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## Abstract

Since the 1970s the prevalence and duration of housing market booms has increased in developed countries as has the busts which followed them. These developments and particularly their occurrence in a large number of countries simultaneously were key contributors to the global financial crisis of 2008. The literature on this crisis has focused primarily on the role of mortgage markets and home-ownership in driving housing booms and busts and also on the countries which have experienced the strongest busts, particularly in the English-speaking world. Despite the large number of social rented dwellings in Western Europe, the role of this sector has been largely neglected in the literature. This paper aims to address these omissions by the interaction of social housing and the housing market in Ireland, which experienced a specular housing market boom in the 1990s and strong bust in the 2000s and Austria which has a long tradition of housing market stability. It argues that social housing played a central but contrasting role shaping the housing market dynamics in these two countries. In Ireland social housing was pro-cyclical – it accelerated the housing market boom and intensified the bust - whereas Austrian social housing had a counter cyclical impact on the housing market and thereby helped to promote price stability. These outcomes were partially reflected in the different social housing policy regimes in use in these countries - Austria represents a 'unitary' and Ireland a 'dualist' housing regime in housing regime in Kemeny's (1995) typology. In addition, the sources of finance for social housing and the use of demand-side or supply-side subsidies were also important drivers of these contrasting outcomes.

## Introduction:

The period since the late 1970s is distinguished by the increasing prevalence of housing market booms in developed countries and also by changes in their durations, in the severity of the busts which often followed them and in the cross-country concurrence of these housing market cycles. Agnello and Schuknecht's (2009) analysis of deviations from long-run house price trends in 18 OECD countries reveals that 12 of this sample experienced booms between the late 1970s and the late 1990s (some on several occasions). However, 11 of these countries experienced a boom during the first half of the 2000s and these more recent booms were generally of longer duration than their predecessors and therefore were associated with higher price rises and stronger busts. The strength of the housing booms of the early 2000s and of the busts which followed, coupled with their occurrence in a large number of countries simultaneously were of course key contributors to the credit crunch which commenced in 2008 and sparked the wider global financial crisis.

The substantial literature which has emerged in response to these developments has focused strongly on the English-speaking countries most negatively affected by the global financial crisis, particularly the United States and the UK, although a sizeable literature on the Spanish case has also emerged (see: Immergluck, 2015; Brenner, 2006; Crouch, 2009; Whitehead and Williams, 2011; Lopez and Rodriguez, 2010; Norris and Byrne, 2015). The role played by the growing availability of credit for private real estate and housing development and purchase, particularly for home ownership mortgages and of increased financialization (i.e. the growing power of financial actors and processes over economic, political and social life) more broadly in driving housing booms and busts is the overwhelmingly dominant theme in this literature and there is a strong consensus that government has played a central role in facilitating these developments (see: Blackburn, 2006; van der Zwan, 2012; Rolnik, 2013; Immergluck, 2015; Byrne, 2016a; Lopez and Rodriguez, 2010, Bone and O'Reilly, 2010) and Crouch, 2009). In the case of the United States, for instance, the expansion of home ownership and the mortgage market is most commonly attributed to government efforts to increase the supply of capital for mortgage lending through the establishment of federal mortgage securitisation agencies such as Fannie Mae and Freddie Mac (Immergluck, 2015; Aalbers, 2009). However apart from this important case of government activism, the role of government is usually defined in negative terms in analyses of the drivers of the global financial crisis - in order words financialization and increased reliance on private credit by households is associated with government withdrawal from the housing system. For instance, the rolling back of government regulation of financial markets and of barriers to cross border capital flows is almost universally identified as a key driver of increasing capital availability at a general level and mortgage availability in particular. Furthermore, the 'light touch' planning regimes which facilitated speculative property development are identified in the literature on entrepreneurial urbanism as important enablers of financialization and of the house building bubbles which emerged in tandem with the credit bubble in some European countries such as Spain and Ireland (Lopez and Rodriguez, 2011; Norris and Coates, 2014; MacLaran and Kelly, 2014; Macleod, 2002). Although government housing subsidies and social housing provision remains extensive in developed countries, particularly in Western Europe, their impact has received very limited attention from scholars of the global financial crisis and, when examined, has also been defined primarily in negative terms. Thus, commentators have focussed on the role which residualisation of social housing, due to falling rates of new building and privatization, have played in enabling financialization and housing market bubbles by forcing more households to look to the market for housing (Rolnik, 2013; Meek, 2014; McCabe, 2011).

This paper which examines developments in the Irish and Austrian housing systems during the 1990s and 2000s aims to address some of these oversights in the literature on the global financial crisis. By comparing Ireland (which suffered one of the biggest housing market booms of the early 2000s and one of the strongest and longest housing market and economic busts of the global financial crisis) with Austria (which experienced one of the weakest and shortest recessions of this period and has enjoyed a long run pattern of steady but modest house price growth) this paper provides new insights into the drivers and impact of the crisis, unattainable by focussing solely on 'crisis countries'. The Irish and Austrian models of social housing, welfare states and traditions of government economic management also differ significantly which increases the potential for learning from the comparison of these two cases (Esping-Andersen, 1990; Kemeny, 1995). The innovative nature of the comparative analysis presented here is further amplified by its focus on social housing rather than on market housing and on factors internal to the social housing system such as housing finance and delivery mechanisms and social housing policy regime, rather than on the influence of external social, economic and political factors on social housing (although we acknowledge their import, they are not the primary focus of the analysis offered here).

In what follows we argue that the relationship between social housing models and the housing market has a decisive impact in terms of housing market volatility or promoting stability. Depending on the model of provision, social housing can accentuate or mitigate boom/bust cycles in housing markets. We suggest that the extent to which social housing acts as a pro- or anti-cyclical intervention in housing markets is a crucial determinant of its role in this regard. For instance, if social housing investment patterns mirror housing market cycles, this can accentuate booms and busts. In addition, supply-side focused social housing subsidies can help correct undersupply from the market and thereby moderate house price and rent inflation, whereas demand side subsidies particularly those focused on subsiding low income private renting households have the opposite effect. The nature and sources of funding for new social housing provision are also ke y to enabling these pro and counter cyclical investment patterns. Funding arrangements in some countries mean that investment in new social housing development falls radically during the fiscal crises which often accompany housing market busts. While the funding models employed elsewhere enable governments to increase social housing output during recessions and thereby stimulate the construction industry.

