements

This analysis of observed house price movements in Figure 2 begins with the quantity of accommodation fixed at A1, demand is indicated by demand line D1 which through the interaction of supply and demand has fixed the price of this type of space at P1. In Ireland during the 1980s for example little price movement was experienced due to a lack of underlying demand. Improvement in the general economy led to an increased level of demand D2 which, in competing for existing supplies, pushed the price level up to P2. At this new price, further accommodation is made available (A2). As the level of accommodation is relatively fixed in the short term due to supply inelasticity caused by factors such as the lack of serviced ready to go development land on the market, sudden changes in demand can lead to rapid price increases.



Source: Dubben and Williams (2009)

Figure 2 – Supply demand relationships

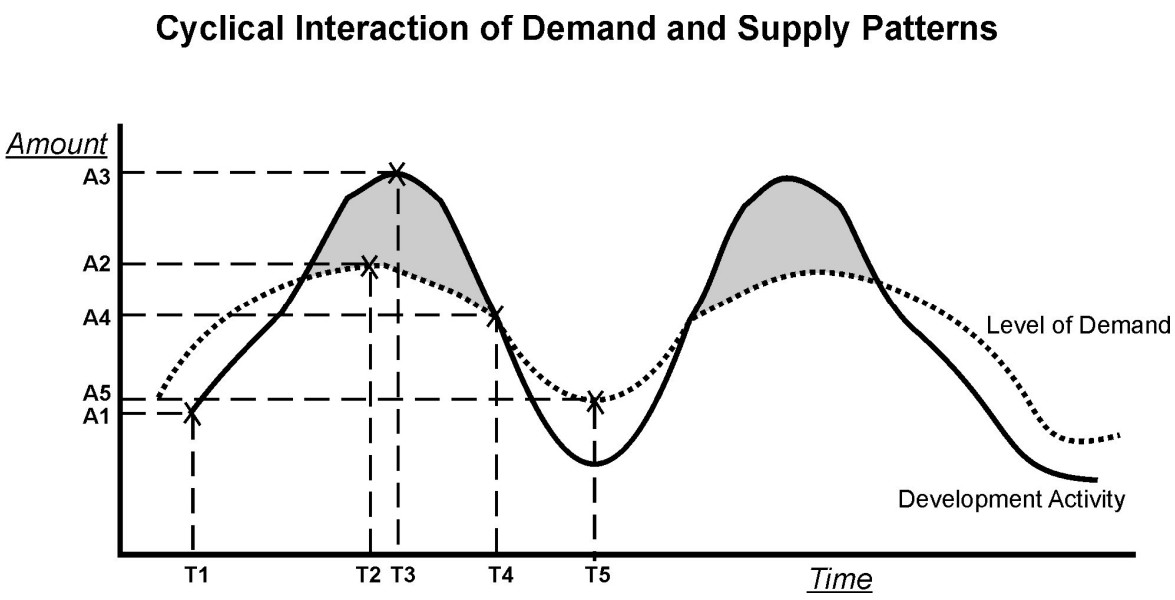
Within a speculative development market, profit-seeking suppliers respond to the new price level by increasing levels of accommodation. If however supply does not or is unable to respond to demand increases two impacts are felt. Firstly price increases occur at a continued high rate in the area of most demand and secondly demand is deflected into areas where supply is more easily delivered, such as green field sites at lower priced and more distant locations. Price rises are a feature of an expanding economy with potential purchasers and rental demand for accommodation exceeding supply and a resulting competing bids process driving up prices paid. For example over the late 1990s and early 2000s in Dublin a variety of sources placed estimates of 15-20,000 on demand levels while supply levels remained fixed at 10-12,000 per annum (Williams *et al.*, 2007).

When the economy goes into decline this market process is due for a reversal and price declines. This may be resisted by vendors and suppliers who have committed to development costs which will not be reflected in price reductions. For example with supply levels eventually matching and then exceeding

demand levels in 2007 price stabilisation and reductions became necessary. Suppliers and vendors who had incurred land and other costs in expectation of a rising market and continued high profits were unwilling in the short term to adjust prices until such shifts become inevitable. Public policy interventions aimed at maintaining price levels in such circumstances can be argued to be ineffectual and wasteful.

The next issue for examination is the issue of time periods or cycles over which the property market operates and its impact on development patterns. As a result of the different time frames within which such changes in demand and output occur development cycles and booms and slumps result. Demand for property is capable of changing very quickly due to improved economic activity, changes in interest rates and increased confidence. However, the supply of built space often lags behind such increases in demand and in later stages of the cycle fails to respond in the short term to the levelling off or reduction of demand as illustrated in Figure 3 which shows the importance of market cycles.

The example begins during a weak market phase during which development interests have not been active and the economy and property market have been experiencing low growth such as in Ireland in the 1980s. With weaker economic and market conditions levels of development are run down and the risk in market prospects leads to cancellation or postponement of development decisions.



Source: Dubben and Williams (2009)

Figure 3 – Cyclical Patterns in the Property Market

As a recovery or upswing eventually occurs at T1 the amount of development activity A1 lags behind demand as the time period for completion of housing projects will be a minimum of one to two years from initiation through planning to development. The impact of this time lag, with demand levels rising even modestly, is to drive up prices on the available stock making development activity substantially more profitable. Media reports of profitability in the Irish residential market during the recent favourable market period reported development profits in housing developments of up to 45% of Gross Development Value with resulting major uplifts in prices of development land. As evidence of increases in demand is analysed by development site owners the expectations of profitability

increase and supply of speculative new development is increased. At this point in the market financiers also become more willing to lend and the supply of property therefore rises to A3. With lead developments attracting sales and lettings at good profit levels this encourages increasing numbers of other and new developers to enter the market place. All are acting with imperfect market knowledge as to what the precise level of existing and future demand is.

