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"*The Debt of the Irish*": Insights from the 'Boom and Bust'
in the Greater Dublin Area's Residential Property Market"

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Abstract

Ireland's residential property market, which inflated rapidly between 1997 and 2006, has witnessed a dramatic slump since 2007 with house prices falling by over 37% on average. The systemic cause of this property crash was over-reliance by Irish banks on commercial and residential property lending. In the 'bust', many of these lenders have required recapitalisation or nationalisation, placing significant strain not only on the economy and society, but have also necessitated the financial intervention of the EU/ECB/IMF. At the household level, difficulties abound for recent house purchasers who are indebted through mortgage borrowing on highly overvalued houses. The numbers of households in negative equity has risen sharply, as have the number of mortgage accounts in arrears or default. This paper examines some of the consequences of the property slump, focusing in particular on the negative impacts on households who purchased at the height of the property bubble. It provides an overview of the bubble in the Dublin housing market from the mid 1990s and examines the pattern of unsustainable residential development in the region. It then explores the current Irish debt crisis in more detail by an examination of the results from the recent stress tests of the Irish banks, and considers the response of the Government to the problem. The paper concludes by identifying further areas for research in the nature of mortgage debt, including the need for greater analysis of the coping mechanisms of households and the forbearance practices of lenders.

1.0 Introduction

The extent of Ireland's economic crash following the global financial crisis has been unparalleled in western economies, as Ireland has witnessed a GDP decline of 21% between 2007 and 2010 (Lane 2011). Over-reliance on property investment and imprudent lending have been core ingredients in this crisis (Honohan 2010). Interest has renewed in understanding the dynamics of the home ownership and mortgage markets as they developed over the Celtic Tiger period (1994 – 2007) in Ireland, and their role in precipitating the country's economic decline. From 1994, the Irish population grew rapidly, as did employment and incomes, thereby stimulating housing demand (Norris and Winston 2011). The liberalisation of mortgage credit availability and the greater interconnection between the Irish and international banking sectors from the late 1990s served to stimulate competition in mortgage lending (Kelly and Everett 2004). House prices and residential investment rose faster and higher in Ireland than any other OECD country from 1998 (Andre 2010).

Since 2007, however, the situation has changed dramatically. The crystallisation of lending losses on speculative property development by Irish banks led to the government guaranteeing bank debts and taking over impaired property assets, which has affected the financial stability of the State (Kelly 2010 (a)). The extraordinarily large drawdown of residential mortgage credit by households over the boom, coupled with a substantial excess supply of residential development, particularly in weak, peripheral locations, is now interacting with constrained credit conditions in the bust (Kitchin, Gleeson et al. 2010). Ireland has witnessed among the most spectacular falls in house prices in the developed world (EMF 2010; Lea 2010). These factors have interacted with a wider downturn in economic activity to produce a very serious situation regarding unsustainable mortgage debt.

This paper analyses the publically available data relating to the bursting of the residential property bubble through a focus on the Greater Dublin Area. Section 2 analyses the trends witnessed in the housing and mortgage market in the region over the boom and bust from 1994 – 2009. Section 3 outlines the consequences of the bust for mortgage holders in terms of unemployment, negative equity, arrears and possessions. Section 4 examines the potential implications of the housing market crash going forward, and comments upon the government's response to the problem. Section 5 provides conclusions.

2.0 The Dublin Housing Market: the Bubble and the Bust

This paper focuses on the implications of the residential property crash in one region, the Greater Dublin Area (GDA), which is defined by the "core" local authorities of Dublin City, Dun Laoghaire/

Rathdown and South Dublin and the suburban and "peripheral" local authorities of Fingal, Meath, Kildare and Wicklow (Figures 1 & 2). This region represents the effective Dublin housing market and is an appropriate focus for Irish housing and mortgage lending trends. In 2002, its share of the national population was 40%, with a further 40% share of employment concentrated here in 2005, and a greater than average concentration of employment in the higher earning services sector (Walsh 2007). Following Ireland's economic boom from 1994, the failure to promote alternative growth centres has also contributed to Dublin's dominance in terms of industry, jobs and housing output (Winston 2007). Increasing population and employment led to greater housing demand, rising house prices and mortgage borrowing. Favourable fiscal treatment of owned housing, such as Mortgage Interest Tax Relief and no stamp duty for First Time Buyers (FTBs) also stimulated demand for private housing (Shiels, Norris et al. 2007). Between 2002 and 2006 the number of mortgaged households in the GDA increased from 215,000 to 244,000 (CSO 2002; CSO 2006).

Figure 1 – The Greater Dublin Area (GDA)

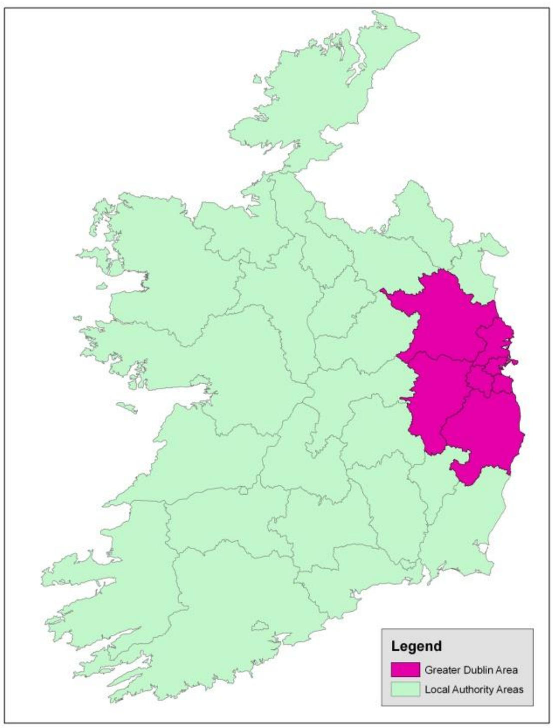


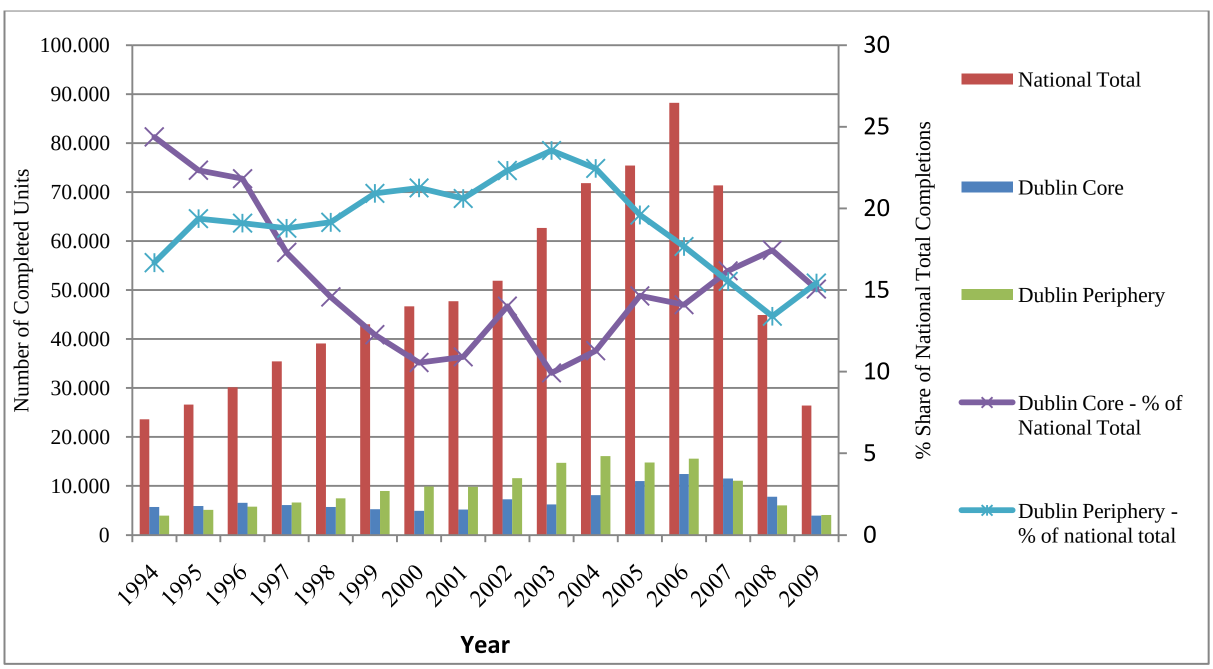
Figure 2 – The GDA by Local Authority Areas and Core/ Periphery divide