The analysis of these issues presented in this paper is organized in five further sections. The next section reviews the literature on the role of government and the social housing sector in the global financial crisis and other housing booms and busts. This is followed by a comparison of the Irish and Austrian housing systems, welfare states and government and economic management traditions and of these countries' experiences of the global financial crisis. This main body of the paper examines the relationship between social housing and housing market (in)stability in Ireland and Austria. It consists of three sections focusing, respectively, on social housing supply and delivery mechanisms, funding arrangements and policy regimes. The final section of the paper sets out its conclusions.

## Social Housing Policy and the Global Financial Crisis

As mentioned above, in Western Europe the funding and, in some countries, direct provision of social housing, was traditionally the primary way in which the state intervened in the housing system. Despite this, social housing has received limited attention from scholars of the global financial crisis and when it has been examined its role has been defined primarily in negative or passive terms. In this vein, Rolnik (2013) argues that the reduction in the social housing stock, due to privatisation and reduced government subsidies for new building has led to the residualisation of the sector. This has in turn played an important role in pushing more low income households into home ownership and therefore in laying the foundation for the financialization of housing. This analysis is supported by research on a wide variety of countries. For example, López and Rodríguez (2011: 47) report that in Spain 'from 1993 cut backs in the construction of public housing added to the already dramatic decrease in the construction of public housing which had taken place between 1984 and 1989' and this shortage of supply was augmented by the Boyer Decree (1985) which sanctioned the privatization of public housing stock (Lopez and Rodriguez, 2010). Similarly, in the UK the shift towards a 'homeownership society' is widely associated with the introduction of the 'right to buy scheme' for social housing tenants in the 1980s and the subsequent privatization of large portions of this stock (Forrest and Murie, 1988). Furthermore, mass privatisation of the former state owned dwellings which housed the majority of Central and European Households during the communist period has forced young people to rely on the market for accommodation or, in the absence of a developed market, on family support (Stephens, Lux and Sunega, 2015).

A much smaller literature has also emerged which identifies more subtle transformations in social housing finance and provision arrangements as drivers of financialization. The use of private finance to fund public housing regeneration in the UK, for example, has been conceptualised as a mechanism to open up public housing provision to finance capital and to embed marketization pressures (Hodgkinson, 2011; Aalbers, *et al* 2015) (for a similar analysis in the Irish context see Hearne, 2011; Bisset, 2008). Regeneration of social housing and in particular the incorporation of private housing into these neighbourhoods as part of regeneration programmes has been part of a wider urban entrepreneurial agenda in many countries, thus feeding into the overheating housing markets by underpinning developers' profits and forcing more aspirant social tenants into the market for housing (Byrne, 2016b).

Some important insights into the relationship between social housing and the housing market can also be found in the wider literature on housing regimes in developed countries. Among these writings Jim Kemeny's (1995) landmark comparative analysis of rental policy strategies - From *Public Housing to the Social Market* – is particularly relevant to the discussion at hand. Here Kemeny (1995) identifies a 'dual' housing system that operates principally in English-speaking countries – the USA, Canada, Australia, New Zealand, the UK and Ireland – and contrasts which the 'unitary' housing system which operates in Germany, Sweden, the Netherlands, Switzerland, Austria, Denmark and France. In dual rental regimes, governments support home-ownership via subsidies and favourable legal treatment and the private, for-profit, rental sector is neither regulated nor subsidised by the government but is protected from competition with the small and mainly government provided non-profit, social rental sector because access to the latter is restricted to disadvantaged groups and its size is controlled by limits on government subsidies. These arrangements 'push' households into home-ownership, which consequently dominates in dual systems. In unitary rental regimes by contrast all housing tenures are afforded similar levels of government support. Also social housing (which is delivered by the third sector or agencies at arms-length from government) is available to a wider range of income groups and therefore competes directly with the for-profit rental sector is highly regulated, but is also highly subsidised by the government. Consequently, renting is more common and home-ownership rates are lower than in dual rental systems (Kemeny, 1995). Notably, Kemeny (1995) argues that unstable housing markets are an ingrained feature of dual housing systems and are less common in unitary regimes. This is because very high rates of home ownership require large numbers of marginal home owners who are more likely to be unable to afford their mortgage payments and therefore are more prone to repossession. This encourages government to subsidise these home owners but constraints on the affordability of these subsidies for taxpayers accentuates the natural to boom/slump housing market cycles or drive what Kemeny (1995: 55) terms 'glut-famine amplification'. Conversely in addition to promoting "tenure diversity, housing choice, low housing costs" Kemeny *et al*. (2005: 871) argue that a key advantage of unitary rental regimes is that they act "as a buffer against wild and extreme swings in housing prices".

## Government, Economy and Housing in Ireland and Austria

Table 1 summarises some key features of the Irish and Austrian economies, housing and government systems. It reveals that both countries had a similar GDP per capita in 2014 and are small to medium sized in terms of population, at least in the European context, but otherwise have little in common in terms of their governance tradition, economic policy and systems of welfare and housing provision.

In terms of government, politics and policy Austria shares many traditions with Germany. Both have a federal system of government, whereby executive power is shared between central and regional government (the lander) and local government is also an important service provider. Like Germany, for most of the 20th century Austrian national politics was organised along a conventional left/right axis and dominated by two large parties – the (Christian democratic) Austrian People's Party and the (centre-left) Social Democratic Party of Austria – but policy making was also heavily influenced by corporatist negotiation between the trade unions and employers. This governance tradition has weakened since

*Table 1 Government, Economy and Housing in Ireland and Austria*

| Category | Austria | Ireland |
|---|---|---|
| System of Government | Federal (regional government - Lander – holds significant power) as does local government. | Centralised – there is no meaningful system of regional government and local government holds limited power. |
| Inhabitants | 8.1 million | 3.4 million |
| GDP per capita in 2014 | €36,000 | €39,300 |
| GDP in 2010 compared to 2007 | +4.06% | -14.4% |
| General government expenditure as a % of GDP in 2014 | 52.8 | 37.8 |
| Welfare regime (according to Esping-Andersen, 1990). | Conservative | Liberal |
| Dwellings | 3.8 million | 2 million |
| Housing policy regime (Kemeny, 1995) | Unitary | Dual |
| Housing Tenure (% of households) | • Owner occupied 53%<br>• Private rented 18%<br>• Social housing 22%.<br>However, there are strong regional variations - 38% of households in Vienna live in social housing for instance | • Owner occupied 70.8%<br>• Private rented 18.9%<br>• Social housing 8.9%. |
| Social Landlords | Social housing is provided by the following organisations:<br>• Limited Profit Housing Associations: 53%<br>• Local government: 40%<br>• Central and regional government: 3%<br>• Other: 4% | Social housing is provided by the following organisations:<br>• Housing Associations: 18%<br>• Local government: 82% |
| Public spending on housing | • Public spending on house building was 0.2% of GDP in 2014 which close to the western European average.<br>• Public spending on other aspects of housing is low - Weisser and Mundt (2014) estimate that it was 0.6% of Austrian GDP in 2014, compared to 2% in Britain and 3.6% in the Netherlands. | Public spending house building was below the western European average at 0.1% of GDP in 2014. |
| Mortgage debt per capita (2015) | €26,830 | €12,930 |
| Burdensome housing costs (EU Survey on Income and Living Conditions, 2014). | 7.0% of households | 6.6 % of households |

Source: Amann and Mundt (2005); Amann, Lawson and Mundt (2009); European Mortgage Federation (various years), Ludl (2007); Reinprecht (2007), Weiser and Mundt (2014) and data generated by the authors from the European Union Survey of Income and Living Conditions (various years) and Eurostat (various years).