Early entrants will experience high profits due to their having acquired sites for low prices during the weak phase of the market. Such entrants also have benefitted from the substantial incentives and supports introduced by successive Irish governments. However later entrants will push up both land prices and levels of supply, this increase in supply reaching completion at T3 may already have created supply beyond available demand at T2 as experienced in the period since 2007. Nevertheless, the nature of development activity is that once started, a construction project may not be abandoned without incurring substantial losses. The time span, over which a project will take to move from inception to completion, two years or considerably more for larger complex projects, makes judgements of supply/demand relationships difficult and such occurrences of oversupply common in past cycles.

The result of oversupply is falling prices, rentals and reduced investor demand, leading to decreased profitability. At this stage (T4), major new development proposals have been suspended and major reductions in development activity occur. With little or no development occurring effectively a correction or even over correction in market activity levels results. Thus the level of demand which stabilises even at low level will tend after a period of time to find supplies limited. This in turn will lead to rentals and prices increasing from their lower levels and the commencement of the next cycle. The tendency is then to repeat again the stages as already described at (T5). Interventions including those of the National Assets Management Agency (NAMA) which attempt to prevent downward price corrections can often delay rather than prevent the eventual normal market recovery process occurring.

Policy interventions in the housing market in Ireland have tended to be reactive in addressing short term cyclical market difficulties and blockages. In general these can be generally categorised as attempts to support or boost market activity levels. Wider long-term policy debates especially concerning the multiple fiscal interventions in the property and housing market have been limited. The role of property taxation in a wider sense, incorporating a role in financing of central and local government, has been raised but is not a political priority. The reluctance to engage in this broader debate is evident in the lack of any discussion on the benefits of more stable and affordable property prices to society. These benefits could include addressing societal needs, improving accessibility to housing and property which could enhance economic competitiveness but are often apparently outweighed by the concerns of maintaining current market pricing and activity levels.

1.2 Regional and market sub sectors

A major issue, under-recognised in the debate on housing market prospects is the regional and sub sector market dimension. During the upward movement in the property market the tendency is to view the national property market as moving in a unified manner. This can mask significant regional and intra urban differences which are most apparent in weaker market conditions. Areas experiencing the strongest levels of economic and employment growth such as Dublin and Galway have experienced the most significant growth in house prices and this upward movement obviously also creates pressure on the availability of affordable housing. Policy responses in contrast have tended, until now, to be country-wide (DoELG,1998, 1999, 2000a). While individual areas have their own housing strategies,

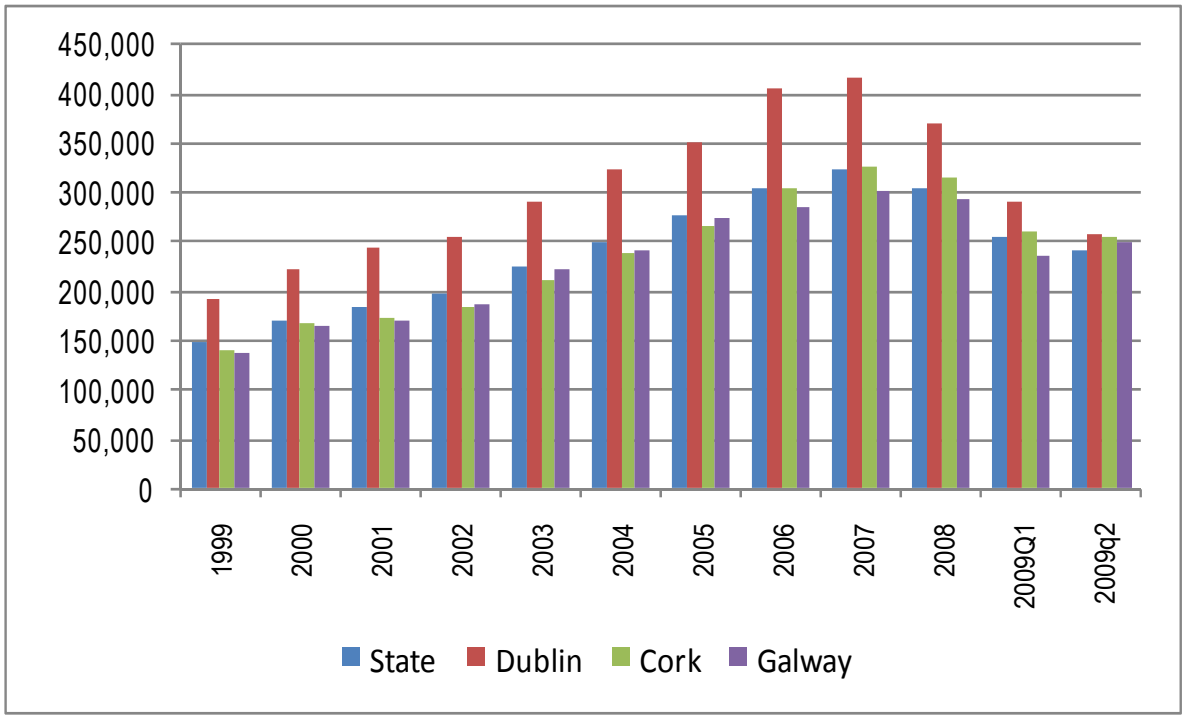
the taxation interventions supports and interventions are national in scope. Such interventions risk the wasteful allocation of resources to areas not in need and inactivity in areas most in need. An additional issue in the Irish urban development experience is that in spatial terms development patterns have been allowed in a highly dispersed or sprawl type pattern. This occurred as the housing needs of high growth areas such as Dublin were deflected into adjacent areas in an unmanaged growth pattern (Williams *et al*. 2000, 2002, 2003).