Source: (CSO 2011 (a))

Housing Supply

Ireland has increasingly adopted a pervasive Anglo-Saxon housing model based around reducing State housing provision, increasing access to private housing finance and the embracing of an ideology focused around the benefits of individual, private ownership (Ronald 2008; Norris and Winston 2011). Housing supply increased rapidly in Ireland from 1994, as a result of government policy support, fiscal incentives and credit liquidity for the construction sector. As the boom intensified, housing demand outstripped supply in the core residential areas of Dublin City and a spatial deflection of housing demand to the periphery resulted (Williams, Hughes et al. 2007). This deflection was caused by historic under-supply in the Dublin City area, infrastructure shortfalls, poor levels of ready serviced land for development, deficiencies in the number of professional planners and by the extensive reserve of zoned land in peripheral locations (Redmond and Norris 2005) The "core area" loses its percentage share of national annual house completions declining from 24% in 1994 to 10% in 2003 (Figure 3). Comparatively, the periphery rapidly increased its share of national completions from 17% to 24%. It was only from 2003 that output increased significantly in Dublin City, on foot of recommendations from the Bacon Report regarding supply imbalances for private housing (Bacon 2000). This sprawl pattern of development takes place at a time of rapidly appreciating prices and an affordability problem, particularly for younger First Time Buyer (FTB) purchasers and lower income households (Downey 2005). Hence, as prices rose and mortgage borrowing and leveraging increased, growth was increasingly accommodated in weaker, peripheral sub-markets.

Figure 3 – Numeric and Percentage Share Change in House Completions Nationally and in the Core and Periphery of the Dublin City Region, 1994 to 2008

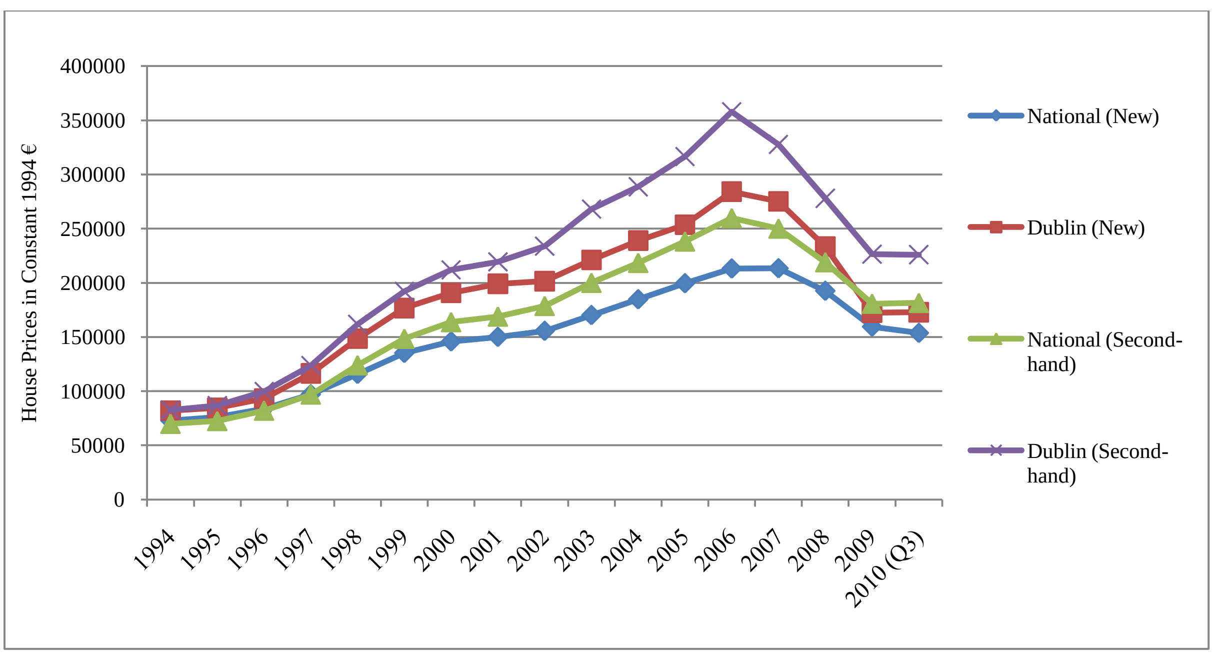


Source: (DoEHLG various)

House Prices

As housing demand intensified, rising house prices rapidly began to move beyond what was considered sustainable (Downey 2005). Two periods of growth in prices are evident in Ireland between 1994 to 2000 and 2001 to 2006, with the latter characterised by an aggressive inflation (Figure 4). National, inflation adjusted prices for new housing rose by 293% between 1994 and 2006 while second hand housing increased by 371%. In Dublin the rate of change was extraordinarily higher, with new house prices increasing by 346% and second hand houses by 433%. These growths began to price lower income groups out of the market; evident by the declining market share of FTBs between 2001 and 2006 in the Dublin Area, from 65% to 46% (DoEHLG, various years). Second hand homes make up a far greater proportion of the housing stock in the core residential areas in Dublin and therefore the data highlights the significant affordability issues in the core region, and indicates why purchasers were pushed toward cheaper, newer housing, mainly found in the periphery. A limitation of the official house price data is that it is overly aggregate in nature. Information on house prices is not available at the level of the county nor is there any form of submarket data available. Furthermore, the data is based on an arithmetic average, rather than regression analysis to account for differing housing characteristics (Lyons 2010).

Figure 4– Average New and Second-hand House Price Change in Dublin and Nationally 1994 - Q3 2010 (Inflation Adjusted)

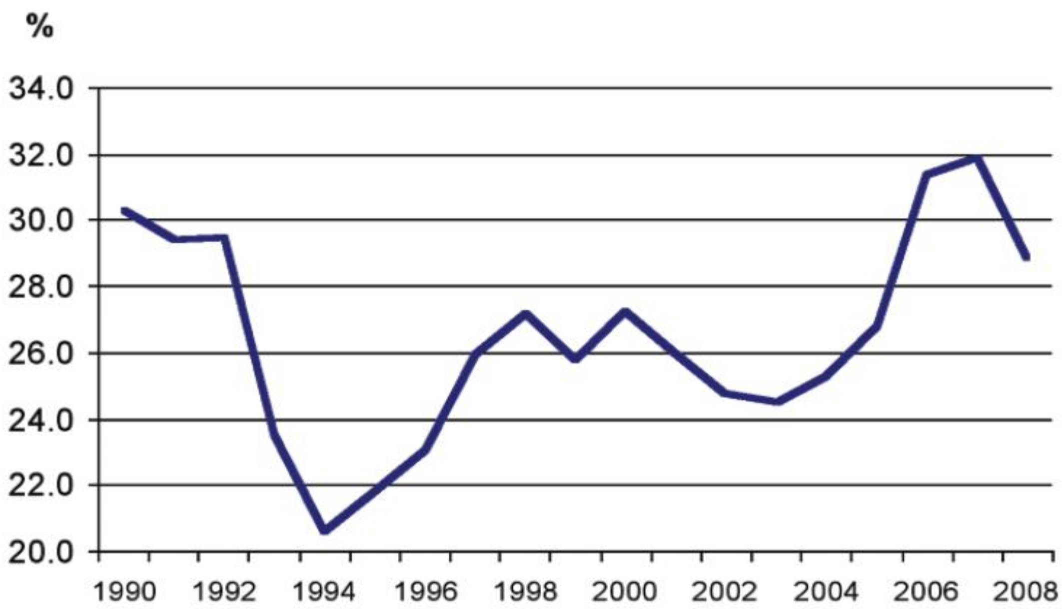


Source: (DoEHLG various)

Affordability

According to Kelly (2010) the rising cost of housing was directly related to the increased level of mortgage credit availability, with a €1 rise in mortgage borrowing increasing house prices by €1.13, which fuelled the affordability crisis. The Department of the Environment maintains an index of housing affordability based on the costs of servicing a mortgage. The index examines the case of a two earner (married) household, with one wage based on the average industrial wage and one wage based on the non-industrial average, making repayments on a 20 year mortgage on an average priced house. The index shows a marked increase in unaffordability from the beginning of 2002 until peak of the property bubble in late 2006 (Figure 5). However, this statistic is highly aggregated and utilises national averages. As shown, house prices were significantly higher in the Dublin region, while the assumption of a two earner household represents the best case scenario in terms of repayment. It also makes no assumptions regarding the affordability of differing types of mortgage products, nor does it factor in the significant differences in prices in housing sub-markets. As the boom progressed households countered the affordability problem by increasingly leveraging the scale of their mortgage borrowings.