Note: unless otherwise stated the statistics refer to the latest year for which data are available.

the early 1990s but corporatism remains influential and the political system remains more stable than in many European countries (Unger and Heitzmann 2003). Austria and Germany also operate 'conservative' welfare states focussed more on maintaining existing social stratification (by means of social insurance system which funds income/contribution related benefits) rather than on redistributing income (Esping-Andersen, 1990).

These countries also share a tradition of government activism in economic management and regulation of markets but the details of their approaches to this task differ. The distinctive Austrian approach is commonly termed 'Austro-Keynesianism' and was traditionally characterised by five pillars:

> a) deficit spending to stimulate demand in case of crisis; (b) low interest rate policy to stimulate private investment; [... ](c) hard currency policy vis a vis the DM to import price stability; (d) moderate wage policy to prevent domestic cost push inflation; (e) employment in nationalized industries to hoard labour during employment crisis (Unger and Heitzmann, 2003: 376).

Austria was much slower to liberalise market regulation than most of the rest of Western Europe, although some liberalisation has been introduced since the 1990s, the government here remains more interventionist than the Western European norm. The Austrian economy entered recession following the global financial crisis but this downturn was modest and short-lived. The Austrian economy grew in 2008, shrank in 2009 but recommenced growth the following year, consequently the economy expanded by 4% between 2007 and 2010 (Eurostat, various years) (see Table 1).

In contrast to Austria, no strong social democratic tradition emerged in Ireland and for most of the 20th Century Irish politics was dominated by two centre-right political parties (Fianna Fáil and Fine Gael). The Irish system of governance is also highly centralised and although Ireland has a corporatist governance tradition, it is less formally embedded in policy making than its Austrian equivalent and it collapsed during the severe economic crisis which Ireland suffered in the late 2000s. This was one of the strongest recessions seen in the EU during the global financial crisis - the Irish economy contracted by 14.4% between 2008 and 2010, which drove a severe banking and fiscal crisis (see Table 1). Almost the entire Irish banking system was nationalised in 2009 and 2010 and in the latter year the government found itself unable to borrow on international markets and was forced to apply for an emergency loan from the IMF and EU (Norris and Coates, 2014). This crisis followed an unprecedented period of economic growth (popularly known as the Celtic tiger boom) when Ireland, which was an economic laggard in Western Europe for most of the post war period, finally caught up with living and economic development standards in neighbouring countries (Ó Riain, 2014). Since the 1960s Ireland has pursued a liberal economic management model (Kennedy, Giblin and McHugh, 1988). It was also included in the 'liberal' regime in Esping-Andersen's (1990) typology of welfare states and the available evidence indicates that this categorisation remains accurate (see Table 1). Most Irish social security benefits are means tested and flat rate and public spending as a proportion of GDP is among the lowest in the European Union in 2014 (37.8% compared 48.5% among all 28 EU members) and is significantly below Austrian levels (52.8% in this year) (Eurostat, various years).

As mentioned in Table 1 Ireland and Austria are categorised as 'dual' and 'unitary' rental regimes respectively in Kemeny's (1995) landmark text. Although some questions have been raised about the continued relevance of these categories to the countries he studied (including by Kemney himself (Kemeny, *et al*, 2005) and by Hoekstra, 2009 and Norris, 2014) the available information indicates this categorisation remains relevant to the two cases under examination in this paper. This is evidenced by the high rate of home ownership in Ireland (70.8% of households) and lower rate in Austria (53%). Furthermore, social housing accounts for a relatively low proportion of the Irish housing stock (8.9% of households), two thirds of which of which is provided directly by local government and entry is limited to low income households which limits the potential for competition with the weakly regulated and minimally subsidised private rented sector. In Austria, by contrast, the social housing sector is much larger (22% of households) and since the 1980s has been mainly provided by third sector 'limited profit housing associations'[3] (LPHAs) (Mundt and Amann, 2010) (see Table 1). Because Austrian social housing is not strictly targeted at low income households and private landlords qualify for the same subsidies available to LPHAs (if they charge 'cost rents' which reflect the cost of housing provision rather than the market price) the two

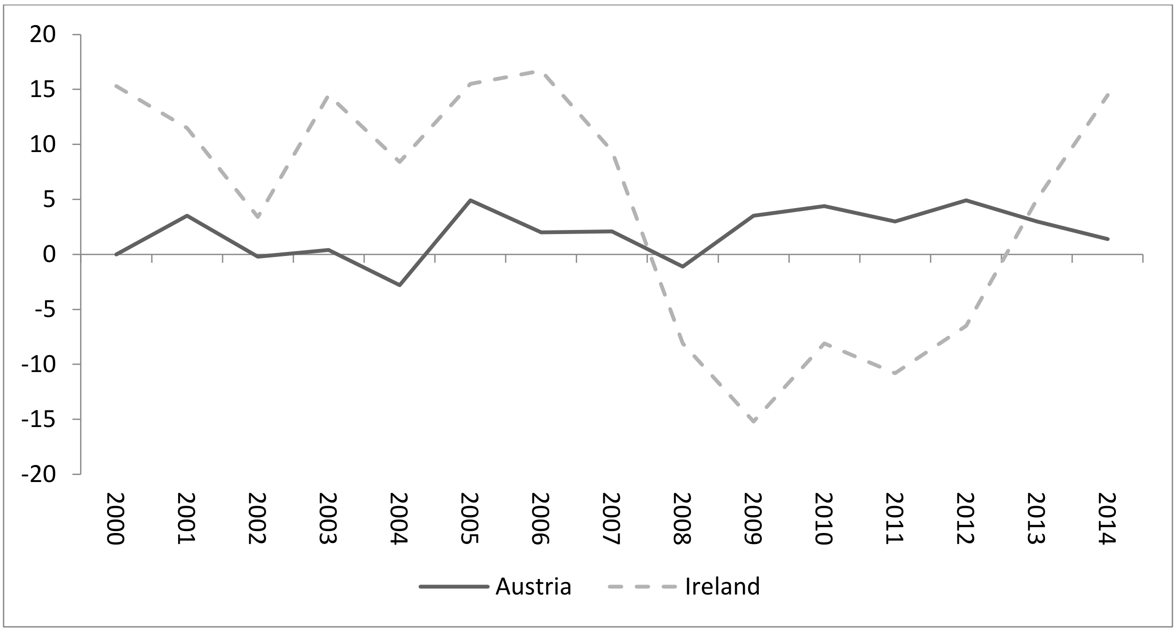
[3] LPHAs are organisation which provide affordable housing and are regulated by a particular piece of government legislation. There are activities are strictly limited to the provision of affordable housing, the level of profits is capped at 2% and they are regulated by local government.