Significant regional variations in house price levels have developed based upon the disparity in regional supply/demand situations with the constraint on supply levels operating to lessen market ability to match demand in the Dublin area. This is less evident in other regions. Regional variations in the price levels of new housing reflect the particular constraints on the supply of available development land.

The role of sentiment and market expectation in price formation in the housing market is relatively strong. This can be seen in prices in market areas unaffected by such demand surges throughout Ireland also experiencing increasing price increases albeit at lower levels. The inelastic supply of housing development in Dublin at a period when employment and business space development was massively expanded created competitive market conditions pushing potential occupiers and purchasers to use all available capital resources to secure scarce housing. Marginal changes to stamp duty, tax rates and grants initiated to assist first- time purchasers simply added to the escalating bid prices for a housing product of which there was a critical shortage. The current market demonstrates that the sensitivity of price mechanisms to excess demand is immediate and upward while the operation of the downward price mechanisms in reaction to excess supply is delayed and contested by market interests.

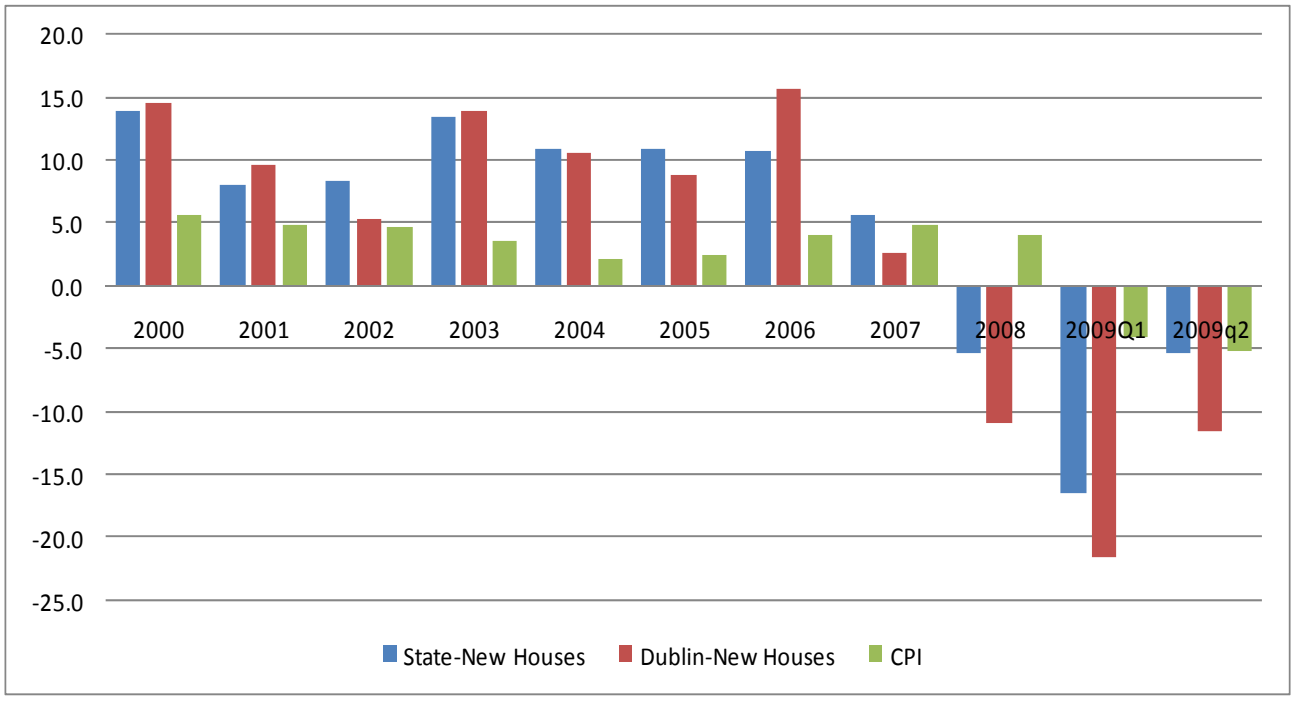
1.3. Housing market trends and affordability

In order to assess future house market issues it is necessary to incorporate the implications of cyclical patterns of growth and corrections. As outlined this occurs due to the imperfect knowledge of shifting supply and demand trends related to changing economic conditions, changing planning and policy parameters and the time lag between development initiation and completion. The following figures outline recent market trends for new housing in Dublin and Ireland. Figure 4 shows, in particular, the sharp decline in new house prices over the past two years, while Figure 5 contrasts nominal house price changes with changes in the inflation rate. The data series on house prices held by the Economic and Social Research Institute is more recent and confirms the continuing decline in house prices (www.esri.ie).