Figure 5 - Mortgage repayments as % of net income (2 earners)



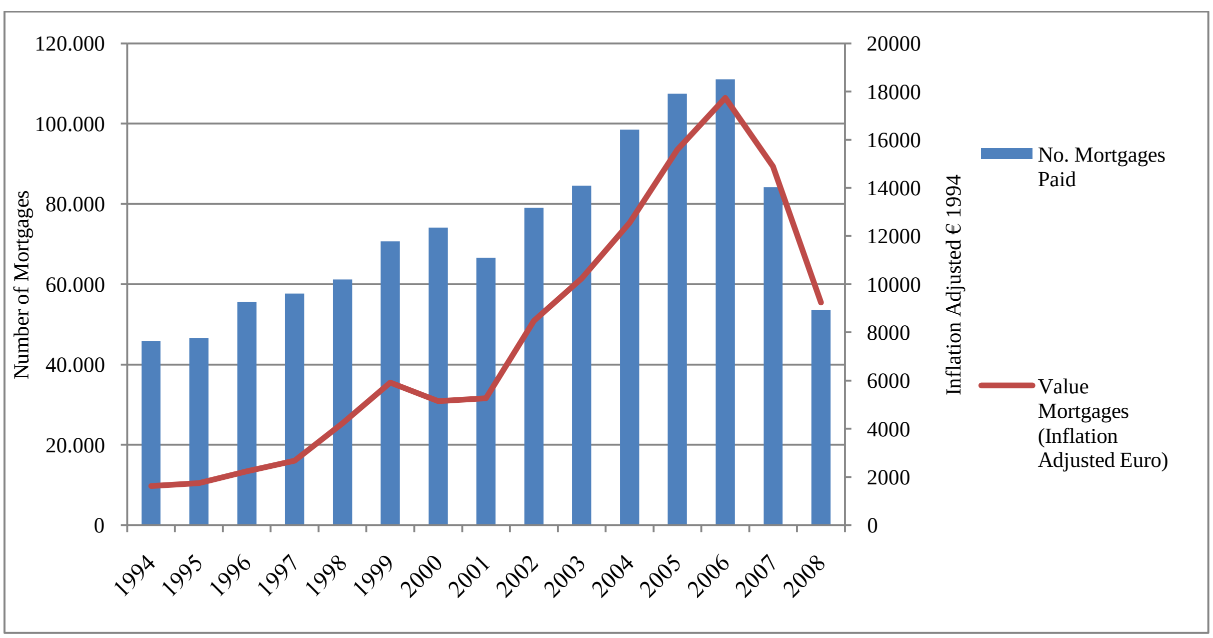
Source: (DoEHLG 2008)

Mortgage Borrowing Trends

Much like the United Kingdom (Stephens 2007), Ireland experienced a mass liberalisation of its mortgage market from the late 1980s, which involved the breakup of the building societies oligarchic structure, the entry of the associated banks into the market and the Central Bank took a more benign view of the banks concentrating on the property market (Murphy 1995; Fitzpatrick and McQuinn 2007). The lenders adopted more aggressive sales driven approaches, as well as technological developments, new mortgage products, and faster loan approvals (Mc Bride 2000). It is within this context of deregulation, that under-writing standards began to decline and borrowers were increasingly allowed to draw down ever-larger multiples of their income, generally at more highly leveraged odds.

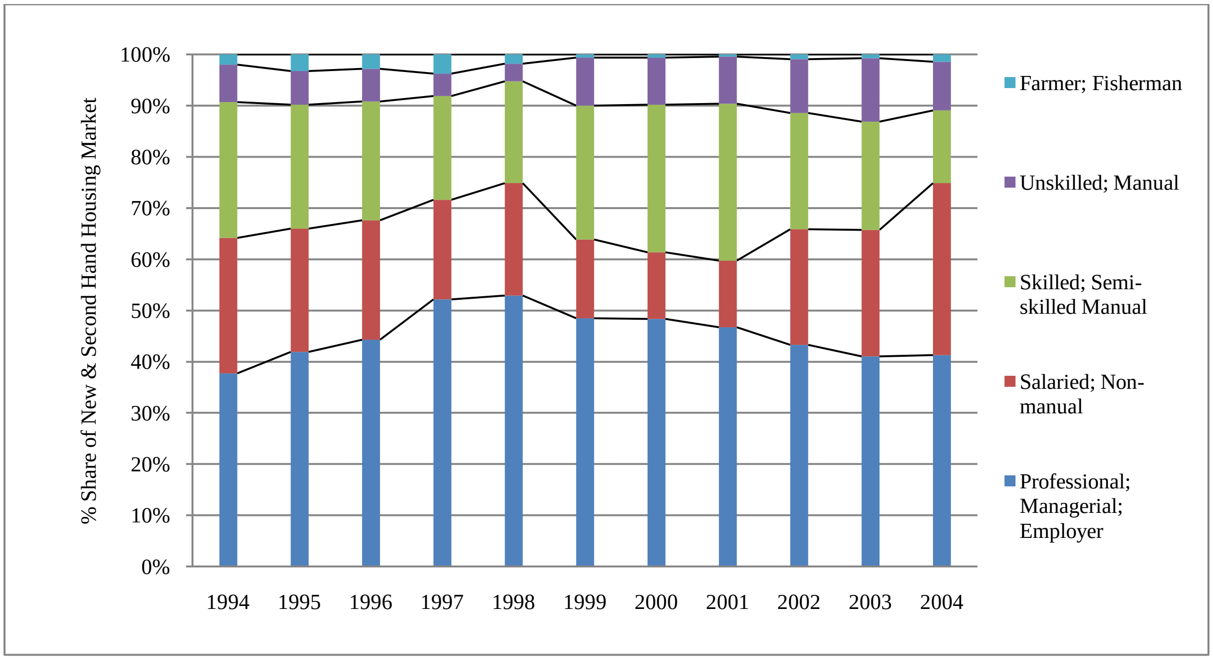
From 2002, the level of Irish residential mortgage debt as proportion of GDP rose at a faster rate, and to a greater extent, than the European average (EMF 2010). The annual number of mortgages drawn down increased from 45,000 in 1994 to 111,000 in 2006, but the inflation adjusted value of borrowings increased from €1.6 bn to €17.8 bn (DoEHLG, various; Author's Calculations). Hence, while the number of mortgages drawn down increases 2.4 times, the value of loans drawn increases eleven-fold (Figure 6). Home ownership was increasingly expanded at the margins of society, much like in the UK (Ford, Burrows et al. 2001). Over the boom the percentage share of lower skill occupational groups accessing mortgage finance increases. For example, the 'Unskilled/ Manual' group increase their mortgage market share from 4% in 1997 to 12.5% in 2003, while the 'Professional/ Managerial' group declines from a market share of 52% in 1997 to 41% in 2003 (Figure 7). Increased access to mortgage finance for lower income groups occurs during a period of rapidly appreciating house prices. A number of studies have highlighted the precariousness of the combination of mortgage debt and forms of unstable and low paid unemployment, and unemployment (Ford, Burrows et al. 2001; Horsewood and Doling 2004).

Figure 6 - Annual Number and Value of Building Society and Bank Loans for Residential Home Purchase



Source: (DoEHLG various)

Figure 7 - Occupation of Mortgage Borrowers in Ireland 1994 - 2004



Source: (DoEHLG various)

Table 1 – Growth in Owner Occupied Households with Mortgage in the Greater Dublin Area by Local Authority Area 2002 – 2006

Geographic Area	Owner occupied with mortgage				Mortgaged Households as a % of Total Households	
	Census 2002	Census 2006	Numeric Change 2002-2006	% Change 2002-2006	2002	2006
Dublin City	53,120	55,225	2,105	4	29	29
Dún Laoghaire-Rathdown	26,975	27,701	726	3	42	41
Fingal	34,703	44,412	9,709	28	57	55
South Dublin	38,518	39,313	795	2	53	49
Kildare County	25,963	31,013	5,050	19	52	51
Meath County	20,351	28,409	8,058	40	49	53
Wicklow County	15,376	18,717	3,341	22	43	44
Greater Dublin Area	215,006	244,790	29,784	14	42	42
National	484,774	569,966	85,192	18	38	39

Source:(CSO various (a))

Tenure data from the Censuses of 2002 and 2006 allow examination at a micro geographic level of changes in the composition of mortgaged households in the Greater Dublin Area (GDA). The Census is conducted every 5 years, and disaggregated data is available at the Electoral Division level, the smallest administrative units in the State. The GDA contains 585 Electoral Divisions (EDs) and the household data can be mapped utilising geographic mapping software. The data highlights that between 2002 and 2006 the number of households identifying themselves as owner occupiers with a mortgage in the State increased from 485,000 to 570,000, while the numbers in the GDA increased from approximately 215,000 to 244,000. However, the growth during this accelerated phase of Ireland's property bubble was exceptional in the periphery of the region (Table 1).