rental sectors compete against each other which Kemney (1995) identifies a key feature of unitary rental regimes.

**Social Housing and Housing Market (in)Stability**

As well as contrasting housing regimes, Figure 1 below reveals that recent decades have seen markedly different house price developments in Ireland and Austria – the former has been characterised by striking instability while the latter has been largely stable. Irish house prices increased by between 10.6 and 14.7% per annum in the 2003-2006 period, but this development was merely the tail end of a much longer boom which commenced in the mid 1990s and saw house prices increase by 292% in nominal terms over the decade which followed (Norris and Coates, 2014). In contrast, Austrian annual house price growth was

*Figure 1 Annual % Change in House Prices in Austria and Ireland, 2000-2014*

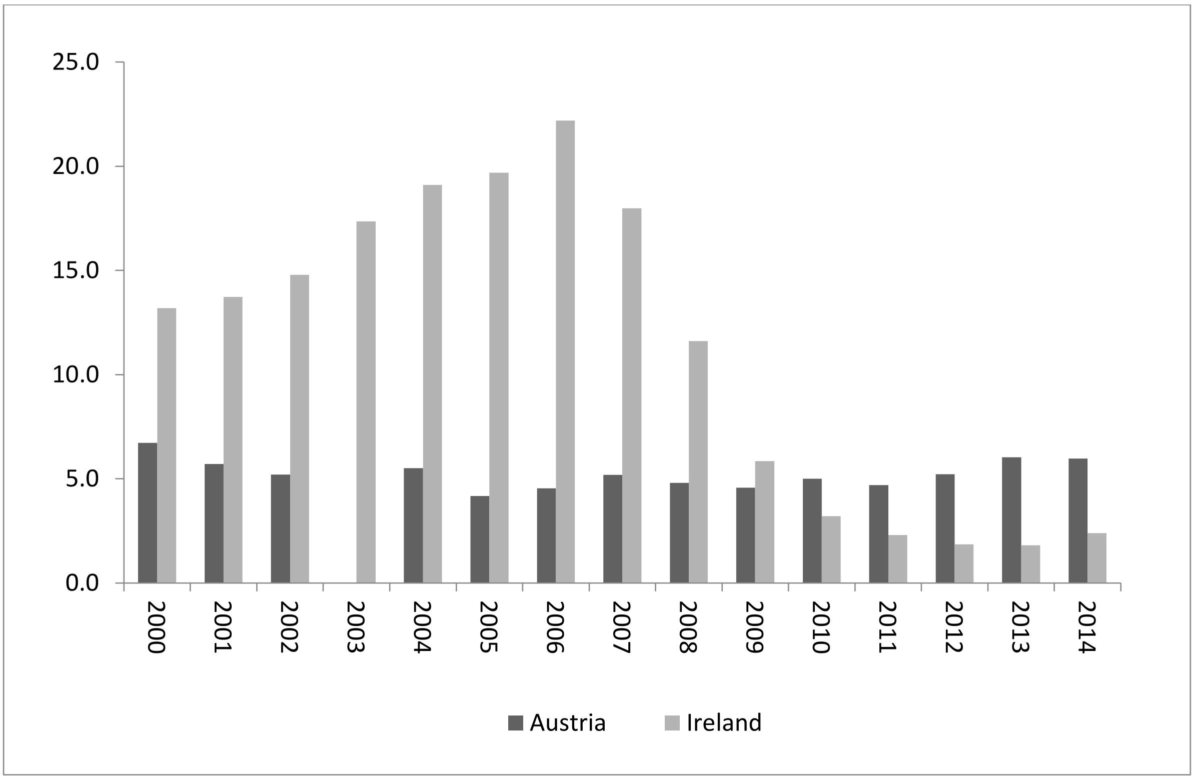



Source: European Mortgage Federation (various years).

modest during the 2000s – it ranged from 4.4% to -1.1% between 2001 and 2012 (see Figure 1). This reflects a longer term trend because in real terms house price growth in Austria has been largely flat since the 1980s (Louis *et al*, 2008). These contrasting patterns of house price growth and decline were shaped by a variety of demand and supply side factors, many of which have been researched in significant depth (e.g. van den Noord, 2005; Helbich *et al* 2014.). As mentioned above, the role of social housing has been largely ignored in these analyses and a key insight offered here is that in terms of the supply side drivers of housing market developments the level, location and form of social housing supply was significant in both Ireland and Austria.

Austrian housing output was relatively stable during the 2000s (it varied from 4.2 to 6.7 dwellings per 1,000 inhabitants per annum) and, in contrast to Ireland, Austrian housing output actually increased in the wake of the global financial crisis (from 4.6 dwellings per 1,000 inhabitants in 2006 to 6.0 in 2014) (see Figure 2). A total of 839,948 new dwellings were built in this country between 2000 and 2010, this significantly exceeded concurrent growth in household numbers (346,900) therefore (allowing for obsolesce in the existing housing stock) this new housing output should have been more than adequate to meet demand (Eurostat, various years; European Mortgage Federation, various years). With the exception of the Vienna region which accounted for 43% of total population growth in Austria between 2000 and 2014 but only 21 - 13.9% of new housing supply during this

*Figure 2 Housing Completions Per 1,000 Inhabitants in Austria and Ireland, 2000-2014.*




Source: authors' own calculations using data from Eurostat (various years) and the European Mortgage Federation (various years).