Source: Department of the Environment, Heritage and Local Government (various)

Figure 4 – New House Prices 1999-2009



Source: Department of the Environment, Heritage and Local Government (various)

Figure 5 – Percentage Change in New House Prices and Inflation

With a growing economy in the 1990s and supply/demand imbalances, growth in prices accelerated in this period. As the market price of housing escalated rapidly with the economic growth of the late 1990s the problem of affordability became a serious concern. A pause in economic growth prospects in 2001 was followed by a strong recovery from 2003 onwards with resulting strong housing market growth occurring. This price surge continued through to 2007 with active interventions by government continuing to incentivise development while simultaneously trying to assist house purchasers acquire affordable housing.

It can be argued that policy interventions aimed at pricing levels are often inappropriate. The arguments against pricing controls are widely made in terms of rent/price control as debated during the market upswing. It was suggested that such restrictions would lead to a curbing of the supply process. In reverse the same debate now emerges related to market support measures including NAMA and other measures which have the intended or unintended effect of supporting existing price levels. The reasonable conclusion is that such measures will assist holders of existing stock but fail to address more fundamental issues which would improve long term market efficiency. A more reasonable case can be made for the position that a reduction in the confusion of conflicting policy positions and overlapping initiatives aimed at house pricing issues and affordability is often advisable. Poorly resourced and ad-hoc initiatives can prove at best inefficient for the operation of the housing market and at worst have unintended and wasteful impacts given the scarce resources available.

A review of the key demand features is necessary in 2010 in light of major economic changes over the recent period. This includes the major downturn in economic conditions and the crisis in the financial sector. The economic cycle has moved sharply downwards and negative income, employment and population trends are expected over the next two years. With negative sentiment/little confidence/fear and limited credit availability house prices and supply levels have reduced significantly. This is in line with expectations that demand for property is a derived demand linked strongly with real economic growth and decline. In particular critical indicators show 2009 commencements are expected to be down 53% and 2009 completions estimated at under 26,000 with the estimates of this research on supply for 2010 and 2011 under 20,000 per annum. The value of loans paid out in 2009 was down 56% on 2008 figures and the most recent 2009 figures indicate credit growth at its lowest level since the beginning of 1994 (Tables 1 and 2). The overall decline in the value of loans paid out as the property market went into decline over 2007 and 2008 is clear in Table 1.

Table 1 – Number of Residential Mortgages Issued

Year	Total[1] N	First Time buyers N
2005	201,260	37,879
2006	203,953	37,064
2007	158,098	30,469
2008	110,305	19,946
2009	45,818	12,684

[1] Total mortgages includes first time buyers, mover purchases, investment to let, remortgaging and top-ups.

Source: Irish Bankers Federation, http://www.ibf.ie/researchset.html

Table 2 – Value of Residential Mortgages Issued

Year	Total Mortgages[1] €m	First Time buyers Mortgages €m
2005	34,114	7,717
2006	39,872	8,448
2007	33,808	7,250
2008	23,049	4,833
2009	8,076	2,671

[1] Total mortgages includes first time buyers, mover purchases, investment to let, remortgaging and top-ups.

Source: Irish Bankers Federation, http://www.ibf.ie/researchset.html

In the latest trends based on figures released in February 2010 by the Irish Bankers Federation the volume of new lending in Q4 2009 was down 18% compared to the previous quarter and was down 47% year on year reflecting the general economic environment and lending patterns. The average value of mortgages issued was stated to be back at levels similar to early 2005. The resulting supply contraction is a matter of concern as the supply of housing moves below its 40 year historical average as listed below.

Table 3 – National House Supply Averages - 40 Year trends

Years	Average supply per annum
1970s	22,919
1980s	23,338
1990s	30,191
2000s	63,643
40 year average (1970-2009)	35,022
20 year average (1990-2009)	46,917

Source: Department of the Environment, Heritage and Local Government (various years)

Critical issues arising from this analysis are those of finance availability and lending in a falling market. This will include banks current and future capacities and attitude to lending and credit risk. As we move from a vendor to purchaser driven market price pressures are downward in spite of the reluctance of market interests to make such reductions. Housing affordability has continued as a major problem as house prices continue to remain at very high multiples of average incomes and loan to value ratios move from 100% to lower levels.

2. Future Housing Supply and Demand [1]

It is now clear that due to the economic and financial downturn the effective national demand for housing is likely to be at much lower levels than pre-recession forecasts of a potential annual underlying housing demand of c.45,000 per annum nationally (ESRI, 2003: Mc Carthy *et al.*, 2003). These levels of demand would remain valid in the absence of net out-migration as it represents the natural growth and demographic analysis of age cohorts and household formation rates. However, as out-migration accelerates and thus balances the influence of natural growth, housing purchase demand reduces. While a potential need for or latent demand for affordable housing remains, the effective purchasing demand is then reduced and in particular purchasers are unwilling to pay previous high market prices.