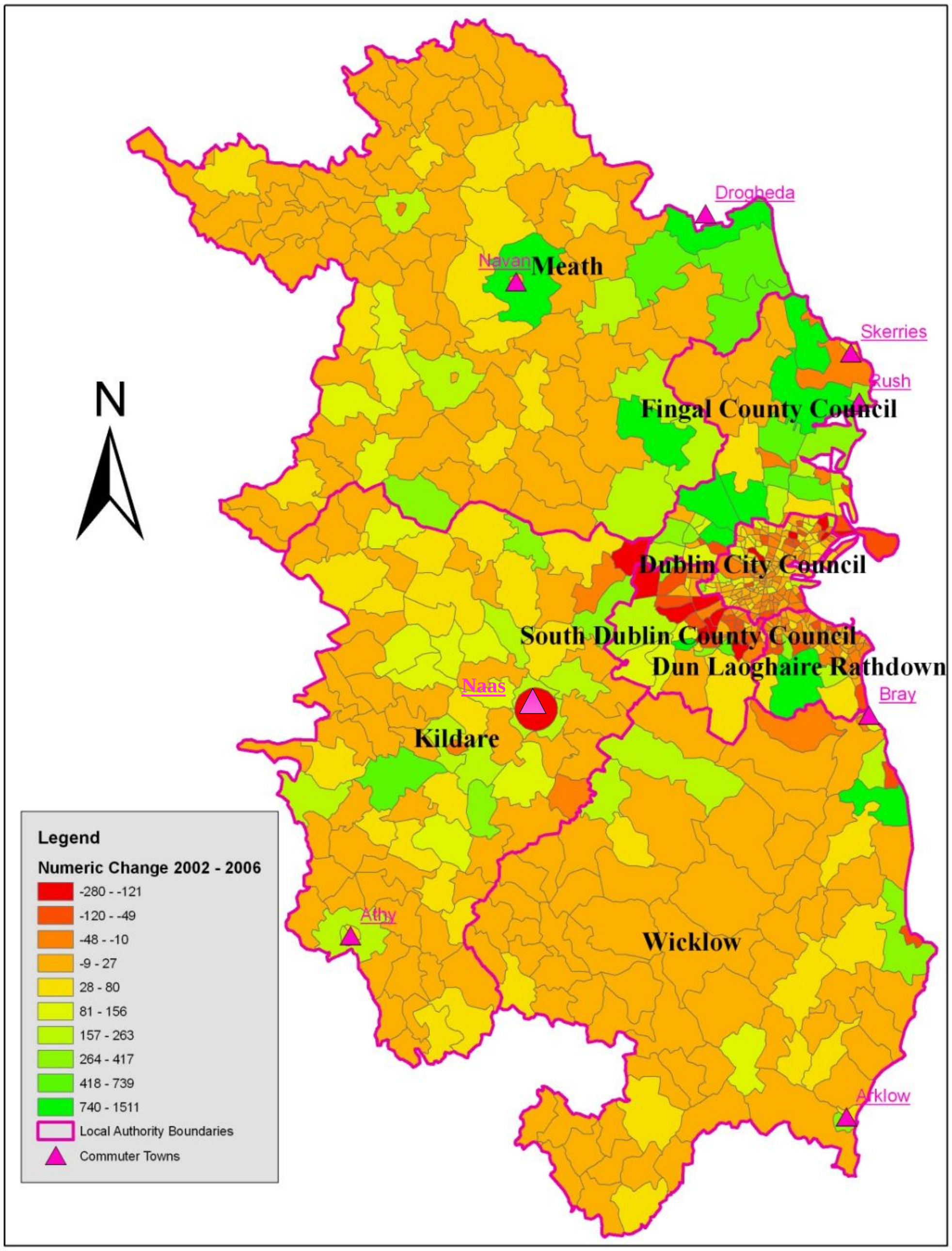
At the micro level it is clear that great differences exist in growth rates within Local Authority areas. Figure 8 displays the numeric change in owner occupied households with mortgages between 2002 and 2006. While recognising this is not a linear trend, these maps highlight the deflection mortgage borrowing households further into the periphery, and the decline of the core residential areas. The location of greatest growth is found on the north western fringe of Dublin City in Fingal and along the east coast in Meath and Fingal. The hinterlands of commuter towns such as Naas in Co. Kildare and Navan in Co. Meath also witness exceptional growth. Therefore, growth in mortgaged household numbers is spatially concentrated during a period when house prices rose fastest and borrowers accessed larger loan amounts. It is in these locations that some borrowers may witness the greatest mortgage repayment burdens, particularly in households with precarious employment situations.

One of the key drivers of the mortgage credit bubble was the ability of households to obtain higher levels of credit against the equity they invested initially in their property. There was a distinct lack of specific rules regarding the maximum amount that could be lent to prospective borrowers based on their income (Lyons 2010). In the early 1990s, typical Loan to Value ratios (LTVs) for banks and building societies ranged between 60 – 70% (Lang and O'Leary 1999). In 2006, approximately 71% of Dublin based First Time Buyers utilised a mortgage product with an LTV of 90% or greater, while 70% also utilised loan terms of greater than 30 years. These trends confirm house price affordability had become a serious issue and younger, FTB households were increasingly leveraging the scale of the borrowings to purchase. By extending loan terms, households were trying to minimise monthly mortgage repayments but an adverse effect is the slowing of equity build up which increases vulnerability if faced with an income or employment shock.

Irish households also increased their vulnerability to interest rate shocks based on the kinds of mortgage products they utilised over the boom. Doyle (2009) has noted the development of flexible type products in Ireland over the boom, such as variable rate loans. Flexible rate products are considered more risky, particularly for income and employment vulnerable households, as the monthly repayment is uncertain as it is linked to fluctuations in wider interest rates and the macro-economy (Ford 2006; Scanlon, Lunde et al. 2008). Between 1998 and 2006 the number of variable mortgage products drawn down nationally increased from 20,000 to 72,000, while fixed product loans declined from 41,000 to 38,000 (DoEHLG, various). Additionally, the subprime market began to be developed in Ireland from

2004, though remains small by international comparison (Doheny 2007). Subprime lenders advance loans at higher interest rates to customers generally unable to access mortgage finance via traditional banking channels. Irish subprime borrowers are more likely to have irregular income, be recent immigrants, be self employed, be separated or have past credit difficulties (Coates 2008).

Figure 8 –Change in Mortgaged Households in Greater Dublin Area, 2002 - 2006



Source:(CSO various (a))

Hence, as Ireland's economy grew in the 1990s, demand for housing soared alongside rising population, employment and incomes. In the Dublin context, demand could not be satiated in the core residential areas of the City due to infrastructure deficiencies and the building up of land banks by developers on the periphery. The resultant supply/ demand imbalance led to a surge in Dublin house prices, and an affordability problem for many prospective purchasers. Borrowers counteracted the affordability problem by purchasing cheaper units in peripheral submarkets in the GDA and/ or by increasing the leveraging of their borrowings. It is clear that as the boom progressed, mortgage liquidity was increasingly made available to lower income households. In the bust, extensive mortgage debt is owed on properties which are poorly situated in weaker housing submarkets, which are more prone to falling demand and prices.

3.0 The Housing and Mortgage Market Crash – Consequences for Households

The difficulties that Ireland has experienced since 2007 were caused by a clear property bubble and over-reliance on lending toward residential and commercial lending (Honohan 2010). Each of the domestic Irish lending institutions breached prudent balance sheet growth rates in the years leading up to the crash, and often did so repeatedly (Honohan 2009). From 2006, it was clear that the Irish property market was passed its peak, as prices began to turn down. However, the trigger for the collapse was the shift in international financial markets during 2007 and 2008. This meant Irish banks could no longer access cheap international finance on wholesale markets, while domestic investors also began to pull back from the property market (Lane 2011).