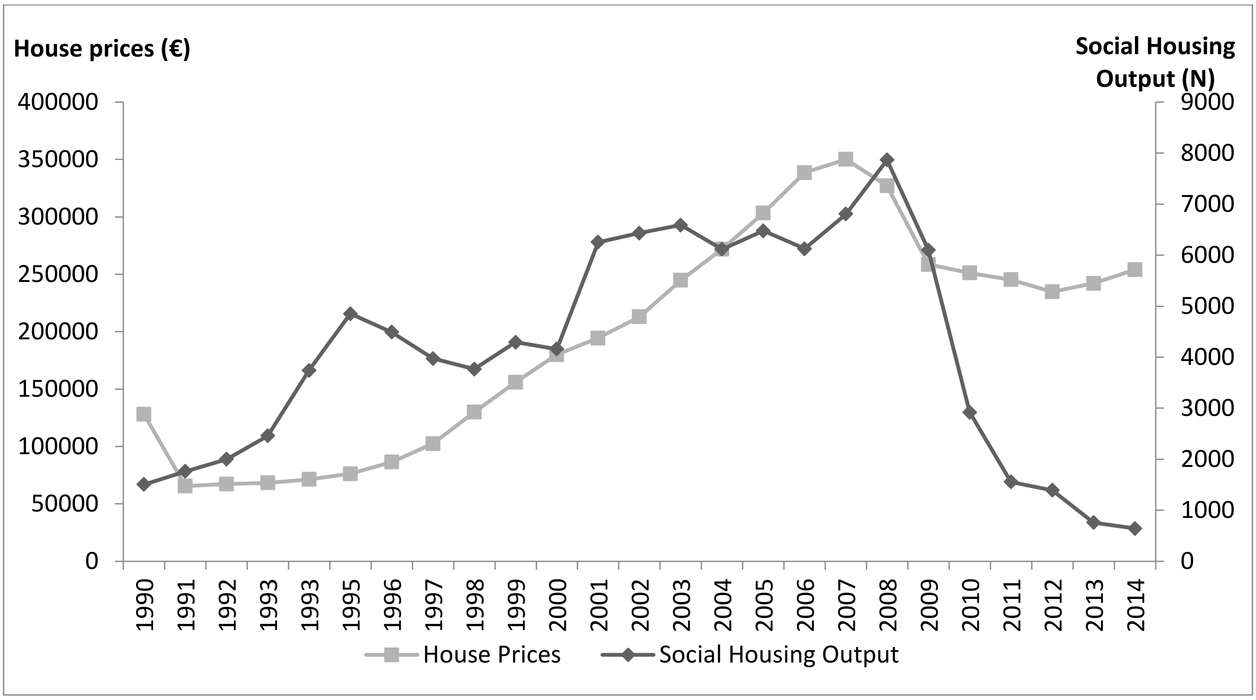
period, the spatial distribution of house building broadly reflected the geography of population growth. Between 2000 and 2014 40% of population growth in Austria occurred in the Lander of Lower and Upper Austria and Tyrol and these regions accounted for between 40 and 50% of total housing output between these years (Statictik Österreich, various years).

Crucially, from the perspective of the discussion at hand, social housing (played a key role in boosting supply particularly in regions of high population growth and during periods of undersupply from the market. Social Housing accounted for between 28 and 36.7% of all housing built in Austria between 2000 and 2014, but this tenure's output was higher in high population growth regions and notably it accounted for over half of housing output in Vienna between 2000 and 2008. The impact of this social housing provision on the housing market was also amplified by the fact that it was almost entirely constructed by limited profit housing associations rather than purchased from the existing housing stock, therefore social housing supply was additional to that provided by the market. Social housing played an important role in boosting supply after the global financial crisis and thereby in cushioning the Austrian building industry from the effects of the 21 % fall in private housing output which occurred between 2006 and 2010, because social housing output increased by 10% concurrently. Similarly, during the early 1990s population growth, increased availability of mortgage credit and partial deregulation of private rents led to sharp increases in house prices and rent levels in Austria. However, the government responded by increasing social housing provision and this is widely held to have brought about a stabilisation of rent levels (Matzenetter; 2002; Amann and Mundt, 2005; Deutsche, 2009). Therefore, in addition to its primary social purpose, Austrian social housing also has an important secondary function as a counter-cyclical economic intervention.

At first glance the Irish housing system appears to have been just as efficient in responding to rising demand as its Austrian counterpart. Figure 2 reveals that Irish house building grew steadily during the first half of the 2000s to a peak of 22.2 dwellings per 1,000 inhabitants in 2006 - the highest rate of output in the European Union and approximately four times the EU average in that year (Central Statistics Office, 2008). A total of 651,031 new dwellings were built in Ireland between 2000 and 2010 and the number of households increased by 438,000 concurrently (see Figure 2; Central Statistics Office, various years). However the differential between the increase in housing supply and household numbers was smaller in Ireland than in Austria and crucially the former country was significantly less effective in satisfying housing demand and therefore mitigating price inflation because the dwellings were not always built in the right place or even occupied after construction (Norris and Shields, 2007; Kitchin, *et al,* 2012). 20.2% of the dwellings built between 1991 and 2002 were located in the six rural countries which span Ireland's western seaboard, but the number of households resident there increased by just 14.9% (Central Statistics Office, various years). Whereas Williams, Shields and Hughes (2003) highlight consistent housing undersupply in Dublin throughout the period of the housing boom. Fitz Gerald (2005) found that one-third of dwellings built in Ireland between 2000 and 2003 were left vacant and calculated the growth in such properties added up to 10% to house prices in the period 2000 to 2003. These empty dwellings were heavily concentrated in rural areas. In 2006 9.7% of dwellings in Dublin were empty compared to 23.4% in the aforementioned rural counties on the western seaboard (Central Statistics Office, various years).

In contrast to the situation in Austria, social housing supply in Ireland did not help to resolve these problems because it had a pro-cyclical impact on the housing market (Byrne and Norris, forthcoming). This was due first of all to the level of social housing supply. Figure 3, which compares house prices and social housing output in Ireland, demonstrates that output was low when the Irish economy and housing market were weak in the early 1990s; social housing provision expanded radically during the Celtic tiger boom in the mid 1990s and early 2000s but it contracted radically (by 92% between 2008 and 2014) following the global financial crisis and housing market crash at the end of this decade. This coincidence between increased social housing output and the property boom helped to further stimulate a construction sector that was arguably already overstimulated. In addition, investing in social housing when land and house prices were at historic highs was unlikely to provide value for money. From 2008 the sharp contraction in social housing output obviously intensified the negative economic effects of the concurrent collapse in commercial house building, particularly the contraction in construction employment.