While the supply of further new housing is reducing with virtually all large scale projects suspended this research estimates that during 2010 the National Asset Management Agency (NAMA) may identify and financially resource perhaps several thousand additional residential units in the State which are at a near completion stage so that this viable-to-completion (VTC) stock could then be added to the flow of new housing. Apart from a supply of 10,000 to 15,000 one-off houses (OOF) at present, practically no residential estate-type construction is in hand. Whilst a modest level of second-hand housing transactions are reported from June 2009 onwards, the resumption in the supply and sale of new housing will from 2010 onwards largely depend both on direct NAMA funding for completion of VTC stock and likewise on its progress in recapitalising the main banks on an assumption that this will enable mortgage lending to resume for new-build housing supply. This radical reduction in short term effective demand to 20,000 per annum or less in the years 2010 and 2011 needs to be considered in light of the emerging evidence of a major supply surplus in the housing sector. Accordingly, a record level of vacant stock now overhangs the market which was already showing evidence of high vacancy levels in 2006 as per Table 4.

Table 4 - Housing Stock as Occupied, Vacant and Percentage Vacant, April 2006

	Occupied Stock A+B+C	Vacant Stock D+E+F	Total Stock	Vacant %
Dublin City	197,006	26,092	223,098	11.70
DLR	70,580	6,928	77,508	8.94
Fingal	82,031	7,878	89,909	8.76
South Dublin	82,077	5,407	87,484	6.18
Total - Dublin	431,694	46,305	477,999	9.69
Kildare	62,002	6,838	68,840	9.93
Meath	54,772	6,485	61,257	10.59
Wicklow	43,511	5,577	49,088	11.36
Total – Mid-East	160,285	18,900	179,185	10.55
Total – GDA	591,979	65,205	657,184	9.92
Total – RoS	911,312	201,117	1,112,429	18.08
Total – State	1,503,291	266,322	1,769,613	15.05

Source: CSO 2006 Census, Vol. 6, Table 43, p. 111.

[1] The demographic and statistical analysis in this section was largely conducted by Brian Hughes, DIT.

NOTE: CSO Occupation//Vacancy definitions: A=Usual Residence; B=Visitors; C=Temporarily absent, D=Vacant House; E=Vacant Flat; F=Holiday home. For the purposes of this research the categories used for 'occupied' are 'A', 'B' and 'C. Accordingly, the interpretation of 'vacant' includes categories 'D', 'E' and 'F'.

In summary, Table 4 confirms that in April 2006 almost one-in-six units in the State was vacant with the Rest of State (RoS) surplus being over 80% greater than that of the Greater Dublin Area (GDA). The next Table 5, also for 2006, differentiates between the population to housing stock ratio and population to occupied housing stock ratio, thereby identifying the extent of surplus accommodation. It is noted in comparing housing statistics in the European Union since the 1980s (Federcasa, 2006) that the Irish State's population to housing stock ratio or average house hold size has declined from a ratio of 3.7 persons per household in 1980 to 2.9 persons per household by 2004. This ratio was still generally higher than the European average estimated at 2.4 in 2003 and has moved towards this level over time. The continuing emergence of higher levels of non-nucleated households together with future demographic growth could counter-balance the weakening effective affordable demand associated with higher unemployment and flat economic-growth prospects. Nevertheless, much of Ireland's surplus stock, especially in the rest of state area excluding Dublin is not in areas where demand is likely to recover in the short term. Table 5 examines the housing stock in the GDA by comparison to the RoS in 2006

Table 5 - Housing Stock, Population and Housing Densities, April 2006

	Total Stock	Vacant %	Total Population	Population to housing stock Ratio	Population to occupied stock Ratio
Dublin City	223,098	11.7	506,211	2.27	2.57
DLR	77,508	8.94	194,038	2.5	2.75
Fingal	89,909	8.76	239,992	2.93	2.67
South Dublin	87,484	6.18	246,935	2.82	3.01
Total - Dublin	477,999	9.69	1,187,176	2.48	2.75
Kildare	68,840	9.93	186,335	2.71	3.01
Meath	61,257	10.59	162,831	2.66	2.97
Wicklow	49,088	11.36	126,194	2.57	2.90
Total – Mid-East	179,185	10.55	475,360	2.65	2.97
Total – GDA	657,184	9.92	1,662,536	2.53	2.81
Total – RoS	1,112,429	18.08	2,577,312	2.32	2.83
Total – State	1,769,613	15.05	4,239,848	2.40	2.82

From Table 5 the extent of the State's housing vacancy levels becomes apparent. Analysis of the 2006 individual administrative county vacancy rates in the GDA area indicates variations within vacancy levels with an aggregate vacancy level of 65,205 units at 9.92% in the GDA with above this average in Dublin City, Meath and Wicklow and below average in South Dublin. The position outside the GDA presents clear evidence of chronic over-supply representing over 18% of total housing stock.

Prior to Census 2006, vacancy levels were not published with census data. Historic vacancy levels were assessed using house completion and utility connection estimates in previous research. Analysis

over the period 1971 – 2002 (Fitzgerald, 2005) indicates that gross vacancy levels including all categories averaged c.10% over this period.