The result has meant Ireland now faces a triple track crisis with declining economic activity, huge losses in the domestic banking sector and a rapidly deteriorating fiscal position. Following the collapse of Lehman Brothers, the Central Government, convinced that the problem of the Irish banks was one of access to liquidity, introduced a blanket guarantee of bank debt of some €440 bn in September 2008. However, the balance sheet losses on property related loans were much larger than imagined. The government's strategy for the banking sector has meant the guaranteeing of the banks' liabilities, recapitalising the banks with €70 bn and the establishment of a "bad bank", the National Asset Management Agency, to purchase development related loans from the banks, at a discount (Lane 2011).

However, the guarantee and the extent of recapitalisation has proven too broad for the Irish taxpayer to handle and the Irish State has since required financial assistance from the EU and IMF in November 2010, and a further €67.5bn was provided in terms of emergency funding. The first stage of Ireland's crisis has largely involved speculative, development loans and bank debt which has led to the insolvency of the Irish state. Some commentators believe that the second stage of the crisis will involve losses on Irish residential mortgage debt and the resultant home repossessions (Kelly 2010 (b)). Predicted losses on residential mortgages will place further burdens on the balance sheets of Irish lenders, and therefore on the State. As Irish banks are forced to shrink their balance sheets, liquidity for new mortgage lending will dry up, leading to a lack of market transactions and therefore cause further house prices falls. The outcomes for Irish mortgage holders at present are stark and include house price falls and rising negative equity, while a massive increase in unemployment and severe drops in incomes are interacting with substantial mortgage debts to produce a serious situation regarding arrears and home repossessions.

Price Falls and Negative Equity

Falling house prices from mid-2007 has pushed many over-leveraged households into negative equity. Data on the extent of price falls is not sufficiently spatially disaggregated, though National and Dublin prices have fallen by 40% and 47% respectively from peak to trough, with apartment prices in the capital falling by 52% (CSO various (b)). In Dublin City new house prices fell from a peak of €425,925 (Q3 2006) to a nadir of €236,532 (Q4 2009) (DoEHLG, various years). According to Kitchin et al (2010), falling house prices have been greatly influenced by the excessive oversupply of housing stock and zoned land available for housing development, particularly in peripheral markets. Estimates for housing oversupply, which accounts for all vacant residential units in the Country above an established vacancy rate and excluding second holiday homes, vary between 120,000 and 171,000 nationally as of the end of 2009 (Kitchin, Gleeson et al. 2010; Williams, Hughes et al. 2010). In general, the Dublin Local Authorities and the peripheral counties of Dublin have less oversupply than other regions within the Country, and the markets in these locations are expected to rebound more quickly. However, even within this area significant sub regional differences exist. Kildare, Meath and Fingal have much higher growth rates in terms of additions to the housing stock between 2006 and 2009 (almost 15%), and have vacancy rates of around 10% (Kitchin, Gleeson et al. 2010). The households in the greatest difficulty from falling home values are likely to be younger households with families living in peripheral urban locations.

A household experiences negative equity where the value of the outstanding debt on a property exceeds the current market value. Homeowners are not able to sell the house to cover the loans owed, nor can they move between tenures or locations. High levels of housing debt and/ or higher interest rates can also interact with falling house values to exacerbate a spatial and tenure 'fixity' for a household (Henley 1998; Ferreira, Gyourko et al. 2010). Negative equity affects all class and income types, but may become more burdensome for those on the margin of the private ownership tenure (Forrest and Kennett 1996). The presence of negative equity becomes a serious issue where a household encounters an income disruption, either through unemployment, reduced pay or relationship breakdown (Duffy 2010).

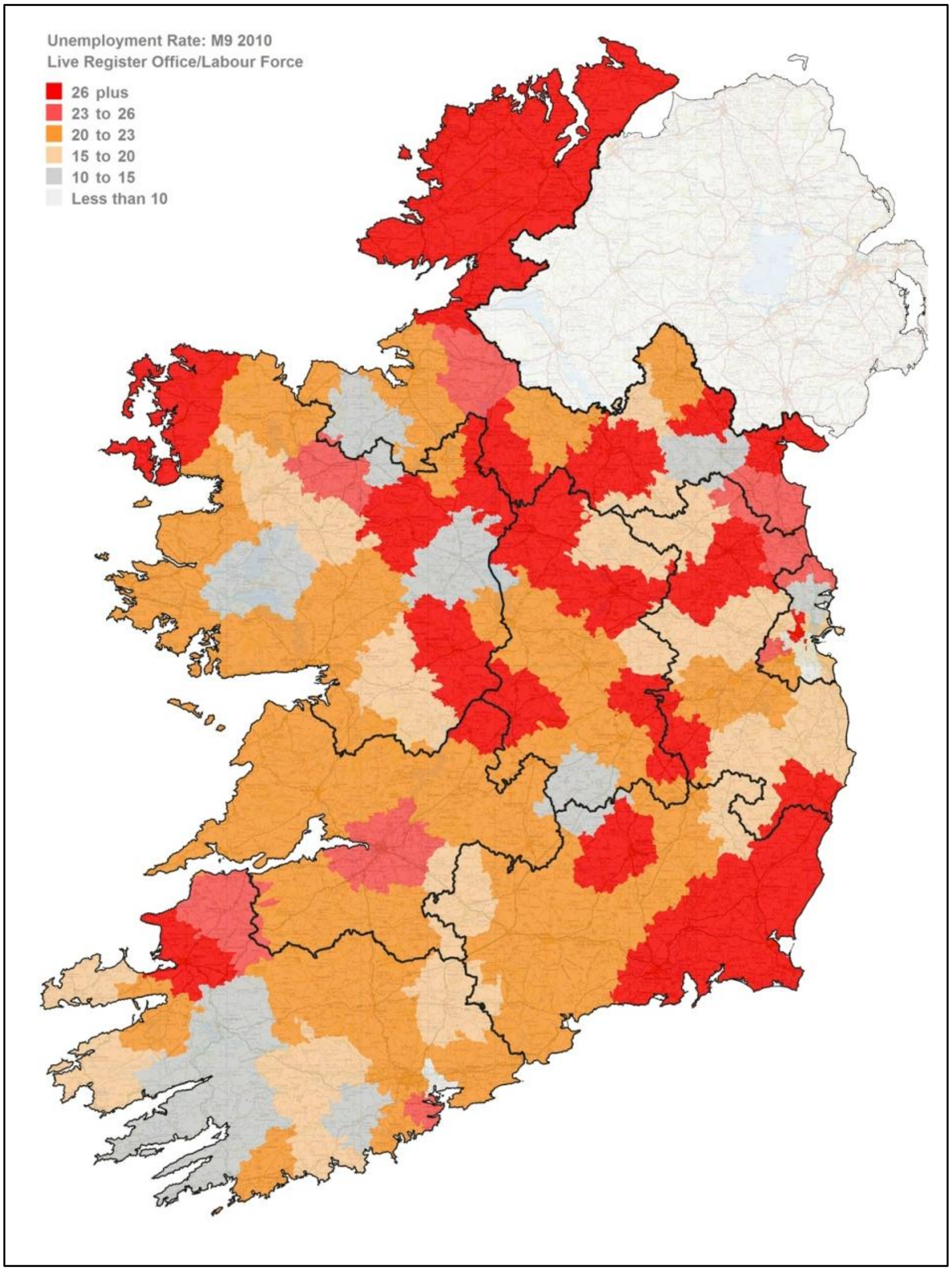
Duffy (2010) estimated that the number of Irish households in negative equity could be196,000 by the end of 2010, although the numbers were revised upwards to 300,000 (Madden 2011 (a)). Duffy (2010) contends those households drawing down their mortgages between 2004 and 2007 will witness the greatest growths in negative equity, with 29% of households experiencing declines of over 20% in value. First Time Buyers are more likely to make up a greater proportion of households witnessing larger falls in value. Lyons (2010, 96) recognises the geographic nature of the negative equity problem, emphasising that counties with larger proportions of mortgaged households, like Meath and Kildare, will have higher negative equity rates, particularly where localised unemployment is high.

Unemployment and Income

The international literature points to the risks for households with unsustainable mortgage debt from sudden shocks to employment and incomes, particularly for households in temporary, part time or self employment (Ford, Burrows et al. 2001). Such 'trigger events' can often start a chain reaction of mortgage related stresses which can end in serious arrears and possessions. Unemployment has risen dramatically in Ireland from approximately 4% in 2006 to almost 14% in 2010. Long term unemployment has been most heavily concentrated in the 25 to 44 age group, with total long term unemployed numbering 153,900 (CSO 2011 (b)).