*Figure 3 House Prices and Social Housing Output, 1990-2014.*

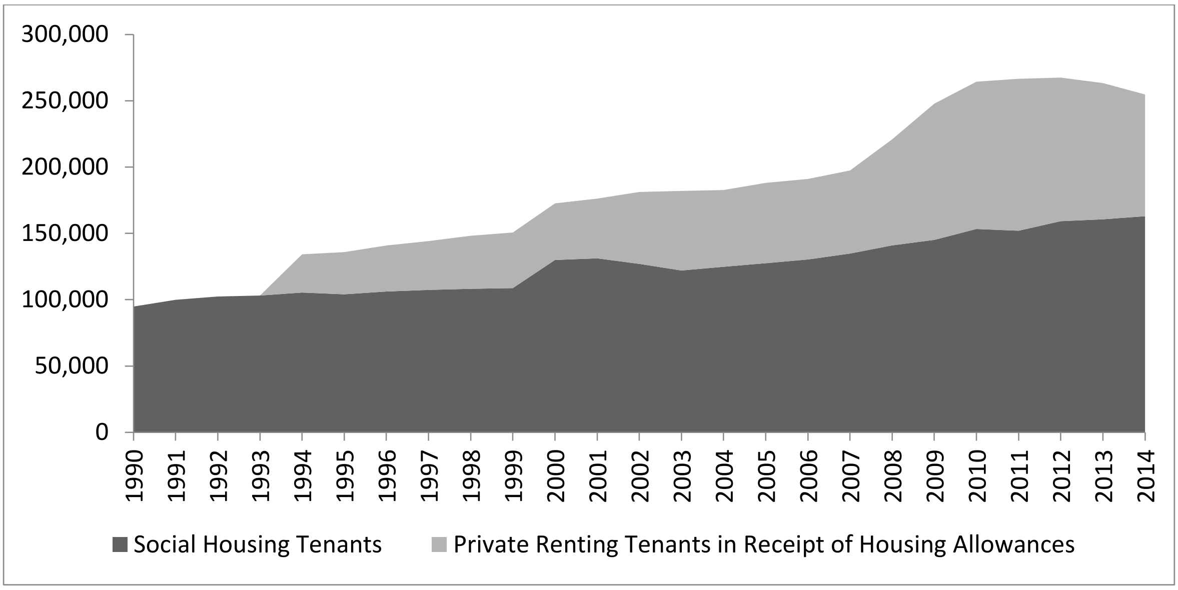



Source: Department of Public Expenditure and Reform (various years) and Department of the Housing, Planning and Local Government (various years).

The pro-cyclical role of Irish social housing was further amplified by a number of changes made to arrangements for procuring these dwellings which were initiated during the 1990s and early 2000s. The first of these relates to the increasingly widespread purchase of existing dwellings for inclusion in the social rented stock, as opposed to building dwellings especially for this purpose (Byrne and Norris, forthcoming). Traditionally all Irish social housing was purpose built but just under one third of the additional social rented dwellings provided in 2000 were purchased from the existing stock (Department of Housing, Planning and Local Government, various years). The introduction of 'inclusionary zoning' by the Planning and Development Act 2000 (which enabled local government to require that up 20% of new housing developments be employed to meet social housing needs or to provide dwellings for sale at cost price to low-income home buyers) further reduced the capacity of the social housing sector to add to private sector housing supply. Between its introduction in 2000 and 2011 nearly 13% of additional social housing was procured using this mechanism (DMK Economic Consultants and Brady Shipman Martin, 2012).

These pro-cyclical tendencies were further reinforced by increasing reliance on the private rented sector to accommodate low income households which the help of a housing allowance called Rent Supplement. This measure was introduced in 1978 and take-up was initially low, but began to climb as the economy boomed in the early 1990s to the extent that between 1994 and 2004 Rent Supplement claimant numbers increased by 101%, whereas the number of social housing tenants increased by just 15.2% (see Figure 4). The growth in Rent Supplement claimants also made an important contribution to driving house price inflation by enabling more buy-to-let landlords to enter the housing market and inflating rents. Norris and Coates (2014) argue that lending to this cohort was a key driver

*Figure 4 Households in Social Housing and in Receipt of Housing Allowances for Private Rented Housing, 1990-2014*




Note: social housing includes local authority and housing association tenants. Housing allowances includes rent supplement and tenants in leased dwellings (procured under the rental accommodation scheme and housing assistance payment).
Source: authors' own calculations of data from the Department of Housing, Planning, Community and Local Government (various years) and the Department of Social Protection (various years).

of the Irish house price bubble - the proportion of outstanding mortgages held by residential landlords increased from 18.8 to 26.9% between 2004 and 2008, while the proportion held by homeowners fell from 80.0 to 71.9% concurrently (Byrne and Norris, forthcoming; European Central Bank, 2009). Particularly in cities, the state, via Rent Supplement, was by far the largest procurer of private rented housing (33.9% of private rented tenancies in Dublin were financed in this way in 2002) and analysis of the impact of this housing allowance on the private rental housing market indicates that it played a key role in inflating rents (Department of Social Protection, 2015). Moreover, as social and private housing output contracted radically from 2009 significant pressure was placed on the private rented sector. Total claimants of Rent Supplement and similar housing allowances for private rented accommodation increased from 79,960 at the start of the crisis in 2008 to a peak of 132,287 in 2011 (Department of Social Protection, various years; Department of Housing, Planning and Local Government, various years). Claimant numbers fell back slightly after the latter date as the economy improved, but rising employment generated increased housing demand and because housing output increased to reflect this, private renting housing allowance claimants began to experience increasing problems in accessing accommodation from 2012. This has been identified as one of the main causes of the marked increase in homelessness seen in Dublin in particular in recent years (Threshold, 2016; Sirr, 2014; Department of Social Protection, 2015).

The contrasting pro and counter cyclical patterns of social housing supply seen in Ireland and Austria were strongly influenced by differences in arrangements for financing social housing in these two countries. Until recently Irish social housing was funded through capital grants from central government[4] (Norris, 2016). These grants covered all of the costs of building or buying dwellings while tenants' rents (which are related to their incomes rather than the cost of providing dwellings in the Irish case) paid for management and maintenance[5]. Somewhat ironically, these nationalised financing arrangements enhanced the pro-cyclicality of social housing investment patterns and accentuated housing market volatility. In contrast, the fact that social housing in the Austrian context relies on diverse forms of finance, including government and private loan finance and the LPHA's own equity, makes possible its counter-cyclicality and mitigates housing market volatility.

Housing is of course a 'lumpy' good that requires large-scale, upfront investment (Weber, 2002). Loan finance spreads the costs of housing development over an extended period and thereby renders it more affordable for government to subsidise, which is why in almost every country that has a social housing system the sector is

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[4] This system was established in the late 1980s and replaced direct local government borrowing to fund housing provision (Norris, 2016). In the wake of the global financial crisis in 2010 borrowing to fund social housing was reintroduced.