Assessing an appropriate vacancy level within total housing stock can be regarded as necessary to allow a normal property market to operate efficiently. Vacancy rates can differ substantially for owner occupied markets and rented markets. At the European Union level comparative studies on the housing stock, including vacancy levels, were completed in the past decade (Norris and Shiels, 2004; Federcasa 2006). In the 2006 study it is noted that difficulties exist in interpreting the variety of national market tenure types. This was due to issues including the reliability of data and interpretation of national statistics with countries with a strong tourism/second home sector displaying potentially the highest vacancy rates. Comparisons in this study also include countries in north west Europe such as the UK and Netherlands which have lower reported vacancy rates at 3.4% and 2.2% respectively. Other international agencies such as the US Census Bureau (www.uscensus.gov, 2010) maintains a very detailed housing inventory, updated on a quarterly basis, and for example in the USA vacancy levels of 2-3% are normal for the owner occupied sector while up to 10 % is the expected for rented residential property. With a predominantly owner occupied residential market and in light of the international evidence we consider a maximum or standard vacancy rate (SVR) of 5% to be appropriate for Ireland having excluded holiday homes from the numbers vacant. This vacancy guideline of 5% facilitates both labour liquidity and residential market transaction churn. Regarding obsolescence due regard has been had to housing refurbishments, extensions and conversions. Based on the fact that almost 40% of the State housing stock is only ten years old, it is considered that an appropriate obsolescence factor of 0.5% is justified.

To analyse the more recent trends Table 6 was prepared based upon results from the CSO publication of its 2009 Population and Migration Estimates together with full DoEHLG 2009 housing supply statistics updated to April 2009:

Table 6 - Housing Stock and Population as estimated, April 2009
(In the absence of county-level disaggregates the county populations shown are estimates by the research team)

	DoEHLG-data end-yr. 2008 Housing Stock ()	Estimated stock at April 2009 (Supply)	Population. & Migration . Estimates. Population at April 2009 (regional level)	Population to stock ratio
Dublin City	241,035	242,000	520,500	2.15
DLR	84,496	84,900	196,000	2.31
Fingal	101,275	102,000	245,000	2.40
South Dublin	94,853	95,200	250,000	2.63
Total - Dublin	521,659	524,100	1,211,500	2.31
Kildare	77,540	78,000	206,000	2.64
Meath	68,515	68,800	180,000	2.62
Wicklow	53,494	53,800	139,500	2.59
Total – Mid-East	199,549	200,600	525,500	2.62
Total – GDA	721,208	724,700	1,737,000	2.40
Total – RoS	1,250,781	1,254,900	2,722,300	2.17
Total – State	1,971,989	1,979,600	4,459,300	2.25

The following Table 7 shows the 2009 updated analysis based on the 2006 census totals for the three categories of vacant property, as per CSO Table 43. Until the 2011 census data are to hand it will not be possible to give exact levels of vacancy. The 2009 total vacancies are pro-rata indicative estimates of the vacant categories 'D', 'E' and 'F' between April 2006 and our April 2009 totals. The overall number of housing units completed from 2006 to 2009 has been aggregated from DoEHLG data. The numbers vacant and occupied have been estimated by use of data on population and population to stock ratios over this period allied with discussions with financial and market sources indicating that over one third of additional stock over the period remains vacant. The estimate on holiday homes at 64,520 may be high given anecdotal evidence that due to the recession some of this stock is, if market conditions permit, available for sale thereby increasing vacancy levels.

Table 7 – Vacancy Levels 2009

	'D'	'E'	'F'	Total
	Vacant house	Vacant Flat	Holiday home	Vacant
2006	174,935	41,598	49,789	266,322
2009	226,691	53,905	64,520	345,116
Increases	51,756	12,307	14,731	78,794

Source: Adapted from CSO Table 43 (2006), Vol 6 Census:

These estimates are estimated at county level for Dublin and the Mid East Regions and at rest of state level in Table 8.

Table 8 - Housing Stock, Population and Vacancy, April 2009

	P. & M. Estimated. Population at April 2009	Population to occupied stock ratio	Occupied Housing Stock	Vacant stock at April 2009	Vacant % at April 2009
Dublin City	520,500	2.46	211,585	30,415	12.57
DLR	196,000	2.57	76,264	8,636	10.17
Fingal	245,000	2.76	88,768	13,232	12.97
South Dublin	250,000	2.85	87,188	8,012	8.42
Total - Dublin	1,211,500	2.65	463,805	60,295	11.50
Kildare	206,000	2.97	69,360	8,640	11.08
Meath	180,000	2.96	60,810	7,990	11.61
Wicklow	139,500	2.97	46,969	6,831	12.70
Total – Mid-East	525,500	2.97	177,139	23,461	11.70
Total – GDA	1,737,000	2.71	640,944	83,756	11.56
Total – RoS	2,722,300	2.74	993,540	261,360	20.83
Total – State	4,459,300	2.73	1,634,484	345,116	17.43

Adapted from CSO data In the absence of county-level disaggregates from the CSO, the county populations are estimated by the research team.

Within the GDA it is clear that the administrative areas which have experienced the most intensive levels of house building, namely Dublin City, Fingal and Dún Laoghaire-Rathdown - and to a lesser extent Kildare and Meath - are those where the house-building surpluses have accelerated since the 2006 census.

The research team are currently working on 2010 population, housing and vacancy figures. Population projections and ongoing research indicates the national housing vacancy level remaining at approximately 17% for April 2010. It has been estimated that the excess supply component in this vacant stock is 171,718 of the total 345,116 gross vacant stock allowing for 64,520 holiday homes, obsolescence in the housing stock at 0.5% and a standard vacancy rate of 5% of the total stock.