Regionally, Dublin has the highest number of unemployed people though has the lowest unemployment growth rates (12.7%). The periphery of the GDA has been affected to a greater extent by unemployment, according to the mapping of Live Register claimants to approximated Social Welfare Office catchment areas (Gleeson, Kitchin et al. 2011) (Figure 9). However, caveats apply to this data and those signing on the Live Register cannot be directly equated with those unemployed, as the Live Register also takes account of part-time, seasonal and casual workers, and the catchment areas for the Social Welfare Offices are estimates (van Egeraat 2011). However, it is likely that unemployment is significantly higher in the peripheral locales; the same locations with the largest growth rates in mortgaged households over a period of rapidly appreciating prices and a trend toward unsustainable mortgage borrowing.

Figure 9 – Geographic Breakdown of Live Register Claimants per Social Welfare Office, September 2010



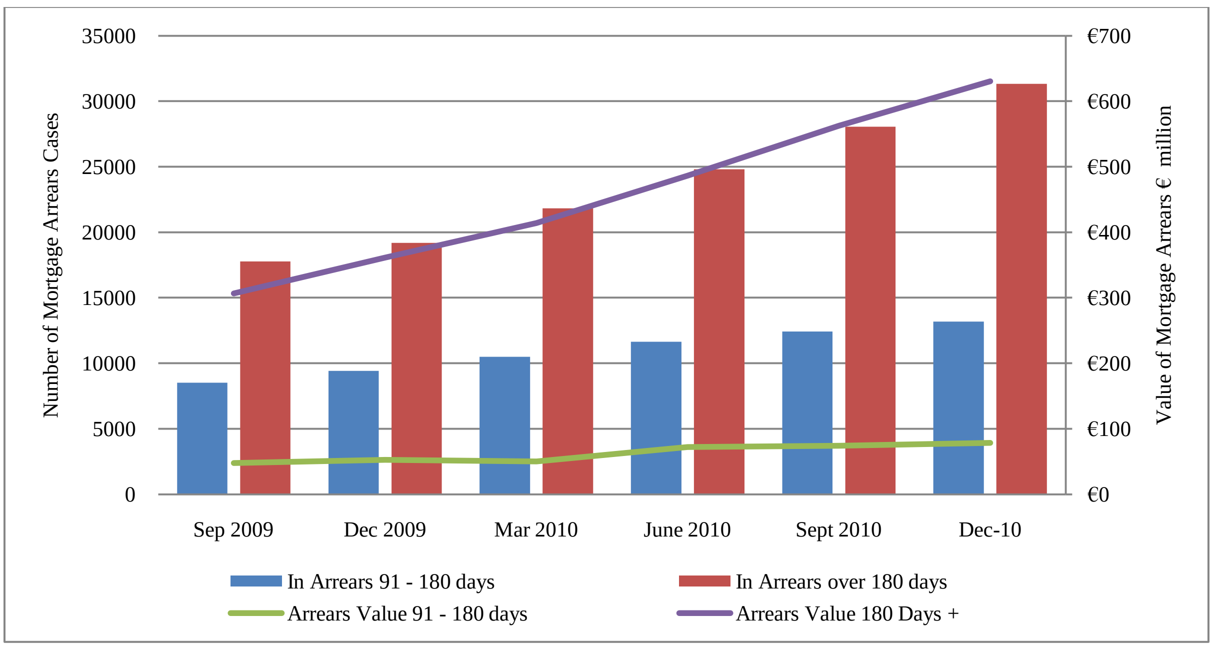
Source: (van Egeraat 2011)

Mortgage Arrears

Ford et al (2001) suggest higher mortgage arrears rates are typically experienced among younger households, while divorce, unemployment/ part time work are also contributory factors. The presence of children can amplify a precarious arrears situation, due to restricted disposable income. Social class is a clear influencing factor but varies over the economic cycle, with those in lower classes witnessing a far stronger likelihood of arrears during a period of wider economic instability. Location also plays a factor, with peripheral locations experiencing higher arrears rates than cities during economic downturns.

Since September 2009, the Irish Financial Regulator has published some national statistical information regarding arrears and possessions. However, a breakdown of arrears by region or borrower type is unavailable The data demonstrates that between 2009 and 2010 the number of accounts in arrears between 91 and 180 days increased from 8,500 to 13,170, while the number of accounts in arrears over 180 days increased from 17,500 to 31,500 (Figure 10). Long term arrears cases are remaining stubbornly high and are growing. An analysis of Irish 'Prime' and 'Buy to Let' Residential Mortgage Backed Securitisation transactions provides a geographic breakdown of arrears cases by county (Moody's 2010). This suggests that major urban locations display much lower rates of arrears, such as Dublin at 2.78%, while the peripheral counties display significantly higher arrears rates; between 3.5% and 4.5%. However, it must be stressed this data includes information from the Buy to Let sector which may be skewing results, and are only utilised to demonstrate the influence of location on arrears rates.

Figure 10 - Total Irish Mortgage Cases Outstanding - End of Quarter - Q3 2009 – Q4 2010



Source: (CBI, various)

Possessions

The Financial Regulator data confirms the number of enforcement proceedings issued, where notice has been served to households in arrears of future court action, had dropped from 3,617 to 3,074 in 2010. Prime lenders accounted for 84% of enforcement proceedings (Oireachtas 2010). The drop in cases going to court may be explained by a number of possibilities. Firstly, the lenders may be engaging borrowers in a formal process of renegotiating loan terms, instigating this process with a formal demand letter. Secondly, lenders may recognise the considerable period of time it takes to resolve cases involving possessions of family homes through the Irish courts and may begin formal proceedings on cases with a view to time delays. Thirdly, some UK research indicates that lenders have changed their arrears/ possession strategies from one of "pay or possess" to one of "managed forbearance" and this may be what is witnessed in the Irish case (Wallace and Ford 2010).

Over the period from 2009 to 2010 the number of Possession Orders granted was 511, while the number of properties voluntarily surrendered or abandoned in the face of an Order was 138. Where Orders were not granted, many impaired accounts are being renegotiated before a Court judgment is required and lenders are engaging in a process of forbearance where they are offering renegotiated repayment terms to households. Approximately 60,000 mortgage accounts have been renegotiated (CBI various). As of Q4 2010, some 585 properties had been repossessed, up from 397 in late 2009. Prime lenders account for approximately 58% of executed possession, and subprime lenders, with an estimated mortgage market share of 2%, account for 42% (Oireachtas 2010). The repossession figures for Ireland are still comparatively low, compared to the 48,000 predicted repossessions in the UK in 2009 (Ball 2010). This has been the result of the Government's imposition of a moratorium of one year on possessions on primary residences where borrowers work with lenders based on guidelines laid down in a Code of Conduct on Mortgage Arrears published by the Central Bank (C.B.I 2010).

4.0 The Irish Debt Crisis "*Going Forward*"

The following section seeks to elaborate on the potential course the Irish mortgage debt crisis may take. It is considered that the number of households in difficulty with mortgage payments has been consistently under-estimated, and that the number of accounts in arrears moving toward formal default and repossession will increase markedly throughout 2011 and 2012. Until now, the main driver of mortgage burdens and arrears has been unemployment and income reductions. However, it is likely that excessive leveraging, (i.e. higher Loan to Value ratios) and geographic location (i.e. more peripheral housing markets) will increasingly have an impact on driving arrears (Moody's 2010).

The Mortgage Lenders' Position

On the 31st March 2011, the Central Bank of Ireland announced the results of a "stress test" exercise regarding loan losses in the domestic Irish banking institutions as part of the Financial Measures Programme agreed by the EU/ECB/IMF. The key function of the stress tests was to establish an evidence base to plan for the reduction in size of the Irish banking system and stabilise its funding base. BlackRock Solutions Inc., a risk management advisory firm, conducted a stress test review of likely losses in the Irish domestic banks, while the Central Bank of Ireland conducted an additional comparative assessment. The four banks reviewed included Allied Irish Banks, Bank of Ireland, Irish Life and Permanent and EBS Building Society, and represent 65% of the mortgage market (Table 2). A conservative assessment approach was encouraged and losses were predicted on a base scenario and a "stressed" scenario using varying macro-economic parameters, such as a worst case unemployment rate of 15.8% in 2012 and a fall in house prices of 60% from the peak of the bubble (C.B.I 2011) (Table 3).