[5] Rents are income related in Ireland, normally set at 15% of tenants' income.

funded using loans (Whitehead, 2014). In contrast, the Irish model of using central government capital grant funding for social housing concentrates almost all of the substantial costs of provision in the procurement phase and exposes the sector to fluctuations in the strength of central government finances and also to changes in central policymakers' spending priorities.

In practice these developments meant that Irish social housing output was very low in the early 1990s in large part because central government finances were stretched (see Figure 3). Output rose as central government finances improved in the late 1990s and early 2000s and public capital spending on social housing provision rose from €232 million in 1995 to just below €1 billion in 2005 (Department of Public Expenditure and Reform, various years). However, due in part to the lumpiness of 100% capital grant finance and in part to the peaks and troughs in investment, public sector output failed to keep pace with private building (the former accounted for 29% of all housing output during the 1970s but just 10.9% in the 1990s) and population growth (which increased by 20% between 1991 and 2006) (Central Statistics Office, various years) (see Figures 2 and 3). Ireland also has a long tradition of selling social housing to tenants which dates from the mid-1930s, and 40% of the additional social rented dwellings provided between 1990 and the crash in 2007 were sold to tenants (Department of Housing, Planning, Community and Local Government, various years). Consequently in relative terms, the social housing sector contracted during the 1990s and early 2000s – it accommodated 12.7% of households in 1981 but just 6.9% in 2002 (Central Statistics Office, various years).

As mentioned above, the aftermath of the global financial crisis saw significant austerity in Ireland and, as was the case during Ireland's last severe fiscal crisis in the 1980s, during the latest fiscal crisis policymakers chose to focus their retrenchment efforts on capital rather than current spending (Mercille and Murphy, 2015; Hardiman and MacCarthaigh, 2013). This reflects the political and practical difficulties of reducing the latter – deferring capital investment is likely to be more politically palatable than laying off nurses, for instance and social security spending is obviously difficult to reduce when unemployment is rising but capital spending plans can be shelved at the stroke of a pen (Honohan, 1992). Because social housing was 100% dependent on upfront capital funding from central government, it was extremely vulnerable to austerity. Exchequer capital grants for social housing provision fell by 88% between

2008 and 2014 (from €1.4 billion to €167 million) and output contracted concurrently by a similar amount (from 7,588 to 642 units) (see Figure 3; Department of Public Expenditure and Reform, various years).

In contrast, as explained in Table 2 the Limited Profit Housing Associations which provide the vast majority of social housing in Austria draws on a variety of capital and revenue funding sources.  LPHAs can access between 30 and 40% of project funding through a low interest, fixed rate public loan which constitutes a form of subordinated debt (i.e. other loans must be repaid first, therefore the government takes the 'first hit' on any losses) and is used to leverage the majority of project funding through a commercial mortgage loan provided by a private bank. In addition, LPHA make use of their own equity (in the form of land, cash or investments) to cover between 10 and 20% of project costs, which helps to reduce financing costs and ultimately tenants' rents (see below). In some instances, tenants may also be required to provide a deposit of as much as 2% of the cost of providing their dwelling in order to secure a tenancy. Revenue finance is derived from tenants' rents, which are pegged to the cost of housing provision.  Tenants may also receive a housing allowance from government to subsidise all or part of their rental costs. The allocation of

*Table 2 Sources of Funding for Limited Profit Housing Association Housing Provision in Austria*

| Category | Form | Proportion | Source | Additional Information |
|---|---|---|---|---|
| Capital | Capital market mortgage loan | 40-60% of capital costs | Austrian banks | Euribor + 0-30 basis points, fixed or variable rate, 20-30 year loan term, senior debt |
| Capital | Public loan | 30-40% of capital costs | Lander | 1% fixed rate 30 year bullet loan (repayable in full at end of its term rather than in instalments), subordinated debt |
| Capital | Equity | 10-20% of capital costs | LPHAs own reserves | Mainly to cover land costs |
| Capital | Equity | 0-10% of capital costs | Tenants | Does not always apply, tenants who provide a deposit enjoys 'right to buy' their dwelling |
| Revenue | Rents | These are 'cost rents' which cover the costs of debt service and housing management and maintenance | Tenants | |
| Revenue | Housing allowances | Tenants who cannot afford the rent receive housing benefits to help them meet the costs. | Central government | Approx. 5% of Austrian households in total receive housing benefits |

Source: Amann, Lawson and Mundt (2009) and interviews conducted by the authors.
Note: This table captures the main aspects of social housing finance. It should be noted, however, that regional variations do occur across the federal provinces.

government capital subsidies for social house building is decided on the basis of an agreement between central and regional government which covers a four-year period.

Amann, Lawson and Mundt (2009: 14) conceptualise Austrian social housing finance can as a form "of risk averse structured finance, which employs a variety of different sources within a well-regulated framework", they point out that a key benefit of this system is that it "… reduces risks for investors and financing costs for providers of cost rent [social] housing". From the perspective of government this system is affordable because public subsidies take the form of loans which are repaid over time primarily by tenants' rents and these repayments are reinvested in new housing development or refurbishment. This system therefore funds a "closed circuit of finance" which is invested and reinvested in housing and means that the social housing system is largely self-financing over the long-term. Furthermore because public loans provide an average of only 30% of total investment in new social housing provision, each €1 provided by government in the form of public loans is used by LPHAs to leverage more than double that amount in borrowings from the commercial banks. The cost of social housing provision is further reduced by the fact that LPHAs' borrowings from commercial banks are provided at very low rates (0 and 30 basis points above euribor) and over very long terms (20-30 years). These loans are not government guaranteed and the low interest rates reflect the subordinated status of the public loans and also the very robust regulation of Limited Profit Housing Associations - this sector's long history of almost nil defaults which means that their credit rating is only slightly lower than the sovereign. Partially as a result of these arrangements Mundt and Springler (2014) report that total government spending on housing in Austria was 0.9% of GDP in 2014 which was less than have the rate of expenditure in France (2.2%), Great Britain (2.0%) and the Netherlands (3.6%).