Table 9 – Supply Excess

Gross vacant stock	345,116
Holiday homes	64,520
Net vacant stock	280,596
Allow 5% Standard Vacancy Rate	98,980
Allow 0.5% Obsolescence rate	9,898
Excess surplus	171,718

These figures are comparable to the published estimates in current research at the National Institute of Regional and Spatial Analysis which indicated an overall vacancy levels in excess of 300,000 (www.nirsa.ie)

3. Future Trends and Policy implications

Future prospects are that different regions and sectors of the market will have varied reactions to any change in current levels of economic growth. Problems of oversupply are now clearly evident in many regional markets where supply exceeds demand for the coming period. The situation differs in parts of the Greater Dublin Area which could recover more quickly in terms of its demographics, income, employment and household formation levels particularly at locations with good transport infrastructure and facilities. The central importance of location, transportation and access will again dominate in an emerging market with greater options or choices for purchasers in the region than had been previously available. Location issues will play a major part in varying intra –urban price differentials and price movements. It is already clear that regional price structures will reduce and consolidate with prices stabilising first in market segments such as the traditional family homes where there is an absence of supply and continuing to move downwards where no significant constraints exist. Particular problems continue to be experienced with volume developments in areas with weak location attributes or services and individual locations and housing markets which are particularly dependent on a limited economic base or where a single employer dominates.

Following this correction future price growth can be expected to be moderate relative to recent trends particularly for peripheral and commuter locations. For many regions in the rest of the state the evidence is that a significant oversupply will overhang the market over a longer period. It is estimated, in this research that the national housing vacancy rate as of March/ April 2010 to be 17%.

The level of excess supply in this vacant stock is estimated at approximately 170,000 of the total 345,000 vacant stock which allows for holiday homes, obsolescence in the housing stock and a standard vacancy rate of 5%.

In summary, as at 2009/2010 an unsustainable vacancy rate exists throughout the State. In particular the Rest of State vacancy level remains in serious oversupply since its census 2006 position and there would appear to be over 4 years of potential oversupply nationally. In the context of an Irish economic recovery being deferred to 2011 potential shortages are unlikely to arise. In fact with the economic down turn it is increasingly likely that vacancy levels could increase. When an economic recovery does occur residential take-up would be expected to take the form of a lagged response as was experienced in previous recessions. That is because population growth itself is a lag response to economic recovery. Furthermore, the extent and depth of this particular downturn would suggest that a sudden return to robust end-use demand for housing is unlikely. In order to assess individual area levels of house supply and demand it would be necessary to update sub-county level surveys to identify stock suitability and related shortfalls.

In the period since the 2006 census, additions to stock have increased the oversupply problem. The 2006 census State housing stock is recorded at 1,769,613 units, some 266,322 or 15.05% which were deemed vacant. In the intervening two year period considerable further development has occurred. Our research estimates total State housing stock at April 2010 at approaching 2 million units. The overall conclusion on supply is that currently we are significantly overbuilt as has been reported recently in commentaries on research by the National Institute of Regional and Spatial Analysis (NIRSA) who incorporated the GeoDirectory database analysis in arriving at national vacancy levels (Irish Times, 04-02-2010).

This evidenced-based research shows the wide spatial contrast as between GDA and RoS areas with confirmation of chronic housing over-supply in many RoS area counties. The divergence was already evident in the 2006 vacancy level of 29.3% in Leitrim when compared with 9.7% for Dublin. This raises concerns of consistency to-date in the delivery of national-level strategy housing policy implementation given the regional nature of the problems. Realistically, there will be some house-building activity in the RoS area, to satisfy one-off or pockets of demand in some counties. The overall conclusion for many rural counties is that volume house-building activity, if it is rationally related to demographic demand, will require careful individual assessment and resource management for what will be many years of over-supply. There is a pressing need to devise and implement a housing management model applicable at a regional and county level. It should take account of wider demographic issues such as the growth dynamic of individual components of regional natural growth and migration. In addition, it should provide for both external as well as internal, inter-regional movement analysis as part of housing supply and demand analysis.

There are many policy lessons to be learnt from past experience. The economic and employment consequences flowing from a low level of housing new-build requirement until 2013 will be experienced in many parts of the State. This indicates the need for supply and end-use demand studies at macro as well as micro-level to be made mandatory for medium and large mixed -use or residential planning applications. In addition it is evident that the current zoning/rezoning processes operating in the Irish planning and development process have failed. The largely unregulated property finance industry, combined with a development-led planning process, have contributed to an outcome that is unsustainable. It is clear that our land zoning and rezoning policies have badly failed and require replacement. In particular excessive and inappropriate rezoning, including in flood plains, has served to undermine the legitimacy and accountability of the development and planning process throughout

the country. Proposals for reform in this area have remained under consideration since the report of the Oireachtas all party committee (Government of Ireland, 2004).

Levels of vacancy demonstrate that the management of urban development in Ireland was not linked with realistic assessments of real market demands and was, instead, largely speculative. High levels of speculative financial activities, often linked to questionable land zoning and planning decisions, have contributed to a property market collapse, necessitating a subsequent rescue of the Irish owned and managed banking sector and property market at a major cost to the Irish state and taxpayer. The cost to the state of these failed development projects is significant, as the taxpayer may now also bear the cost of managing both the loans and the physical developments within the current NAMA bank rescue plan.

The extent of vacant developments and the NAMA rescue plan necessitate reconsideration of the planning and development system, which played a major part in current market failures. It is clear, for example, that the implications of current market vacancy levels have major consequences for the future prospects and valuations of development land, as clear evidence emerges as to the nature of the NAMA loan book and the underlying property assets. Valuations of development land based on the expected sale of completed developments will need to be revised severely downward to reflect their current use and limited development potential.