Table 2 – Estimated Irish Mortgage Market by Lenders' Market Share and Likely Distressed Accounts, December 2010

Institution	Market Value € bn	Market Share %	Market Share Number of Accounts
Domestic Lenders			
AIB	26.5	17.3	136,344
Bank of Ireland	28	18.3	144,061
INBS	2.3	1.5	11,834
EBS	15	9.8	77,176
Irish Life & Permanent	30.4	19.9	156,410
Foreign Lenders			
Ulster Bank/ RBS	23.3	15.2	119,880
BOSI/ Lloyds/ HBOS	10	6.5	51,451
KBC Bank Ireland (IIB)	13.7	9	70,487
NIB/ Danske	3.9	2.6	20,066
Total	**152.8**	**100%**	**786,164**

Source: (Mc Connell 2009)(Author's Calculations)

The stress test results provide data in relation to the notional loan balances for each of the domestic Irish mortgage lending institutions, as well as projected losses on their residential mortgage loan books under a base and a stressed scenario (Tables 4 & 5). Under a worst case scenario, losses on owner occupied residential mortgages in the four institutions could be almost €10.2 bn or nearly 14% of the total outstanding loan books of the domestic lenders. The best case scenario, under the Central Bank's much more benign assumptions, indicates losses could be as little as €3.5 bn or 4.7%. Some lenders, such as Irish Life and Permanent and AIB, are likely to incur higher losses and it seems likely they lent to riskier mortgage borrowing groups, like First Time Buyers and lower income households.

Table 3 – Summary of Stress Scenario macroeconomic parameters – Ireland (year on year figures)

	2010*	2011	2012	2013
GDP	**-0.2**	**-1.6**	**0.3**	**1.4**
GNP	**-3.0**	**-2.6**	**-0.2**	**1.2**
Consumption	**-1.4**	**-3.9**	**-1.3**	**0.1**
Investment	**-21.1**	**-11.3**	**-1.7**	**-0.3**
Government Consumption	**-2.2**	**-5.5**	**-4.3**	**-2.4**
Exports	**5.7**	**2**	**2.1**	**2.5**
Imports	**2.3**	**-1.1**	**0.5**	**1.7**
Balance of Payments (% of GDP)	**-0.9**	**1.6**	**3.1**	**4.3**
Employment	**-4.0**	**-2.5**	**-1.1**	**0.1**
Unemployment Rate	**13.6**	**14.9**	**15.8**	**15.6**
Inflation				
HICP	**-1.5**	**0.1**	**0.6**	**1**
CPI	**-1.0**	**0.7**	**0.9**	**1**
House Prices	**-15.5**	**-17.4**	**-18.8**	**0.5**
Commercial Property	**-13**	**-22**	**1.5**	**1.5**
Personal Disposable Income	**-3.2**	**-3.9**	**-1.2**	**0.2**

Source: (C.B.I 2011)

Table 4 – Notional Loan Balances and Market Share on Residential Mortgages in domestic Irish institutions, 31/12/2010 (€m)

Product	**Mortgage Lenders**				**Total**
	AIB	**BOI**	**ILP**	**EBS**	
Total Mortgage Loanbook	31,014	59,941	33,872	15,891	140,718
Total Irish Mortgage Loanbook	27,535	27,948	26,329	15,891	97,704
Owner Occupied Mortgages	20,179	20,869	19,428	13,961	74,437
Buy to Let Mortgages	7,356	7,080	6,900	1,930	23,267
Estimated Market Share	17%	18%	20%	10%	65%

Source: (Mc Connell 2009; C.B.I 2011)

Table 5 – Residential Mortgages Loan Loss Assessment Results (€m)

		AIB		BOI		ILP		EBS		Total	
Product		**Base**	**Stress**	**Base**	**Stress**	**Base**	**Stress**	**Base**	**Stress**	**Base**	**Stress**
Total Residential Mortgages Ireland	BlackRock	3,077 *(11.2%)*	4,846 *(17.6%)*	2,249 *(8.0%)*	3,836 *(13.7%)*	2,993 *(11.4%)*	5,103 *(19.4%)*	1,411 *(8.9%)*	2,495 *(15.7%)*	9,729 *(10.0%)*	16,280 *(16.7%)*
	Central Bank	1,983 *(7.2%)*	3,007 *(10.9%)*	1,255 *(4.5%)*	2,016 *(7.2%)*	1,598 *(6.1%)*	2,594 *(9.9%)*	848 *(5.3%)*	1,380 *(8.7%)*	5,684 *(5.8%)*	8,997 *(9.2%)*
Owner Occupied Ireland	BlackRock	1,768 *(8.8%)*	2,968 *(14.7%)*	1,104 *(5.3%)*	2,075 *(9.9%)*	1,669 *(8.6%)*	2,975 *(15.3%)*	1,187 *(8.5%)*	2,164 *(15.5%)*	5,729 *(7.7%)*	10,181 *(13.7%)*
	Central Bank	1,139 *(5.6%)*	1,791 *(8.9%)*	656 *(3.1%)*	1,115 *(5.3\%)*	969 *(5.0%)*	1,598 *(8.2%)*	700 *(5.0%)*	1,164 *(8.3%)*	3,465 *(4.7%)*	5,668 *(7.6%)*
Buy to Let Ireland	BlackRock	1,308 *(17.8%)*	1,879 *(25.5%)*	1,145 *(16.2%)*	1,761 *(24.9%)*	1,323 *(19.2%)*	2,128 *(30.8%)*	224 *(11.6%)*	331 *(17.1%)*	4,000 *(17.2%)*	6,099 *(26.2%)*
	Central Bank	844 *(11.5%)*	1,216 *(16.5%)*	599 *(8.5%)*	901 *(12.7%)*	629 *(9.1%)*	996 *(14.4%)*	148 *(7.6%)*	216 *(11.2%)*	2,219 *(9.5%)*	3,330 *(14.3%)*

Source: (C.B.I 2011)

The Likely Extent of the Problem

The figures of accounts in arrears and renegotiations from the Financial Regulator suggest that one in ten Irish mortgages are experiencing significant repayment burdens (CBI various). It is known that 45,000 accounts are in arrears and the balance outstanding on these loans equals €8.6 bn, while the value of arrears equals €709 million. Some 60,000 accounts have received forbearance and renegotiated terms (*ibid*). Allowing for an overlap between arrears and renegotiation, approximately 80,000 mortgages are in arrears greater than 90 days or have been renegotiated at the end of December 2010. Table 6 provides a breakdown of the assumed number of mortgage accounts in distress, either in arrears or renegotiated, for each of the domestic and foreign owned lenders in Ireland from December 2010. These are estimates only, and utilise the assumption that one in ten mortgages are in difficulty. The domestic and foreign owned lenders are likely to have 52,000 and 26,000 distressed accounts on their loanbooks respectively. This means 10% of the Irish residential mortgage book is assumed to be currently in difficulty, valued at approximately €15.28 billion (Table 6).

When these assumed losses are compared to the stress tests results, the 10% loss rate estimated here is higher than the Central Bank's projections, and is on par with the BlackRock base scenario, meaning that if losses increase over the following year it seems increasingly likely that the worst case scenario may be reached. The BlackRock stress scenario assumes house price losses of 60% from peak to trough, and states these are overly conservative and unlikely. However, the historic peak to trough falls in property prices following banking crises is usually in the region of -35%; however falls of greater than

50% are common, such as in Hong Kong and the Philippines following the Asian Crisis in 1997 (Reinhart and Rogoff 2009).The BlackRock stress scenario also assumes that unemployment in 2011 will reach 14.9%; at present the Irish unemployment rate is 14.7%. If the worst case BlackRock scenario was realised and 13.7% of mortgages were in distress, then the numbers of accounts in difficulty would number 107,000 and the value would equal almost €16 bn (Table 6).