These funding arrangements enable counter cyclical social housing investment patterns because the affordability of funding arrangements for government means that maintaining or increasing investment in the sector during recessions is viable. The variety of funding sources employed means that the Austrian social housing sector is not very vulnerable to the effects of a fiscal crisis because it has access to other funding options. The counter-cyclicality of social housing investment patterns also reflects the fact that enabling adequate supply is a central focus of Austrian housing policy and to achieve this objective spending on supply side or capital subsidies for house building or refurbishment rather than demand side subsidies is prioritised (Amann and Mundt, 2005). Supply side subsidies have accounted for 80% of total direct and indirect spending on housing in Austria recent years, whereas demand side subsidies in the form of housing allowances for social and private renting tenants who cannot afford to pay their rent account for only 8% of all spending or in the region of €200 million (Deutsche, 2009). This contrasts Ireland where spending on housing allowances increased from just under €500,000 in 2008 to €632,000 in 2011 or from 22.5 to 50.2% of total direct public spending on housing (Department of Public Expenditure and Reform, various years). Also unlike their Irish counterparts Austrian policy makers plan to ensure housing supply is sufficient both at the national and regional level and ensure that sufficient funding is made available to ensure this delivery takes place. The four year planning cycles associated with the social housing funding agreements between national and regional are considered to be key to the stability of housing policy (Amann and Mundt, 2010). These agreements are also intended to ensure that social housing capital is allocated to the regions where it is needed most.

## Conclusion

Housing market (in)stability has been identified as central cause of the global financial crisis and both these developments are commonly linked to the growth of 'financialization' and the increased power of the finance industry more broadly (Aalbers, 2015; Blackburn; Kelly, 2014; López and Rodríguez, 2010). However, the impact of social housing on housing markets has received very little attention in the very extensive literature on these issues which has accumulated and, when this tenure has been considered, its role has been defined primarily as a negative or passive one characterized by the contraction of the sector which forces households to rely on the market for accommodation. The analysis of the impact of Austria and Ireland's social housing systems on their different experience of the global financial crisis which has been set out in this paper provides some important and original insights into the relationship between this tenure and systemic housing market volatility or stability.

Our analysis reveals that social housing played a central role in the shaping housing market developments in both countries under examination here, not a peripheral role as the omission of this tenure from most analyses of the global financial crisis would suggest. Furthermore, the social housing sector's role in this regard was not a negative or passive one. Rather we argue that social housing provision, funding and policy actively influenced the scale and nature of private housing market cycles in Austria and Ireland and the sharply contrasting nature of their respective social housing regimes is crucial in understanding their very different experience of the global financial crisis.. In Ireland the social housing system was pro-cyclical in the sense that it helped to intensify the housing boom and amplify the bust. In Austria social housing had the opposite effect – it played a counter-cyclical role in the housing market because increased social house building helped to mitigate the impact of falling private housing output during the global financial crisis.

As mentioned above, the literature on housing regimes and specifically Kemeny's (1995) influential typology on rental regimes does contain insights into the relationship between social housing and housing markets. He argues that scale of social housing supply and in particular the extent of direct competition between this tenure and private renting impact on housing market stability and volatility – he suggests that the unitary rental regime is associated with the former and the dual regime with the latter. The analysis of the Austrian social housing system and associated unitary housing regime and of Ireland's dual rental regime presented here supports this thesis. In this vein Amann and Mundt (2005: 39) argue that the large size of the Austrian social rented sector, coupled with the fact that 80% of households qualify for entry means that social and private renting in this country competes against one another which helps to depress rents and raise standards:

> Limited-profit and for-profit housing providers do not only compete on the level of rents, but building quality and tenure security play a decisive role in attributing a leading role to LPHA over private rental stock… the existing private rental housing stock… is of lower quality, usually less energy efficient and, other than for the very old rental contracts, determined by shorter terms and less secure tenancy rights. LPHA rental contracts in general are open-ended and… the quality of the new-built LPHA housing stock is very high because projects are evaluated before qualifying for supply-side subsidies.

In line with Kemney's (1995) thesis they conclude that the accessibility, affordability and attractiveness of rented housing in Austria means that households are not pushed into marginal home ownership which helps prevent boom/busts market cycles. In contrast, Ireland's residualised housing sector drove volatility within the private housing market. This is because the effective absence of any non-market alternative pushed households into private renting and marginal home ownership; the procurement of social housing from the market added to demand and low levels of social housing provision necessitated extensive public spending on housing allowances for private renting households which further fuelling demand and inflated rents and house prices.

In addition to supporting Kemeny's (1995) analysis of the relationship between housing systems and housing market volatility the comparison of Irish and Austria's social housing systems outlined here adds to this argument in three significant ways. First of all, we identify at an empirical level *how* the unitary and dual housing systems interact with housing market volatility in the context of a particularly significant period for housing markets. Second of all, we highlight the distinctions between unitary and dual rental systems at the level of 'cyclicality', i.e. the ways in which the respective models accentuate or mitigate the dynamics associated with boom/bust cycles. Third of all, we draw attention to the forms of social housing finance that underpin each model and the particularly significant role they play in all of this. Our analysis also sheds light not just on how social housing models impact on housing market volatility but also on their resilience during the 'bust' periods of housing markets. In particular, we show how Ireland's dualist system rendered government completely unable to maintain any provision of affordable housing in the wake of the property and financial crises from 2008.

The paper also considers the impact of financialization on developments in the Austrian and Irish social housing sectors during the 1990s and 2000s and challenges the consensus view which suggests that it undermines welfare states. Rather than undermining the social housing sector, the use of a variety of funding mechanisms including 'financialized' sources such as commercial bank borrowing bolstered the resilience of the Austrian social housing sector during the global financial crisis. In contrast, funding for social housing in Ireland, which was almost entirely derived from central government grants was the key reason for its fragility (as evidenced by an 80% cut in social housing output in the late 2000s) during this economic crisis. An expanded role for private finance in the provision of housing can thus not be presumed to automatically translate into greater marketisation or commodification of housing. Rather, research must pay attention to the varying ways in which housing policy regimes shape the relationship between private finance and housing.

This paper also suggests that as well as decoupling social housing from fiscal cycles the detaching it from the dynamics of the housing market should be a priority of policy makers. This might occur through by increased use of supply side subsidies and reduced reliance on demand side subsidies such as housing allowances for private renting tenants such as rent supplement in Ireland and also by increasing new build social housing and reducing the use of purchasing existing dwellings and other mechanisms through which social housing stimulates demand for private housing development. The social housing system must guarantee an alternative supply pipeline of affordable housing if it is not to become dominated by the cyclicality of the market and thus lose its role as a counter-balance and as an alternative.

The design and financing of social housing regimes can thus play a role in both ensuring adequate supply of affordable housing but also in fostering more stable housing systems and more stable financial systems. If there is anything to be learned from the global financial crisis and the devastation it has wreaked on housing systems and on whole economies, it is the importance of meeting this challenge for governments and citizens.

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