The current planning and development system remains hampered by inherent policy design flaws, including the ease with which major alterations can be made to agreed development plans by rezoning without appropriate evidence or justification based on end-use demand. An unreformed and fragmented local authority and planning system has overseen unparalleled urban growth, which often bears little relationship to the requirements of national and regional development policies (DoEHLG, 2002b; NESC,2004). Many regions have major residential developments both in locations where demand is absent and at other locations where occupiers are without adequate infrastructure, transport and social services. It is no exaggeration to say that a zoning/rezoning system failure is observed in terms of achieving managed development and which requires reform as suggested by recent government initiatives.

The core principle of the measures announced in the Planning and Development Bill, 2009 is that planning decisions should be taken on the basis of an evidence-based core strategy, supported by factual evidence, is long overdue. This legislation also intends to strengthen the powers of regional planning guidance to avoid a continuation of the fragmentation involved with current organisational structures. In addition it is clearly necessary to include measures in legislation to place some practical and absolute blockages in the way of corruption and malpractice especially relating to land rezoning. This should to be backed up by clear rules based on available best international standards and conflicts of interest guidelines.

Acknowledgements

The authors would like to acknowledge the comments of Dr. Enda Murphy (UCD) on an earlier draft of the paper. This work was partly funded with the support of the Environmental Protection Agency under contract 2005-CD-U1-M1.

References

Central Bank (2006) *Financial Stability Report*, Central Bank, Dublin.

Central Statistics Office (various dates) Census and housing data, Stationery Office. Dublin.

Central Statistics Office (2007). *Census 2006 Volume 6: Housing*, Stationery Office, Dublin.

Central Statistics Office (2007). *National Population Projections 2011-2041* Stationery Office, Dublin.

Central Statistics Office (2008) *Regional Population Projections* (2011-2026), Stationery Office, Dublin.

Department of the Environment and Local Government (1998) *Action on House Prices.* Department of the Environment and Local Government. Dublin.

Department of the Environment and Local Government (1999) *Action on the Housing Market* Department of the Environment and Local Government. Dublin.

Department of the Environment and Local Government (2000a) *Action on Housing* Department of the Environment and Local Government. Dublin.

Department of the Environment and Local Government (2002b) *National Spatial Strategy for Ireland 2002-2020 – People, Places and Potential*. Department of the Environment and Local Government. Dublin.

Department of the Environment, Heritage and Local Government (various years) *Annual Bulletin of Housing Statistics.* Department of the Environment, Heritage and Local Government. Dublin.

Department of the Environment, Heritage and Local Government (various years) *Planning Statistics.* (Department of the Environment, Heritage and Local Government. Dublin.

DoEHLG (2002). *Making Ireland's Development Sustainable – Review, Assessment and Future Prospects*

DoEHLG (2007). *National Population Projections and Regional Population Targets 2006-2020*

DoEHLG (2002). *National Spatial Strategy*. Stationary Office, Dublin.

Dubben, N and Williams, B (2009) *Partnerships in Urban Property Development.* Wiley Blackwell Publishers, Oxford, UK.

Economic and Social Research Institute (2003), *Medium Term Review 2003-2010*. Economic and Social Research Institute. Dublin.

Economic and Social Research Institute (ESRI) (various dates to 2009) *Quarterly Economic Commentary*, ESRI. Dublin

Fedestra (2007) *Housing Statistics in the European Union 2005/2006*, Ministry of Infrastructure in the Republic, Rome, Italy

Fitzgerald, J (2005) *The Irish Housing Stock: Growth in Number of Vacant Dwellings*. Quarterly Economic Commentary. Spring Edition. ESRI. Dublin.

Government of Ireland (2004) *The All-Party Oireachtas Committee On The Constitution Ninth Progress Report: Private Property*, Stationery Office. Dublin.

Irish Times 4-02-10 Report by Frank Mc Donald, New report will show number of empty homes well above 300,000.

McCarthy, C., Hughes, A. and Woelger, E. (2003) *Where have all the Houses Gone*? Davy Stockbrokers Research Report. Dublin.

National Economic and Social Council (2004) *Housing in Ireland: Performance and Policy*, National Economic and Social Council, Report no. 112. Dublin.

Norris, M. and Shiels, P. (2004) *Regular National Report on Housing Developments in European Countries: Synthesis Report*. Stationery Office. Dublin.

Williams, B. and Shiels, P. (2000) 'Acceleration into Sprawl: Causes and Potential Policy Implications' *Quarterly Economic Commentary*, June 2000, Economic and Social Research Institute. Dublin.

Williams, B. and Shiels, P. (2002) 'The Expansion of Dublin and the Policy Implications of Dispersal' *Journal of Irish Urban Studies*, 1 (1), pp. 1-21.

Williams, B., Shiels, P. and Hughes, B. (2003) 'Access to Housing: the role of housing supply and urban development policies in the Greater Dublin Area', *Journal of Irish Urban S*tudies, vol. 2, no. 1. pp. 25-52.

Williams, B., Shiels, P. and Hughes, B. (2007) *Urban Sprawl and Market Fragmentation. Implications for the housing market in the Greater Dublin Area*. Study commissioned and published by the Society of Chartered Surveyors

Websites accessed;

www.hud.gov February 21st 2010

www.uscensus.gov February 21st 2010

www.nirsa.ie March 4th 2010