Table 6 – Estimated Irish Mortgage Market by Lenders' Market Share and Likely Distressed Accounts, December 2010

	Market Value € bn	Market Share %	Number of Accounts on Mortgage Book	Estimated Distressed Accounts (10% arrears or renegotiated)	Value of Distressed Accounts € bn	Estimated Distressed Accounts (13.7% arrears or renegotiated)	Value of Distressed Accounts € bn
Domestic Lenders	**102.2**	**66.8**	**525,825**	**52,582**	**7.80**	**72,038**	**10.68**
AIB	26.5	17.3	136,344	13,634	2.02	18,679	2.77
Bank of Ireland	28	18.3	144,061	14,406	2.14	19,736	2.93
INBS	2.3	1.5	11,834	1,183	0.18	1,621	0.24
EBS	15	9.8	77,176	7,718	1.14	10,573	1.57
Irish Life & Permanent	30.4	19.9	156,410	15,641	2.32	21,428	3.18
						0	0.00
Foreign Lenders	**50.9**	**33.3**	**261,884**	**26,189**	**3.89**	**35,878**	**5.32**
Ulster Bank/ RBS	23.3	15.2	119,880	11,988	1.77	16,424	2.43
BOSI/ Lloyds/ HBOS	10	6.5	51,451	5,145	0.76	7,049	1.04
KBC Bank Ireland (IIB)	13.7	9	70,487	7,049	1.05	9,657	1.44
NIB/ Danske	3.9	2.6	20,066	2,007	0.30	2,749	0.42
Total	**116.7**	**100%**	**786,164**	**78,616**	**11.67**	**107,704**	**15.99**

Source: (Mc Connell 2009)(Author's Calculations)

The numbers of households being repossessed is artificially low in Ireland, and are being maintained due to lenders' fears over the crystallisation of further lending losses and the reputational and balance sheet impairments such losses would bring. As few as 585 repossessions have taken place according to the Financial Regulator. However, an estimated 10,000 households are in arrears of greater than one year and technically should be foreclosed upon as mandatory repossession protections no longer apply (Gartland 2010). While Irish mortgage lenders are providing forbearance on approximately 60,000 mortgage accounts, mostly by moving borrowers onto interest only repayments, 40% of these mortgages continue to non-perform and accrue arrears even on the renegotiated terms (CBI various). It is clear the forbearance options currently utilised to not address the problem and distort the number of households in serious mortgage difficulty.

The Central Bank's stress tests are flawed in the sense that they do not give an accurate picture of potential losses in the entire mortgage market. By focusing on the domestic lenders, the figures provided only represent two-thirds of the overall market. The final third is largely comprised of foreign owned lenders who established mortgage operations from the late 1990s and embarked upon aggressive lending strategies to gain market share (Table 5). Bank of Scotland (Ireland) largely fuelled the mortgage pricing war when it dropped its interest rates below 4% in 2001. The lenders that grew most aggressively during the housing bubble have not been subjected to review; though it seems likely the greatest impairments in the mortgage market may be included in their loanbooks. Furthermore, the loanbooks of the subprime lenders have also not been considered, even though they are likely to have the most distressed mortgages on their accounts, and account for approximately 41% of all repossession orders (Oireachtas 2010). Subprime lending was first available in Ireland in 2004, and by 2007 was estimated to have a €2bn market value; considering an average house price of some €250,000 this would equate to roughly 8,000 outstanding subprime mortgages. Hence, most subprime loans were drawn down during the period of the absolute zenith of the Irish property bubble, and are likely to be in severe negative equity. It would seem likely there is a significant underlying reserve of properties awaiting possession.

The Response Thus Far

While the Government have adopted a strongly interventionist approach in terms of dealing with Ireland's banking problems, they have adopted a largely "hands off" approach in terms of household mortgage debt burdens. The Mortgage Arrears and Personal Debt Expert Group (2010) was established to provide recommendations on the mortgage debt problem alongside the Code of Conduct on Mortgage Arrears (C.B.I 2010), which was an effective 12 month moratorium on repossessions of primary homes where the borrower cooperated constructively with the lenders. The Expert Group specifically recommended against establishing procedures regarding debt write downs, owing to the fact there was a lack of international examples upon which to base a scheme. They did recommend establishing a standardised Mortgage Arrears Resolution Process (MARP) where a lender had to consider at least one forbearance option for a distressed borrower, though was under no obligation to offer it. Borrowers could appeal a forbearance decision to an internal appeals board within the lenders, or following that to the Financial Services Ombudsman. The Group also considered 'Advanced Forbearance' options, such as a

Deferred Interest Scheme (DIS), where the borrower pays a minimum of 66% of the interest payment and the remaining interest accumulates in a non-interest charging deferral account.

The Code of Conduct established formal communications protocols for lenders, as well as the moratorium, and limits lenders to making a minimum of three unsolicited communications per month, though this was fiercely contested by the lenders through submissions (F.R 2010). Anecdotal evidence of threatening and aggressive tactics have been reported in Irish media and the Financial Regulator has had to issue warnings about harassment of borrowers (Madden 2010). The training of staff to deal with borrowers in arrears has also been criticised (Madden 2011 (b)).

There are a number of flaws with these measures. Firstly, some commentators contend personal debt write downs should be enabled, as the scale of debt hampers growth in the wider economy (Gurdiev, Lucey et al. 2010). Secondly, there is an obvious problem with an appeals body being established internal to the bank, and establishing a separate entity for mortgage debt resolutions may have been more appropriate. The principal failing of the DIS is that implementation by banks is voluntary. The deferral of one third of the interest does not alleviate the problem of unsustainable mortgage debt. The Code has been roundly criticised including by the Joint Oireachtas Committee on Social and Family Affairs (2010) who called for the moratorium to be extended to 24 months. A borrower, who availed of the Code, could still see their credit rating damaged. Under the 2009 Code, it was also not possible for a borrower to challenge the actions of a lender for an alleged breach of the code. The government has announced it will make revisions to the payment of Mortgage Interest Tax Relief (MITR) by increasing MITR to 30% from 22% for FTBs who purchased between 2004 and 2008 but thereafter abolish MITR from 2011 (Government of Ireland, 2011). However, while increasing MITR may bring some relief to some households to keep meeting payments, the approach does nothing to address the far more serious underlying problem of unsustainable debt. Furthermore, it is an inefficient fiscal response in that it benefits households with much more expensive units than those with more modest units; therefore it benefits the risk takers at the expense of the more prudent borrowers.

The Government's response to the property collapse has been twofold. On the one hand, the State has intervened to stem banking losses by guaranteeing the debts of Irish lenders and socialising the losses from speculative property deals. On the other hand the response to assist home owners cope with unsustainable mortgages has been mute. The mortgage resolution process developed simply institutionalises a market led process of negotiation on mortgage debt that enables lenders "cherry pick" whom they assist through forbearance. At a time when Government is facilitating the needs of banking and property capital, it is diluting its ability to assist vulnerable households.

5.0 Conclusions

The period from 2001 to 2006 saw the emergence of a sustained asset bubble emerge in the Irish property market, with the Dublin City region experiencing large growths in housing supply, prices and affordability problems. This occurred at a time of increased liberalisation in the mortgage market, with larger volumes of residential mortgage debt being drawn down by households using increased leveraging and flexible products. In the crash, recent purchasers using such loan terms are likely to be more greatly affected, particularly those that purchased in weak peripheral submarkets and those employed in more unstable economic sectors. The recent bank stress tests highlight that the mortgage debt crisis is potentially much more serious than has been captured by recent official data on mortgage arrears and house repossessions. Mortgage forbearance by lenders is going some way to alleviating a flood of home repossessions but this is unlikely to continue into the medium term, and already over 10,000 households are likely on the verge of losing their home. In social terms, it is likely that younger and lower income households, as well as those employed in sectors most affected by unemployment are in the gravest of situations. Possessions are likely to be more heavily concentrated in weaker, peripheral submarkets that grew rapidly during the boom and cooled rapidly in the bust.

The evidence base in relation to the housing and mortgage market crisis in Ireland and the Greater Dublin Area is not well developed. Further research is required to determine the spatial and social concentration of mortgage burdens, and to determine what the drivers of arrears are for more vulnerable household types, particularly first time buyers and lower income households. Little is known about the resilience of Irish households and the kinds of coping strategies they implement (or fail to) and whether these are successful or not. Little is known about the effectiveness of mortgage forbearance options offered by lenders, or the factors that influence lenders' decisions regarding forbearance. The experience and management of mortgage debt has not been analysed in the Irish context since the mass deregulation of the mortgage industry. With better information regarding the spatial and social concentration of mortgage burdens, local and national policy makers, as well as debt advisory agencies and private banks, could identify "at risk" households earlier and target early intervention measures much better. Such information could enable lenders understand the responses of borrowers to arrears, and help craft better approaches to assist indebted households. Furthermore, debt advisory agencies, voluntary housing associations and local planning departments could identify types of neighbourhoods and households more likely to be in mortgage difficulty in advance, and therefore develop "pre-arrears" intervention strategies.

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